

**City Council Questions and Answers for  
Thursday, June 22, 2017**

These questions and answers are related to the  
Austin City Council meeting that will convene at 10:00 AM on  
Thursday, June 22, 2017 at Austin City Hall  
301 W. Second Street, Austin, TX



**Mayor Steve Adler**  
**Mayor Pro Tem Kathie Tovo, District 9**  
**Council Member Ora Houston, District 1**  
**Council Member Delia Garza, District 2**  
**Council Member Sabino "Pio" Renteria, District 3**  
**Council Member Gregorio Casar, District 4**  
**Council Member Ann Kitchen, District 5**  
**Council Member Jimmy Flannigan, District 6**  
**Council Member Leslie Pool, District 7**  
**Council Member Ellen Troxclair, District 8**  
**Council Member Alison Alter, District 10**

*The City Council Questions and Answers Report was derived from a need to provide City Council Members an opportunity to solicit clarifying information from City Departments as it relates to requests for council action. After a City Council Regular Meeting agenda has been published, Council Members will have the opportunity to ask questions of departments via the City Manager's Agenda Office. This process continues until 5:00 p.m. the Tuesday before the Council meeting. The final report is distributed at noon to City Council the Wednesday before the council meeting.*

## **QUESTIONS FROM COUNCIL**

Agenda Item # 3: Approve recommendations of the Electric Utility Commission Resource Planning Working Group for the update to the Austin Energy Resource, Generation and Climate Protection Plan, including long-range planning through 2027.

QUESTION: Please provide detail on the makeup and selection criteria of the working group membership. COUNCIL MEMBER ALTER'S OFFICE

ANSWER: Action on this item will be postponed to August. Staff is working on a response and will provide it at that time.

QUESTION: From a financial perspective, how much more does it cost to move from our current goal of 55% renewable to 65%? How much additional would it cost to move from a 65% renewable goal to a goal of 75% renewable? For each increment, what can we expect to be the impact on rate payers? What additional risks may be involved with each increment? Would we be able to meet our needs for reliable energy during peak loads with a 75% renewable goal? The working group recommended a 65% renewable energy commitment with a goal to study the possibility of a 75% and 80% goal for 2027. If we followed that recommendation, what would such a study entail and how would AE operationalize that recommendation? How would that approach fit with the plan to revise the plan only every 5 years?

How do the costs of implementing more renewables play out over time? From the discussion on Monday, we got the impression that if we go out 5 years there might be big increases in costs after 5 years.

In the chart of 20 year NPV vs. Cost at Risk, please explain how we should interpret the dots representing current Council Goals, the working group's recommendation (65% renewable), vs. a 75% renewable option (working group with 75%). We are particularly interested in understanding what the risk axis represents as there seems to be quite a bit of variation.

What are other peer cities' goals wrt renewable energy?

It has been said that other cities have reached a 100% renewable goal. Please provide some examples and share the breakdown of their renewable portfolio broadly (i.e. do their methods differ from ours in substantive ways? If so, how?)

What does the resource plan draft include in terms of energy storage investments / R&D opportunities?

How does the resource plan draft incorporate energy efficiency efforts?

What is the rationale behind not increasing our local solar goals?

Why were no goals for the support of EV's incorporated into the draft plan?

Did the Resource Planning Working Group take a final vote on the complete package of recommendations? If so, what was the outcome?

If we update the plan only every 5 years, what would the process be if there were "significant changes in technology or market conditions to warrant more frequent updates"?

Please revise the cost impact slide to provide graphics that capture the \$350 million underneath so we can get a snapshot of the implications within the larger context and not just the incremental costs above what we already expect.  
COUNCIL MEMBER ALTER'S OFFICE

ANSWER: Action on this item will be postponed to August. Staff is working on a response and will provide it at that time.

QUESTION: 1) What is the year-to-date (YTD) energy profile for the City of Austin, both in generation and in demand? What percentage of renewables (solar, wind, etc) and other (natural gas, coal, nuclear) does the City have for both generation and demand? Where will the City be if it decides to approve an additional 200 MW of wind being considered on June 22, 2017? 2) In the slide attached, Austin Energy provided a number of different scenarios in terms of cost and risk. How are both cost and risk calculated? What factors are considered in those calculations? Can you provide a rate and bill impact for the scenarios listed on that graph? COUNCIL MEMBER TROXCLAIR'S OFFICE

ANSWER: Action on this item will be postponed to August. Staff is working on a response and will provide it at that time.

Agenda Item(s) 4-7: Austin Energy: energy efficient improvement rebates.

QUESTION: Are any of the properties involved in items 4-7 on the repeat offender's lists for code violations? If they are have they resolved these offenses? COUNCIL MEMBER ALTER'S OFFICE

ANSWER: 1) The apartment complex in Item 5 is currently on the Austin Code Department's repeat offender registration list. The properties in the other items are not.

2) Yes, in 2015, the apartment complex underwent a total renovation to update the property and resolve code issues. It will be removed from the code violation list in October 2017, if it remains free of violations and passes inspection. Austin Energy intends to bring this rebate request back to Council after successful completion of the inspection.

Agenda Item # 8: Authorize negotiation and execution of an interlocal agreement with the Capital Metropolitan Transportation Authority for capital improvements made to the bus stop at Austin-Bergstrom International Airport, and to establish the parties' respective responsibilities. (District 2)

QUESTION: Will the design stage of the transit shelter include input from users of transit (employees and travelers)? How will that input be solicited and received? COUNCIL MEMBER HOUSTON'S OFFICE

ANSWER: The design process of this project is complete and the iconic guitar-shape bus shelter is currently under construction, per City Council Authorization on 01/26/17. Staff from the Aviation Department worked hand-in-hand with CapMetro executives and staff throughout this process to finalize architectural design and technological features representing Austin. The lighted guitar-shape design was selected after an informal architectural competition from the City's approved architect rotation list. The purpose of this interlocal agreement is to memorialize the partnership between Aviation Department and CapMetro in the development and operation of the bus shelter and transportation service at the airport.

Agenda Item # 13: Authorize the use of the design-build procurement method in accordance with Texas Government Code Chapter 2269 for design and construction services for the Austin Convention Center warehouse and marshalling yard.

QUESTON: What is the distance from the proposed location of the warehouse and marshalling yard to the convention center? What is the travel time during peak times? COUNCIL MEMBER HOUSTON'S OFFICE

ANSWER: The distance is approximately 12 minutes or 5.1 miles. ACCD will utilize the proposed facility (marshalling yard) as a staging site to facilitate move-in/move-out of events that will be coordinated utilizing an event operations schedule. Increase travel times will be factored into the event operations schedule and could increase and/or decrease the travel time depending on the group hosting the event. In order to support our clients and events, the facility (ACC) operates from 6 a.m. to 12 p.m. daily utilizing an events operations schedule to coordinate move-in/move-out operations.

QUESTION: 1) Is the proposed Warehouse and Marshalling Yard part of the

proposed Convention Center Expansion? 2) How does it fit into that proposal? 3) Will the proposed Yard be built on the current ACC property? 4) Did the Visitor Impact Task Force review or make a recommendation on this proposal? 5) Has ATD reviewed the issues raised in the RCA regarding queuing and staging of idling trucks on Red River St. and the traffic impacts in the area? 6) Has ATD made recommendations? COUNCIL MEMBER KITCHEN'S OFFICE

ANSWER: 1) Although the proposed warehouse and marshalling yard were not part of the Visitor Impact Task Force's (VITF) scope, the use of a marshalling yard is a proven tool and strategy utilized by high occupancy Convention Centers around the country, like the Austin Convention Center (ACCD), to manage traffic demands, relieve vehicular compression, and avoid any queuing in and around adjacent thoroughfares. A marshalling yard presents a range of transportation management strategies and has the flexibility to respond to the diverse and unique needs of each event with minimal disruption to the Convention Center and surrounding area. Recognizing the expanding development in the area and the potential need for a larger staging area, ACCD and ORES have worked over the past seven years to identify a unique parcel of land to expand warehouse operations and marshalling yard needs to enhance ACCD's ability to facilitate event coordination and to increase operational efficiency and public safety in the area. The current infrastructure at the Convention Center is inadequate to support the intensified activity around the Convention Center; the development of this site will allow ACCD to accommodate the increased demand for facility event coordination and to mitigate traffic congestion and customer interruptions adequately and safely.

2) The marshalling yard addresses the immediate need to mitigate traffic congestion and customer interruptions adequately and safely, providing a long-term solution that can accommodate any expanded facility capacity in the future.

3) No. On April 20th, 2017, the City Council approved the acquisition of approximately 41.67 acres for a proposed warehouse and marshaling yard for the Austin Convention Center Department off U.S. Hwy, 183.

4) The VITF did not make a recommendation on the proposed location of the warehouse and marshalling yard, but the marshalling yard is being designed to address the future demands and business opportunities at the ACC.

5) The Austin Transportation Department (ATD) has not completed a traffic study of the Convention Center specific to Red River thoroughfare.

6) No, but ATD concurs that the current constraints of the ACC service yard and marshalling infrastructure have reached a tipping point for capacity on the surrounding thoroughfares, outpacing ACCD's ability to mitigate traffic congestion and customer interruptions adequately and safely. An offsite storage facility and marshalling yard will help to alleviate vehicular congestion that inhibits mobility along thoroughfares and provide a buffer for controlling ingress and egress of vehicular traffic related to events at both City-owned venues. It will also help to ensure that emergency vehicles will have a path into the area if an emergency arises.

Agenda Item # 14: Authorize negotiation of an interlocal agreement with the STATE OF TEXAS, acting by and through the TEXAS FACILITIES COMMISSION, for development of Phase One of the 2016 Texas Capitol Complex Master Plan.

QUESTION: 1) Please provide an assessment of how the proposed Texas Capitol Complex master Plan will impact downtown traffic and coordination with current mobility planning as it relates to conversions of identified streets to two-way and vacation of portions of street row. Include impacts to transit services if possible. 2) Please provide a fiscal and staff hourly assessment for providing "expedited processing of all aspects of the project requiring City consideration" and expected impact to existing development services workload. 3) Please provide a fiscal and utility impacts for granting of waiver and easements and right-of-way usage fees. 4) Please clarify opportunity to delay item to later in 2017 to allow for the City to better prepare for proposed Capitol Planning effort. COUNCIL MEMBER KITCHEN'S OFFICE

ANSWER: See attachments.

QUESTIONS FROM WORK SESSION: 1) Please provide copies of previous Council resolutions related to work with the Facilities Commission. 2) Please provide copies of any legal memos that may have been distributed in response to the resolutions referenced in the previous question. 3) Is the Texas Facilities Commission willing to consider incorporating labor standards as a part of Phase One project specifications? MAYOR PRO TEM TOVO 4) Please provide additional information regarding direct costs to the City. 5) Please provide additional information regarding proposed vehicular circulation routes in the project area as they relate to cycling vehicles in and out of the proposed parking garages entrances and exits. COUNCIL MEMBER HOUSTON'S OFFICE 6) Please provide additional information regarding the fee waivers requested by the Texas Facilities Commission. 7) Please provide additional information regarding State development activities that do not require City consent. 8) Please provide additional information regarding planned public access to the parking facilities proposed as a part of Phase One. Specifically, will the spaces will be publicly accessible and if so, during what timeframe and at what cost (if applicable)? 9) Please provide additional detail regarding the \$581M Phase One project costs. COUNCIL MEMBER POOL 10) Please provide a list of right-of-way sections that the City might be interested in acquiring from the State, including the section that has recently been under discussion near the Grove Planned Unit Development (PUD) property. COUNCIL MEMBER ALTER

ANSWER: See attachment.

Agenda Item # 15: Authorize negotiation and execution of an interlocal agreement with the University of Texas at Austin's Ray Marshall Center for process development, data collection, and analysis of youth-focused programs in science, technology, engineering, math, creative and entrepreneurship workforce

development programs for a total contract amount not to exceed \$100,000.

QUESTION: 1) What was the reason for the previous postponement to this interlocal agreement? 2) What tools will this research yield that will help evaluate related programs proposed by Quality of Life Commissions and other boards and commissions of the City? COUNCIL MEMBER ALTER'S OFFICE

ANSWER: 1) The item was approved by council for postponement to allow staff to refine the idea around the scope of the University of Texas data collection and analysis in support of a program measuring the extent and the effect of youth focused programs in Title 1 schools, STEM organizations and participating Technology companies. The results will be used to evaluate a design connectivity between education and careers in cluster industries. 2) The revised interlocal now contains two focuses, adults and youth.

For the adult focused research, the work will be used to present return on investment on individuals who previously received training and obtained middle skill employment. The outcome based impact model will calculate the amount of taxes now being paid by the individual and municipal cost saving from subsidized programs that support lower income citizens, no longer necessary for the trained and now employed individuals. This report will provide recommended performance measurements for the city to be able to evaluate direct outcomes from workforce development programs.

For the youth focused research, the systems analysis will identify gaps in services using quantitative and qualitative data. This gap analysis will provide a comprehensive system evaluation and recommendation for improving access to a pipeline for lower income students to training, internships and career opportunities. An evaluation of the current STEM ecosystems will be prepared to better define the role for government to strengthen STEM outreach in Title 1 schools.

Agenda Item # 18: Approve an ordinance amending the Fiscal Year 2016- 2017 Human Resources Department Operating Budget Special Revenue Fund (Ordinance No. 20160914-001) to accept and appropriate an additional \$26,700 in grant funds from the Quality of Life Foundation for the Emerging Leader Summer Internship Program which provides paid internships for Austin area youth.

QUESTION: Will this program be included in the baseline research being proposed in item 15 from Economic Development? Please provide detail on outcome measures and outcome achievements for the program from the start of the program to the current cohort. Are participants given the opportunity to participate multiple times and build on their skill sets? COUNCIL MEMBER ALTER'S OFFICE

ANSWER: See attachment.

Agenda Item # 26: Authorize negotiation and execution of a contract through the Texas Local Government Purchasing Cooperative, administered by the Texas Association of School Boards, Inc. (BuyBoard) with GT DISTRIBUTORS INC., for the purchase of night vision goggles and helmet mounts, in an amount not to exceed \$96,300.

QUESTION: Please provide the breakdown of cost for night vision goggles and helmet mounts. Also, what is the current inventory, its age and useful life? Is the proposed new equipment a qualitative upgrade or is current inventory failing or near failing? How many SWAT units/ members does current inventory supply, as well as with additional inventory? COUNCIL MEMBER KITCHEN'S OFFICE

ANSWER: The breakdown of cost for night vision goggles and helmet mounts are approximately \$11,600 each for the goggles and \$500 each for the mounts. 2) The current inventory consists of 24 units on hand. Of these, nine were purchased in August 2015, four were ordered in December 2016, and the remaining 11 are aging equipment, some of which are more than 19 years old. These additional eight units will complete the equipment upgrade, which will outfit officers for the next 8-10 years. 3) The new equipment is an upgrade to replace some of the aging equipment which is in excess of 19 years old. Parts required on the older equipment to complete repairs are becoming more difficult to source and are sometimes unavailable. 4) 25 SWAT members utilize the current and future inventory.

Agenda Item # 31: Authorize negotiation and execution of a 24-month contract with ASPLUNDH TREE EXPERT CO., or one of the other qualified offerors to Request For Proposals TVN0061, to provide energized transmission line clearance services in an amount of \$6,000,000, with three 12-month extension options in an amount of \$2,500,000 per extension option, for a total contract amount not to exceed \$13,500,000.

QUESTION: Can we see the full evaluation criteria? COUNCIL MEMBER KITCHEN'S OFFICE

ANSWER: The evaluation criteria as stated in the solicitation were as follows:

Evaluation Factors:  
Total will be 100 points.

a) Technical Solutions Proposed (Grasp of the requirement and its solution(s), responsiveness to terms and conditions, completeness and thoroughness of the technical data and documentation.) (reference 1B (i) and 1B (iii) Safety and training program) – 30 points  
1B. – Technical Proposed Solution: Define in detail your understanding of the requirements presented in the Scope of Work of this request for proposal. Provide all details as required in the Scope of Work to show your plan for accomplishing the work, assembling the crews and equipment, and completing

work in a safe and timely manner. Also provide additional information you deem necessary to evaluate your proposal.

i. A description of your work program by tasks. Detail the steps you will take in the following tasks found in the Scope of Work (Section 0500 and Attachments).

iii. A description of your company's training and safety program per Section 0500 Item 13. see attached Section 0500)

b) Demonstrated Applicable Experience (reference 1D (i) and 1D (ii)), Equipment/Facilities (reference 1B (ii.a)), and Personnel Qualifications (reference 1B (ii.b)) – 35 points

1D. Part V - Prior Corporate Experience: Describe only relevant corporate experience and individual experience for personnel who will be actively engaged in the project. Do not include corporate experience unless personnel assigned to this project actively participated. Do not include experience prior to 1998. Supply the project title, year, and reference name, title, present address, and phone number of principal person for whom prior projects were accomplished.

i. Contactor must demonstrate a minimum of five (5) years of work as a successful energized utility line clearance Contractor per Section 0500 Item 3 (A).

ii. A minimum of five (5) positive references where Contractor has provided services of a similar size and scope within the last three (3) years.

c) Total Evaluated Cost - (Section 0705, AE Distribution Energized Line Clearance Cost Sheet) – 25 points

d) Local Business Presence (Maximum 10 points)

Agenda Item # 33: Approve a resolution relating to the development of a Ciclovía Open Streets weekend day event on Congress Avenue from 11th Street to Mary Street.

QUESTION: 1) In order to reach geographic equity in access, is there a plan to bring Ciclovía to the parts of the city/ Is this on a geographic rotation? Please provide details. 2) Have ATD and ACE weighed in on the matter? 3) Are ATD and ACE in favor of the allowing the closure? 4) Since its start what has been the annual spend from the city (including any fee waivers) for each Ciclovía event? 5) What is the total cost of a Ciclovía event and what is the target amount (% of total cost) of City resources to go to the event for the upcoming Ciclovía? COUNCIL MEMBER ALTER'S OFFICE

ANSWER: 1) At this time, there are no active plans to bring Ciclovía events to other parts of the city. However, there is interest from community groups in doing so and a successful history of hosting these types of events throughout the city including in the Central East along 6th street (downtown/IH-35 to Robert T Martinez), in the Mueller neighborhood, in Dove Springs and in

North Central Austin. 2) ATD and ACE staff have been briefed on the concept and are prepared to gather the requested information should the resolution be approved by Council. ACE staff have advised that if this event were to move forward, the traffic control plan would need to maintain east-west traffic at 11th, 5th, 6th and Cesar Chavez streets. 3) Should this resolution move forward, staff would prefer to evaluate this event holistically before providing a recommendation, including how the event relates to the current moratorium on street events and the anticipated impact to mobility in this part of Austin. 4) Staff estimate that the total amount of fee-waivers for Ciclovía-related events since 2015 totals approximately \$50,000. 5) As with any event, the cost depends on varying dynamics, including the specific location and event plan. Staff is prepared to provide estimates on the proposed event's cost impact to City, as per the direction in the resolution.

Agenda Item # 35: Approve a resolution directing the City Manager to draft a business plan related to establishing a Veterans Resource Center.

Question: Will this process assess the possibility of federal funding sources?  
COUNCIL MEMBER ALTER'S OFFICE

Answer: Yes, it would be considered as part of developing a business plan. There will be a revised version of the resolution that will make this explicit.

Agenda Item # 41: Approve a resolution authorizing the City Manager to negotiate and execute amendments to the City's Improvement of Cultural Facilities for Public Use Funded With Bond Funds Agreement with the Mexic-Arte Museum extending the deadline for the expenditure of bond funds.

QUESTION: Does Mexicarte have any money already lined up for this project outside of the \$5 million? Will the plan and design costs come from the City's \$5million? COUNCIL MEMBER ALTER'S OFFICE

ANSWER: 1) Attached is a spreadsheet provided by Mexic-Arte representative Sylvia Orozco. Based upon the information attached, it appears there has been approximately \$1.1 million raised in private donations and/or grants. Something to consider, however, is this information does not include expense accounting. The Mexic-Arte stated a third party was hired (Butler Non-Profit) to conduct a capital campaign feasibility analysis (suggesting the Mexic-Arte had the capacity to raise between \$1.7 million and \$3.7 million)- however, the information provided does not outline the cost of the study. 2) The Bond Agreement allows up to 10% of the Bond Funds to assist in the planning/programming and design phases of the project. To date \$31,333 of the 10% has been spent on the Museum Program Plan. The Museum plans to access the remaining funds for planning/programming and design phase as needed.

Agenda Item # 58: Conduct a public hearing and consider an ordinance authorizing execution of an agreement with Austin Independent School District establishing

site development standards for redevelopment of Bowie High School, located at 4103 W. Slaughter Lane; and granting approval for redevelopment of Bowie High School (This action concerns land located within the Barton Springs Zone).

QUESTION: 1) What are the differences between the proposed agreement with Austin Independent School District and the existing agreement? 2) Is it accurate SOS compliance would limit the site to 15% impervious cover, the existing AISD/City agreement provides for 20-25%, and current proposal would allow 40% or more impervious cover? 3) Please provide more detail/accounting on the arrangement for mitigating impervious cover. What will be the final total impervious cover for the tract calculated as a percent of net site area? 4) Are area tracts of land being used to offset existing impervious cover on the Bowie High School site? If yes, which sites and are they secured? Are the transfer credits for the sites available or have they already been dedicated? 5) Council's resolution provided for including the Travis Country tract for transfer of impervious cover for AISD and there appeared to be an understanding that AISD and City staff agreed the Travis Country tract is suitable for transfer of development rights within the Barton Springs Zone. Why is the agreement/exhibit without reference to this tract of land?  
COUNCIL MEMBER KITCHEN'S OFFICE


ANSWER: See attachment.


Agenda Item # 62: Approve a resolution establishing a 2018 Charter Review Commission to align the City Charter with changes to municipal ordinances and to make recommendations on improving other functions of city government.

QUESTION: 1) Has this topic in the resolution: "City boards and commissions, including terms of Planning Commission members;" already been treated by the Board and Commissions Transition Taskforce? 2) What were their findings and what is left for this commission to explore? 3) Has this type of commission existed in the past for the City? If so, please provide a copy of their work products. 4) Please provide context for the establishment of this commission at this juncture. COUNCIL MEMBER ALTER'S OFFICE

ANSWER: See attachment.

## END OF REPORT - ATTACHMENTS TO FOLLOW

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### Council Question and Answer

|                               |          |              |               |
|-------------------------------|----------|--------------|---------------|
| Related To                    | Item #14 | Meeting Date | June 22, 2017 |
| Additional Answer Information |          |              |               |

**QUESTION:** 1) Please provide an assessment of how the proposed Texas Capitol Complex master Plan will impact downtown traffic and coordination with current mobility planning as it relates to conversions of identified streets to two-way and vacation of portions of street row. Include impacts to transit services if possible. 2) Please provide a fiscal and staff hourly assessment for providing “expedited processing of all aspects of the project requiring City consideration” and expected impact to existing development services workload. 3) Please provide a fiscal and utility impacts for granting of waiver and easements and right-of-way usage fees. 4) Please clarify opportunity to delay item to later in 2017 to allow for the City to better prepare for proposed Capitol Planning effort. COUNCIL MEMBER KITCHEN'S OFFICE

**ANSWER:**

*1) Please provide an assessment of how the proposed Texas Capitol Complex Master Plan will impact downtown traffic and coordination with current mobility planning as it relates to conversions of identified streets to two-way and vacation of portions of street row. Include impacts to transit services if possible.*

Based on the Traffic Impact Analysis (TIA) submitted by the Applicant, the project is expected to impact downtown traffic most significantly in the area bounded by Guadalupe Street, Martin Luther King Jr. Boulevard, Trinity Street, and 15th Street. Several site transportation improvements were identified to mitigate site impacts from increased project trips. These site transportation improvements include signalization, additional turn lanes, and re-assignment of lanes at several intersections. Additionally, similar system transportation improvements were identified along the periphery of the study area to mitigate impacts on the bordering intersections that are currently servicing non-project traffic. The TIA indicates that the conversion of 16th, 17th, and 18th Streets and vacation of Congress Avenue can be accommodated with the proposed mitigation measures.

The Applicant has agreed to design its proposed project such that it will not preclude possible future urban rail service along 18th Street. Capital Metro has developed an acceptable plan to reroute its limited existing bus service in this area.

*2) Please provide a fiscal and staff hourly assessment for providing “expedited processing of all aspects of the project requiring City consideration” and expected impact to existing development services workload.*

Phase One of the Capitol Complex Master Plan is a multi-package project with buildout projected to occur over a 4 ½ year period. Of the work proposed, City staff would be responsible for review of work impacting City utilities and/ or City right-of-way or easements.

The Texas Facilities Commission’s (TFC) plans are in the conceptual stage at this time but based on available information, staff prepared the attached cost of service estimate. TFC will be responsible for all costs of service (includes direct staff time) associated with review, processing, and inspections. The cost of service estimate assumes that the review and permitting will occur under the General Permit Program. The TFC request for expedited review would primarily be fulfilled through the utilization of the General Permit Program, which

costs \$5,000 annually. This program was also made available to Capital Metro and the University of Texas in recent interlocal agreements.

Outside of the General Permit Program, City staff would prioritize related project submittals and is not committed to any specific days for review other than those that are established by each department. The intent of prioritization is that TFC project submittals “get put at the top of the stack” once the submittal is received.

TFC is requesting the assignment of a project team. Staff does not envision having to invoke this project team outside of the team that normally meets under the General Permit Program.

#### **ATTACHMENT 1**

*3) Please provide a fiscal and utility impacts for granting of waiver and easements and right-of-way usage fees.*

The Texas Facilities Commission (TFC) has requested a waiver of fees associated with the subterranean easements required for construction of the underground utility tunnels extending from the Central Utility Plant, located at 201 East 14<sup>th</sup> Street, to the new building proposed for 1801 Congress Avenue (see Slide 5). Staff estimates the value at approximately 5% of the fee simple interest. At \$250/ square foot for 21,867 square feet, the estimated fee is \$273,338.

TFC has also requested a waiver of the fees associated with right-of-way usage in the project area over the 4 ½ year project term. The fee structure for right-of-way usage includes tiers for which the cost is calculated based on square footage and duration. Fees were estimated over a 5-year period and rounded up to account for the potential for unanticipated issues during the construction stage. The projected total is approximately \$6.6M. Attached is a spreadsheet that details those calculations.

The total amount requested is \$6.9M. Neither fee type is considered a direct staff cost nor a cost to the City; they are considered unrealized revenue. This is consistent with the previously approved interlocal agreement with the University of Texas.

Utility relocations associated with this project will be reviewed and approved by the City and subject to City design standards. TFC will be responsible for all project related costs.

#### **ATTACHMENT 2**

*4) Please clarify opportunity to delay item to later in 2017 to allow for the City to better prepare for proposed Capitol Planning effort.*

The following response was provided by the Texas Facilities Commission (TFC).

To meet its legislative mandate, and make efficient use of taxpayer’s funds, TFC needs to execute the work as efficiently as possible. An interlocal with the City will allow TFC to collaborate and coordinate with City staff and services so the work can be expedited, street closure times reduced, and the project completed sooner. TFC believes this is a mutually beneficial arrangement and needs to complete the ILA process by August in order to achieve these objectives.

*5) Please provide a copy of the Traffic Impact Analysis.*

A copy of the TIA is attached.

#### **ATTACHMENT 3**

*6) Please provide additional information regarding any analysis of the potential impact on the surrounding stormwater system.*

At this point in time, City staff has not received detailed plans for review. The Texas Facilities Commission (TFC)

provided the following information.

#### Stormwater Management:

The design intent is that the project will comply with the City of Austin water quality requirements. Both the Texas Government Code and the City of Austin require the proposed improvements not increase the runoff rate from existing conditions. To achieve this requirement, some form of detention is required for any increase in impervious cover. The existing site for the Capitol Complex Phase 1 project is mostly impervious (roughly 85%). Our design team has assumed that new green spaces built over the top of below grade structures will be considered impervious for the purpose of stormwater calculations, even though there will be more public green space once the project is completed. Given this assumption, the project site will have a slight increase in impervious cover (90%, up from 85%). This small increase in impervious cover will require some on-site detention. The design concept for achieving the on-site detention is to utilize a sustainable design concept to capture rainwater in the porous fill materials at the bottom of the tree wells, at the allée of trees flanking each side of the new mall. This achieves the goals of mitigating runoff, while directing stormwater into planted, landscaped areas.

#### Stormwater Infrastructure:

The TFC project team has met with the City of Austin Watershed Protection Department, and will continue to collaborate with the City departments in developing the final design. There are existing storm sewer systems in place within the project area, specifically 17th Street and 18th Street. The project will assume the responsibility for maintaining conveyance of the storm discharge during construction, and will replace these lines with new pipes installed within the fill material over the new below grade parking structure to reconnect the gravity flows of the existing infrastructure. The new stormwater infrastructure installed will be sized to accommodate any increased demand from the project, modeling the fully developed conditions for the watershed. The model will account for COA infrastructure upstream and downstream.

#### Stormwater Quality:

The Texas Commission of Environmental Quality regulates stormwater discharges from construction activity. To minimize the effect of non-point source pollutants, stormwater control measures will be put in place to improve water quality by removing suspended solids. Stormwater Pollution Prevention Plans (SWPPP) will be followed for all phases of construction.

*7) With regard to Slide 8 which summarizes the requests related to Expedited Process, please clarify whether these benefits are extended to other community partners such as the Austin Independent School District (AISD), Capital Metro, etc.*

The interlocal proposed for negotiation with the Texas Facilities Commission (TFC) is for Phase One of the Capitol Complex Master Plan and is not intended to apply to all TFC projects. The City of Austin has entered into similar agreements with the referenced community partners. Although the terms and the vehicle for those terms may vary on a case by case basis based on the specific needs of the community partner, requests similar to those made by the TFC are typically reviewed by staff and forwarded to Council for consideration.

As described previously, the TFC request for expedited review would primarily be fulfilled through the utilization of the General Permit Program, which costs \$5,000 and will be paid by the TFC. This program was also made available to Capital Metro and the University of Texas in recent interlocal agreements.

Outside of the General Permit Program, City staff would prioritize related project submittals and is not committed to any specific days for review other than those that are established by each department. The intent of prioritization is that TFC project submittals “get put at the top of the stack” once the submittal is received.

## Capitol Complex Project- Phase One Fee Estimates

**June 21, 2017**

| COST OF SERVICE ESTIMATES (TO BE PAID BY TEXAS FACILITIES COMMISSION) |   |  |              |          |     |               |
|---|---|--|--------------|----------|-----|---------------|
| Type  | Fee Description                                   | Qualification  | Cost         | Unit     | Qty | Total         |
| General   | Annual General Development Permit Application Fee | Annual fee for estimated project term (2017-2021)                                      | \$ 5,000.00  | each     | 4   | \$ 20,000.00  |
| Inspection  | Site and Subdivision Inspection Fees              | Site Improvements and Civil Work in the ROW, TRUSS Support for temporary utilities     | \$356,106.40 | each     | 1   | \$ 356,106.40 |
| Austin Water  | Service Extension Request (SER) Application Fees  | Assume 3 SER submissions at minimum review charge                                      | \$ 656.00    | each     | 3   | \$ 1,968.00   |
| Austin Water  | Water/ Wastewater Plan Review Submittals          | Assume 6 work packages, 1 submittal  | \$ 215.00    | each     | 6   | \$ 1,290.00   |
| Austin Water  | Water/ Wastewater Plan Review Submittals          | Assume 6 work packages, 5 related resubmittals   | \$ 536.00    | each     | 30  | \$ 16,080.00  |
| Right of Way (ROW)  | ROW Vacation Application                          | Congress and 17th  | \$ 1,000.00  | each     | 1   | \$ 1,000.00   |
| Right of Way (ROW)  | ROW Vacation Appraisal                            | Congress and 17th- Estimated cost of \$15K - \$20K based on area proposed for vacation | \$ 20,000.00 | each     | 1   | \$ 20,000.00  |
| Right of Way (ROW)  | Easement Release Application Fee                  | Public Utility Easement: Congress Ave., 17th St., Martin Luther King Jr Blvd.          | \$ 435.00    | each     | 3   | \$ 1,305.00   |
| Right of Way (ROW)  | License Agreement Fee                             | Temporary Suspension Utility Crossing  | \$ 425.00    | each     | 1   | \$ 425.00     |
| Right of Way (ROW)  | License Agreement Fee                             | Tower Crane  | \$ 425.00    | each     | 4   | \$ 1,700.00   |
| Right of Way (ROW)  | License Agreement Fee                             | Tie-backs (1801 and 1601 Congress)   | \$ 425.00    | each     | 2   | \$ 850.00     |
| Right of Way (ROW)  | Encroachment Agreement Fee                        | Tie-backs (1801 and 1601 Congress)   | \$ 1,000.00  | each     | 2   | \$ 2,000.00   |
| Right of Way (ROW)  | Encroachment Agreement Appraisal Fee              | Tie-backs  | \$ 3,500.00  | each     | 2   | \$ 7,000.00   |
| Right of Way (ROW)  | Temp Use of ROW Permit                            | Temporary Use of ROW (5 year period)   | \$ 150.00    | each     | 20  | \$ 3,000.00   |
| Right of Way (ROW)  | Barricade Inspection Fees                         | Capital Improvement Project (CIP) Barricade Inspection Fee (20 streets over 5 years)   | \$ 1,500.00  | each     | 20  | \$ 30,000.00  |
| Right of Way (ROW)  | ROW Traffic Control Review and Inspection Fees    | Estimated by Year @ \$50 an Hour - 100 hrs per year                                    | \$ 50.00     | per hour | 500 | \$ 25,000.00  |
| Right of Way (ROW)  | Excavation Permit Application Fees                | Permit Application Fees (20 Streets over 5 years)                                      | \$ 45.00     | each     | 100 | \$ 4,500.00   |
| ESTIMATED TOTAL   |   |  |              |          |     | \$ 492,224.40 |

**Capitol Complex Phase One**  
**Right-of-Way Usage Estimates- 5yr period**

| <b>TIER 1 - (day 1 - 180)</b>       | length | width | # of days | fee per sq.ft | Total                 |
|-------------------------------------|--------|-------|-----------|---------------|-----------------------|
| Sidewalk Space (1700 Brazos)        | 345    | 10    | 180       | 0.01          | \$6,210.00            |
| Sidewalk Space (E MLK)              | 390    | 10    | 180       | 0.01          | \$7,020.00            |
| Sidewalk Space (E 18th)             | 390    | 10    | 180       | 0.01          | \$7,020.00            |
| Sidewalk Space (E 17th N)           | 150    | 10    | 180       | 0.01          | \$2,700.00            |
| Sidewalk Space (E 17th S)           | 150    | 10    | 180       | 0.01          | \$2,700.00            |
| Sidewalk Space (E 16th N)           | 280    | 10    | 180       | 0.01          | \$5,040.00            |
| Sidewalk Space (W 17th N)           | 190    | 10    | 180       | 0.01          | \$3,420.00            |
| Sidewalk Space (W 17th S)           | 190    | 10    | 180       | 0.01          | \$3,420.00            |
| 1st Traffic Lane (E 17th)           | 150    | 22    | 180       | 0.1           | \$59,400.00           |
| 1st Traffic Lane (W 17th)           | 190    | 22    | 180       | 0.1           | \$75,240.00           |
| total                               |        |       |           |               | <b>\$172,170.00</b>   |
| <b>TIER 2 - (day 181 - 365)</b>     | length | width | # of days | fee per sq.ft | Total                 |
| Sidewalk Space (W MLK)              | 345    | 10    | 185       | 0.05          | \$31,912.50           |
| Sidewalk Space (1800 Colorado)      | 390    | 10    | 185       | 0.05          | \$36,075.00           |
| Sidewalk Space (W 18th n/c)         | 390    | 10    | 185       | 0.05          | \$36,075.00           |
| Sidewalk Space (W 18th s/c)         | 150    | 10    | 185       | 0.05          | \$13,875.00           |
| Sidewalk Space (1700 Colorado)      | 150    | 10    | 185       | 0.05          | \$13,875.00           |
| Sidewalk Space (W 17th n/c)         | 280    | 10    | 185       | 0.05          | \$25,900.00           |
| Sidewalk Space (W 17th s/c)         | 190    | 10    | 185       | 0.05          | \$17,575.00           |
| Sidewalk Space (1600 Colorado)      | 190    | 10    | 185       | 0.05          | \$17,575.00           |
| 1st Traffic Lane (W 18th)           | 150    | 22    | 185       | 0.14          | \$85,470.00           |
| 1st Traffic Lane (W 17th)           | 190    | 22    | 185       | 0.14          | \$108,262.00          |
| total                               |        |       |           |               | <b>\$386,594.50</b>   |
| <b>TIER 3 - (day 366 - 545)</b>     | length | width | # of days | fee per sq.ft | Total                 |
| Sidewalk Space (W MLK)              | 345    | 10    | 180       | 0.09          | \$55,890.00           |
| Sidewalk Space (1800 Colorado)      | 390    | 10    | 180       | 0.09          | \$63,180.00           |
| Sidewalk Space (W 18th n/c)         | 390    | 10    | 180       | 0.09          | \$63,180.00           |
| Sidewalk Space (W 18th s/c)         | 150    | 10    | 180       | 0.09          | \$24,300.00           |
| Sidewalk Space (1700 Colorado)      | 150    | 10    | 180       | 0.09          | \$24,300.00           |
| Sidewalk Space (W 17th n/c)         | 280    | 10    | 180       | 0.09          | \$45,360.00           |
| Sidewalk Space (W 17th s/c)         | 190    | 10    | 180       | 0.09          | \$30,780.00           |
| Sidewalk Space (W 16th n/c)         | 190    | 10    | 180       | 0.09          | \$30,780.00           |
| 1st Traffic Lane (W 18th)           | 150    | 22    | 180       | 0.18          | \$106,920.00          |
| 1st Traffic Lane (W 17th)           | 190    | 22    | 180       | 0.18          | \$135,432.00          |
| total                               |        |       |           |               | <b>\$580,122.00</b>   |
| <b>TIER 4 - (546 days and over)</b> | length | width | # of days | fee per sq.ft | Total                 |
| Sidewalk Space (W MLK)              | 345    | 10    | 1280      | 0.13          | \$574,080.00          |
| Sidewalk Space (1800 Colorado)      | 390    | 10    | 1280      | 0.13          | \$648,960.00          |
| Sidewalk Space (W 18th n/c)         | 390    | 10    | 1280      | 0.13          | \$648,960.00          |
| Sidewalk Space (W 18th s/c)         | 150    | 10    | 1280      | 0.13          | \$249,600.00          |
| Sidewalk Space (1700 Colorado)      | 150    | 10    | 1280      | 0.13          | \$249,600.00          |
| Sidewalk Space (W 17th n/c)         | 280    | 10    | 1280      | 0.13          | \$465,920.00          |
| Sidewalk Space (W 17th s/c)         | 190    | 10    | 1280      | 0.13          | \$316,160.00          |
| Sidewalk Space (W 16th n/c)         | 190    | 10    | 1280      | 0.13          | \$316,160.00          |
| 1st Traffic Lane (W 18th)           | 150    | 22    | 1280      | 0.2           | \$844,800.00          |
| 1st Traffic Lane (W 17th)           | 190    | 22    | 1280      | 0.2           | \$1,070,080.00        |
| total                               |        |       |           |               | <b>\$5,384,320.00</b> |

**ESTIMATED TOTAL: \$6,523,206.50**

*TRAFFIC IMPACT ANALYSIS FOR*

# **Texas Facilities Commission Texas Capitol Complex Master Plan 2018 Update**

*AUSTIN, TEXAS*

*DeShazo Project No. 15206*

Prepared for:

**Page Southerland Page, LLP**

400 W. Cesar Chavez Street

Suite 500

Austin, Texas 78701

Prepared by:

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Dallas, Texas 75202

214.748.6740



December 6, 2016

*December 5, 2016*



Traffic Impact Analysis for  
**Texas Facilities Commission – Texas Capitol Complex Master Plan 2018 Update**  
 ~ DeShazo Project No. 15206

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|   |
|---|
| <b>ITE Trip Generation Manual, 9<sup>th</sup> Edition</b> |
| <b>Highway Capacity Manual, 2010 Edition</b>              |

## EXECUTIVE SUMMARY

The services of **DeShazo Group, Inc.** (DeShazo) were retained by **Page Southerland Page, LLP** (Page) on behalf of the Texas Facilities Commission to conduct a Traffic Impact Analysis (TIA) for the proposed *Texas Capitol Complex Master Plan* development (“the Project”) located in Austin, Texas, encompassing the area bounded by Trinity Street on the east, 15<sup>th</sup> Street on the south, Guadalupe Street on the west and Martin Luther King Boulevard on the north. The Project will consist of converting the one-way street of 16<sup>th</sup>, 17<sup>th</sup> and 18<sup>th</sup> to two-way operation, closing Congress Street to vehicle traffic between the blocks from 18<sup>th</sup> Street to 15<sup>th</sup> street, limiting vehicle traffic on Congress Street from Martin Luther King Boulevard to 18<sup>th</sup> Street and eliminating traffic travelling through on 17<sup>th</sup> Street. The study will also look at the buildout condition of construction of underground parking under Congress Street and future capital offices buildings. Buildout of the Project is estimated to occur in three phases. Even though, the Texas Legislature has only appropriated funding for Phase 1, this report analyzes the effect of this additional building construction and potential associated additional vehicle impacts for all three phases.

The purpose of this report is to summarize the vehicular traffic operational characteristics of the background conditions within a specific study area and to measure the projected incremental impact related to the Project as determined by standardized engineering analyses. The study parameters used in this TIA are based upon the requirements of the City of Austin and are consistent with the standard industry practices used in similar studies.

The following findings and recommendations are based upon buildout of the subject property in accordance with the development scenario outlined in the *Project Description* section of this report.

**FINDING:** The existing roadway system generally provides enough capacity to accommodate the projected traffic generated by the proposed changes included in the Texas Capitol Master Plan 2018 update with some minor modification to traffic signals and other traffic controls.

**FINDING:** Based on the analysis discussed above in this report, the 16<sup>th</sup> Street, 17<sup>th</sup> Street and 18<sup>th</sup> Street has enough capacity to accommodate additional traffic due to one way to two way conversion and additional traffic due to proposed office spaces.

- ❖ **RECOMMENDATION:** The existing stop sign on east west approaches on 16<sup>th</sup> Street and 18<sup>th</sup> Street is recommended to be kept at the intersection with Congress Street as it will allow pedestrian to safely cross these streets after the development of Pedestrian Boulevard along Congress Street.
- ❖ **RECOMMENDATION:** Driveway 4 and Driveway 5 is recommended to be constructed in the middle of 15th Street and 16th Street to form a four way intersection to maximize available spacing in order to meet the City of Austin driveway spacing requirements.
- ❖ **RECOMMENDATION:** It is also recommended that the driveway 6 and driveway 7 to be constructed in the middle of Lavaca Street and Colorado Street to form four way intersection and maximize available spacing.
- ❖ **RECOMMENDATION:** It is also recommended that the traffic signal should be considered at the intersections of Lavaca Street and 18<sup>th</sup> Street as well as MLK Blvd and Colorado Street. If reviewing agency selected a new traffic signal at these intersections, a detailed traffic signal warrant analysis should be performed prior to the signal installation.

Refer to **Table 10** following summary of findings and recommendations for detail on proposed changes and mitigation at each intersection.

END

## PROJECT SITE



**Exhibit 1. Site Location and Study Area Map with Phase Developments**

## ***Technical Memorandum***

**To:** Ryan Losch, AIA — Page Southerland Page, LLP  
**From:** DeShazo Group, Inc.  
**Date:** December 5, 2016  
**Re:** Traffic Impact Analysis for Texas Capitol Master Plan 2018 Update in Austin, Texas  
*DeShazo Project Number 15206*

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### **INTRODUCTION**

The services of **DeShazo Group, Inc.** (DeShazo) were retained by **Page Southerland Page, LLP (Page)** on behalf of the **Texas Facilities Commission** to conduct a Traffic Impact Analysis (TIA) for the *Texas Capitol Complex Master Plan (the Master Plan)* 2018 Update (“the Project”) located in Austin, Texas. A site location map is provided for reference in ***Exhibit 1***.

As mandated by Texas Government Code, Section 2166.105, the Texas Facilities Commission has produced the 2016 Texas Capital Complex Master Plan which addresses the strategic vision and long-term goals for the Capitol Complex and the extent to which Texas is able to satisfy its space needs through use of state owned property within the complex. The Texas Capital Complex Master Plan provides detailed, site-specific proposals for use of the property to meet the space needs of state agencies and public sector purposes. The Master Plan establishes for the construction of six (6) new state office buildings within the northern half of the Capitol complex.

The Texas Facilities Commission is seeking the cooperation of the City of Austin to facilitate development of the Project. Submittal of a TIA, prepared by a registered professional engineer experienced and skilled in the field of traffic/transportation engineering, is one of the standard practices for any development process. This TIA was prepared in accordance with industry and local standards by registered professional engineers employed by DeShazo. DeShazo is a licensed engineering firm based in Dallas, Texas, that provides professional services in traffic engineering, transportation planning, and related fields.

#### ***Purpose***

The purpose of a TIA is to determine if any additional improvements, other than those proposed in the Master Plan, to the adjacent transportation system are needed to maintain a satisfactory level of service, an acceptable level of safety, and appropriate access for a proposed development. A TIA is a site specific investigation of traffic conditions in a localized area and is not a substitute for area-wide or regional transportation planning, which are responsibilities of the local and regional government agencies.

To achieve this objective, this report summarizes the traffic operational characteristics of the background conditions within a designated study area and the projected incremental impact of the Project as determined through standardized engineering analyses. Based upon the results of this analysis, DeShazo may recommend measures to mitigate traffic impacts that excessively or unduly effect safety or operational efficiency. Some mitigation may be attributable, in part or in whole, to the proposed development. It is intended that the findings and recommendations presented in this study provide information to the public and the governing agency regarding potential transportation improvements that may be warranted. But, also, this study is intended to provide a credible basis upon which the governing agency may determine whether some actions may be required as a condition of the Project's approval.

### *Project Description*

The Project will consist of adding six additional office buildings, constructing underground parking facilities, closing Congress Avenue to vehicle traffic from 15<sup>th</sup> Street to 18<sup>th</sup> Street and converting three streets (16<sup>th</sup>, 17<sup>th</sup> & 18<sup>th</sup>) from one-way traffic operation to two-way traffic operation. The 17<sup>th</sup> Street will be discontinued on either side of Congress Avenue to enter underground parking entrance. The Project will be built in three (3) phases. Buildout of the Project is estimated to occur by 2024. Existing uses on the site include government office buildings and a museum, which will remain in place. A summary of the proposed development program, by phase, is provided in **Table 1**. A preliminary site plan for the Project as prepared by **Page** is attached following the *Executive Summary*.

**Table 1. Development Program Summary**

| USE                            | FUTURE SQUARE FOOTAGE         | ADDITIONAL EMPLOYEES | PROPOSED PARKING SPACES |
|--------------------------------|-------------------------------|----------------------|-------------------------|
| 710 - General Office – Phase 1 | 1,025,000 SF<br>(2 buildings) | 4,100                | 4,451                   |
| 710 - General Office – Phase 2 | 525,000 SF<br>(2 buildings)   | 2,100                | 2,281                   |
| 710 - General Office – Phase 3 | 530,000 SF<br>(2 buildings)   | 2,120                | 876                     |

NOTE: The development program provided above is based upon the most current and complete information available at the time of this study publication.

### *Study Parameters*

The study parameters used in this TIA are based upon the requirements of the City of Austin and are consistent with the standard industry practices used in similar studies. Specific study parameters were reviewed with the Austin Transportation Department staff at the outset of the study.

This TIA analyzed the day-to-day traffic operations at time periods that were considered representative of the overall most critical conditions on the public roadway system with some effect from the proposed Project. Based upon the prevailing background traffic conditions and the trip generation characteristics of the proposed development, the following periods were analyzed:

- traditional weekday AM and PM peak hours of adjacent street traffic
  - at existing area roadway conditions (“Existing” scenario)
  - at year 2020 without site-generated traffic (“Background” scenario)
  - at Phase 1 buildout year 2020 with site-generated traffic (“Phase 1” scenario)
  - at Phase 2 buildout year 2022 with site-generated traffic (“Phase 2” scenario)
  - at Phase 3 buildout year 2024 with site-generated traffic (“Phase 3” scenario)

The following technical assumptions were also made in this analysis.

- Background traffic includes projected traffic volumes included in the TIA prepared by the Alliance Transportation Group for a nearby Dell Medical School development located between Trinity & Red River Road.
- Background traffic is expected to increase at a rate of one (1) percent per year based upon the direction received from City of Austin.

## Study Area

The study area for a TIA is typically defined to allow an assessment of the most relevant traffic impacts to the local area. The extent of the study area is discretionary but is generally commensurate with the scale of the proposed development. Special localized factors may also be considered. The specific locations included in the study area of this TIA are listed below with the changes proposed in the 2016 Texas Capitol Complex Master Plan. The intersections and roadways are depicted in **Exhibit 1**.

**Table 2. Study Area Intersection and Proposed Changes**

| Intersection                                | Proposed Changes  |
|---|---|
| <b>15th Street at Trinity Street</b>        | Traffic signal operation remains the same, 3-northbound lanes and bike lane on east side of street, west outside lane is reduced to 12 feet wide. |
| <b>15th Street at San Jacinto Boulevard</b> | no change   |
| <b>15th Street at Brazos Street</b>         | no change   |
| <b>15th Street at Congress Avenue</b>       | Congress Avenue closed to vehicle traffic north of 15th St. Remove 15 <sup>th</sup> Street left turn lane onto Congress Avenue                    |
| <b>15th Street at Colorado Street</b>       | no change   |
| <b>15th Street at Lavaca Street</b>         | no change   |
| <b>15th Street at Guadalupe Street</b>      | no change   |
| <b>16th Street at San Jacinto Boulevard</b> | 16th St will be converted from one-way westbound to two-way; parking remains on north side of street; travel lanes will be 11 ft. wide            |
| <b>16th Street at Brazos Street</b>         | 16th St will be converted from one-way westbound to two-way; parking remains on north side of street; travel lanes will be 11 ft. wide            |

| Intersection                                | Proposed Changes   |
|---|--|
| <b>16th Street at Congress Avenue</b>       | 16th St will be converted from one-way westbound to two-way; parking remains on north side of street; travel lanes will be 11 ft. wide;  |
| <b>16th Street at Colorado Street</b>       | 16th St will be converted from one-way westbound to two-way; parking remains on north side of street; travel lanes will be 11 ft. wide   |
| <b>16th Street at Lavaca Street</b>         | 16th St will be converted from one-way westbound to two-way; parking remains on north side of street; travel lanes will be 11 ft. wide   |
| <b>16th Street at Guadalupe Street</b>      | 16th St will be converted from one-way westbound to two-way; parking remains on north side of street; travel lanes will be 11 ft. wide   |
| <b>17th Street at Trinity Street</b>        | 17th St will be converted from one-way eastbound to two-way; parking remains on the north side of roadway only; travel lanes will be 11 ft. wide   |
| <b>17th Street at San Jacinto Boulevard</b> | 17th St will be converted from one-way eastbound to two-way; parking remains on the north side of roadway only; travel lanes will be 11 ft. wide   |
| <b>17th Street at Brazos Street</b>         | 17th St will be converted from one-way eastbound to two-way; parking remains on the north side of roadway only; travel lanes will be 11 ft. wide   |
| <b>17th Street at Congress Avenue</b>       | 17th St will be converted from one-way eastbound to two-way; parking remains on north side of street; travel lanes will be 11 ft. wide; 17 <sup>th</sup> Street will be terminated and no longer intersect with Congress Avenue. |
| <b>17th Street at Colorado Street</b>       | 17th St will be converted from one-way eastbound to two-way; parking remains on the north side of roadway only; travel lanes will be 11 ft. wide   |
| <b>17th Street at Lavaca Street</b>         | 17th St will be converted from one-way eastbound to two-way; parking remains on the north side of roadway only; travel lanes will be 11 ft. wide   |
| <b>17th Street at Guadalupe Street</b>      | no changes at this time  |
| <b>18th Street at Trinity Street</b>        | Traffic signal operation remains the same, 3-northbound lanes and bike lane on east side of street, west outside lane is reduced to 12 feet wide. 18th St gets converted from one-way westbound to two-way;                      |
| <b>18th Street at San Jacinto Boulevard</b> | 18th St will be converted from one-way westbound to two-way; parking remains on the north side of roadway only; travel lanes will be 12 ft. wide   |

| Intersection                                     | Proposed Changes   |
|--|--|
| <b>18th Street at Brazos Street</b>              | 18th St will be converted from one-way westbound to two-way; parking remains on the north side of roadway only; travel lanes will be 12 ft. wide   |
| <b>18th Street at Congress Avenue</b>            | Congress Ave will be closed to vehicle traffic south of 18th St; 18th St will be converted from one-way westbound to two-way; parking remains on north side of 18th St; travel lanes will be 12 ft. wide; all-way stop control to remain |
| <b>18th Street at Colorado Street</b>            | 18th St will be converted from one-way westbound to two-way; parking remains on the north side of roadway only; travel lanes will be 12 ft. wide   |
| <b>18th Street at Lavaca Street</b>              | 18th St will be converted from one-way westbound to two-way; parking remains on the north side of roadway only; travel lanes will be 12 ft. wide   |
| <b>18th Street at Guadalupe Street</b>           | 18th St will be converted from one-way westbound to two-way; parking remains on the north side of roadway only; travel lanes will be 12 ft. wide   |
| <b>MLK Jr Boulevard at Trinity Street</b>        | no changes at this time  |
| <b>MLK Jr Boulevard at San Jacinto Boulevard</b> | no changes at this time  |
| <b>MLK Jr Boulevard at Brazos Street</b>         | no changes at this time  |
| <b>MLK Jr Boulevard at Congress Avenue</b>       | Congress will be closed for through traffic and pedestrian Mall will be provided along congress. Only southbound bus traffic will be permitted along Congress Avenue. All other traffic will be restricted on Congress.                  |
| <b>MLK Jr Boulevard at Colorado Street</b>       | no changes at this time  |
| <b>MLK Jr Boulevard at Lavaca Street</b>         | no changes at this time  |
| <b>MLK Jr Boulevard at Guadalupe Street</b>      | no changes at this time  |

Roadway Links:

- (A) Congress Avenue from Martin Luther King Boulevard to 18<sup>th</sup> Street
  - ☐ Convert to one-travel lane in south direction
  - ☐ Only southbound bus traffic will be permitted
  - ☐ Pedestrian boulevard median section added
  - ☐ Bus drop-off lane provided in southbound direction
- (B) Congress Avenue from 15<sup>th</sup> Street to 18<sup>th</sup> Street
  - ☐ Restrict north-south traffic movement along Congress Street.
  - ☐ Provide pedestrian boulevard along Congress Avenue

- (C) 18<sup>h</sup> Street from Trinity Street to Guadalupe Street
  - ❑ Convert from 2-lanes, one-way westbound direction to one-lane in both directions, east and west bound
  - ❑ Provide a bus staging lane on the north side westbound
- (D) 17<sup>h</sup> Street from Trinity Street to Guadalupe Street
  - ❑ Convert from 2-lanes, one-way eastbound direction to one-lane in both directions east and west bound
  - ❑ Provide parallel parking along the north curb line in the westbound direction
  - ❑ Terminate 17<sup>th</sup> Street on the either side of Congress Avenue to enter onto parking garage from both sides
- (E) 16<sup>h</sup> Street from Trinity Street to Guadalupe Street
  - ❑ Convert from 2-lanes, one-way westbound direction to one-lane in both directions, east and west bound
  - ❑ Provide parallel parking along the north curb line in the westbound direction

## TRAFFIC IMPACT ANALYSIS

Traffic Impact Analysis for this study is prepared as part of the Texas Capitol Complex Master Plan 2018 Update for the proposed buildings included in phase 1 to phase 3. The study is provided to the Staff for technical review. DeShazo's engineering recommendations are provided to the City of Austin Transportation Department for consideration. All recommendations made in this study are subject to approval by the State and the City of Austin.

### *Approach*

The TIA presented in this report analyzed the operational conditions for the peak hours and study area as defined above using standardized analytical methodologies where applicable. Current (or recent) traffic volume data were collected on a typical day throughout the study area to represent existing traffic conditions. Where applicable, growth factors were applied to the existing volumes to project future background traffic at the Master Plan Phase buildout year conditions. Then, traffic generated by the proposed development was projected using the standard three-step approach: Trip Generation, Trip Distribution, and Traffic Assignment. By adding the site-generated traffic to the background traffic, the resulting site-plus-background traffic impact to operational conditions of the changed roadway network may be assessed from which approach mitigation measures may be recommended, if needed.

### *Background Traffic Volume Data*

#### Existing Volumes

Current traffic volumes were collected during the analysis periods at the study area intersections on March 22, 2016. Due to equipment issues, three of the 34 intersections had to be recounted the following week on March 30, 2016. Traffic volumes are graphically summarized in **Appendix A**; detailed data sheets are provided in **Appendix B**.

#### Projected Background Traffic Volumes

Background traffic growth is defined as the normal growth of traffic that is not directly related to the subject development of this study. The study area is mostly developed and saturated with a minimal expected growth in traffic. However, for this study DeShazo conservatively used an annual growth rate of one (1) percent based on the discussion with the City of Austin Staff.

By applying this growth rate, future background traffic volumes each phases and project buildout year were calculated for the study area intersections. These volumes are graphically summarized in **Appendix A**.

### *Site-Related Traffic*

#### Trip Generation

Trip generation is calculated in terms of “trip ends” – a trip end is a one-way vehicular trip entering or exiting a site driveway (i.e., a single vehicle entering and exiting a site represents two trip ends). Trip generation for this Project was calculated using the Institute of Transportation Engineers (ITE) *Trip Generation* manual (9<sup>th</sup> Edition). ITE *Trip Generation* is a compilation of actual, vehicular traffic volume generation data and statistics by land use as collected over several decades by creditable sources across the country. Using the ITE equations and rates is an accepted methodology to calculate the projected site-generated traffic volumes for many land uses (though engineering judgment is strongly advised).

The base trip generation data from ITE generally reflect average conditions for a standalone use on a typical day. However, in some cases, the Engineer may judge that other factors may be of sufficient significance to warrant adjusting the base ITE calculations in order to more accurately reflect Project-specific conditions. Since the area surrounding the Texas Capitol Complex has urban, rather than suburban characteristics, with its grid street network of blocks and documented use of bicycles, for this analysis “mode split” was considered to be of sufficient significance to justify adjustment of the base ITE data.

“Mode split” is the consideration of trips being conducted by all modes of transportation, including public transit, bicycle, walking, etc. The default trip generation data from ITE incorporate “typical” mode split characteristics; however adjustments to mode split are required based on the characteristics of the study area.

Capitol Metro provides north and south high frequency bus service along the western study area roadways of Guadalupe and Lavaca via their Express Bus Service where dedicated bus lanes are provided. Capitol Metro also provides commuter high frequency bus service at the peak travel periods along the eastern study area roadways on San Jacinto and Trinity. East and west local bus service is also provided on MLK Boulevard along the northern edge of the study area and on 15<sup>th</sup> Street along the southern edge of the study area.

Currently local transit service is also provided through the study area along Congress Avenue. This service is anticipated to remain, but the north – south leg of the service relocated to Colorado Street when Congress Avenue is closed to vehicle traffic as proposed in the Master Plan. Due to availability of transit service and stops located within ¼ mile of the site complex, a daily, PM and AM trip reduction of was used for the additional trips generated by proposed office spaces.

The 2014 Austin Bike Plan Update sets a goal to reduce daily car trips to the downtown by 7% or 300,000 daily passenger trips within the area of the City classified as the “ring of congestion.” The Capitol Plan falls within the area. However, this is a Transportation Demand Management (TDM) strategy and need to be evaluated further after implementation. For the purpose of this study, existing trips were not reduced to evaluate the worst scenario. Also, it is expected that most of the employees working the State Capitol Complex will live outside the central region. Therefore, the anticipated employees cycling to work is expected to be rather low. The transit and bike credit

was only included for the new trips generated by the proposed office spaces for phases 1 through 3.

Turning movement counts conducted at the 34 intersections in the study area shows some peak bike volumes in the range of 0.5% to 7% with an average of 2% for the total 6 hours counted. Hence, a 2% bicycling mode reductions is used for this analysis. Similarly, the traffic counts during same period shows the percentage of buses at these intersections ranges from 0.1% to 3.9%. A 2% transit trip reduction is assumed for this analysis. In addition to bicycle and transit, a 1% trip reduction is also used for walking trips as the project area has better pedestrian facilities. In summary a 5% additional reduction on additional trip generated by new office buildings was used for this analysis.

Although the Trip Generation Manual provides a land use category for government offices (730), due to the lack of case studies provided for this land use category, it was determined that general office land use (710) would provide a more accurate trip generation rate for the proposed Master Plan phase build-out land use. **Table 3** provides a summary of the calculated net increase in trip ends generated by the project. Supplemental information used in the trip generation calculations is provided in **Appendix C**.

**Table 3. Projected Trip Generation Summary**

| Phase  | Land Use | Quantity (SF) | Average Daily Trips | AM Peak Hour |      |        | PM Peak Hour |       |        |
|--------|----------|---------------|---------------------|--------------|------|--------|--------------|-------|--------|
|        |          |               |                     | In           | Out  | Total  | In           | Out   | Total  |
| 1      | 710      | 1,025,000     | 7,698               | 1,083        | 148  | 1,231  | 208          | 1,018 | 1,226  |
|        |          |               | 7,313*              | 1,029*       | 141* | 1,169* | 198*         | 967*  | 1,165* |
| 2      | 710      | 525,000       | 4,629               | 634          | 87   | 721    | 113          | 553   | 666    |
|        |          |               | 4,398*              | 602*         | 83*  | 685*   | 107*         | 525*  | 633*   |
| 3      | 710      | 530,000       | 4,663               | 640          | 87   | 727    | 114          | 558   | 672    |
|        |          |               | 4,430*              | 608*         | 83*  | 691*   | 108*         | 530*  | 638*   |
| Totals |          | 2,080,000     | 16,990              | 2,357        | 322  | 2,679  | 435          | 2,129 | 2,564  |
|        |          |               | 16,141*             | 2,239*       | 307* | 2,546* | 413          | 2,022 | 2,435  |

Note: All trips shown above with (\*) are adjusted for 5% combined transit, walking and bicycle reduction.

#### Trip Distribution and Assignment

The distribution and assignment of site-generated trip ends to the surrounding roadway system is determined by proportionally estimating the orientation of travel via various travel routes. This is a subjective exercise based upon professional judgment considering such factors as directional characteristics of existing local traffic; trip attributes (e.g., trip purpose, trip length, travel time, etc.), roadway features (e.g., capacity, operational conditions, character of environment), regional demographics, etc.

Traffic for the proposed redevelopment was distributed and assigned to the study area roadway network based upon consideration of the factors listed above. Detailed trip distribution and traffic assignment calculations and results are summarized in **Appendix C**.

Traffic currently using Congress Avenue going north and south were redistributed to Colorado Street, Brazos Street, San Jacinto Street and Trinity Street. The Congress Avenue between MLK

Blvd and 18<sup>th</sup> Street is converted to one way in southbound direction. The eastbound right and westbound left turns at MLK Blvd at Congress Avenue are restricted to limit buses only.

Where the roadways segments of 16<sup>th</sup> Street, 17<sup>th</sup> Street and 18<sup>th</sup> Street are proposed to be converted from one-way to two-way traffic, the existing volumes were proportionally distributed in the opposite directions based on assumption that the unrestricted two way movement will generate similar traffic pattern on 16<sup>th</sup> Street, 17<sup>th</sup> Street and 18<sup>th</sup> Street except for the through movements on 17<sup>th</sup> Street at Congress Avenue which were further distributed into 16<sup>th</sup> Street or 18<sup>th</sup> Street.

#### Site-Generated Traffic Volumes

Site-generated traffic is calculated by multiplying the trip generation value (from **Table 3**) by the corresponding traffic assignments (from **Appendix C**). The resulting cumulative (for all uses) peak period site-generated traffic volumes at buildout of the Project are graphically summarized in **Appendix A**.

### *Traffic Operational Analysis — Roadway Intersections*

#### Description

The level of performance of civil infrastructure can often be measured through an analysis of volume and capacity that considers various physical and operational characteristics of the system. For vehicular traffic an operational analysis of roadway intersection capacity is the most detailed type of analysis. An industry-standardized methodology for this type of analysis was developed by the Transportation Research Board and is presented in the *Highway Capacity Manual (HCM)*. HCM uses the term “Level of Service” (or, LOS) to qualitatively describe the efficiency using a letter grade of A through F. Generally, LOS A is described as free, unobstructed flow while LOS F represents facilities operating over design capacity.

Traffic operational analysis is typically measured in one-hour periods during day-to-day peak conditions. In most urban settings, LOS C, or better, is desirable, although LOS D is considered to be acceptable. Nevertheless, periods of LOS E or F conditions are not uncommon for brief periods of time at major transportation facilities. In some cases measures to add more capacity, either through operational changes and/or physical improvements, can be identified to increase efficiency and sometimes raise Level of Service.

For traffic-signal-controlled (“signalized”) intersections and STOP-controlled (“unsignalized”) intersections, LOS is determined based upon the calculated average seconds of delay per vehicle. For signalized intersections the average delay per vehicle can be effectively calculated for the entire intersection; however, for unsignalized intersections the average delay per vehicle is calculated only by approach or by individual traffic maneuvers that must stop or yield right-of-way. For unsignalized intersections of a minor street or driveway and a major roadway, the analysis methodology often breaks down and yields low Levels of Service (often, LOS F) than cannot be mitigated unless a traffic signal is installed. However, for a traffic signal to be installed, the responsible agency that governs the right-of-way must issue their approval subject to very specific warrant criteria being met *and* several other operational considerations being satisfied. Neither Level-of-Service nor delay is considered a criterion for traffic signal installation.

The following table summarizes the LOS criteria for signalized and unsignalized intersections as defined in the latest edition of the *Highway Capacity Manual*.

**Table 4. HCM Level of Service Criteria**

|       | <b>Signalized Intersection<br/>(Avg. Delay/Veh, sec.)</b> | <b>Unsignalized Intersection<br/>(Avg. Delay/Veh, sec.)</b> |
|-------|---|---|
| LOS A | $\leq 10$   | $\leq 10$   |
| LOS B | $>10 - \leq 20$   | $>10 - \leq 15$   |
| LOS C | $>20 - \leq 35$   | $>15 - \leq 25$   |
| LOS D | $>35 - \leq 55$   | $>25 - \leq 35$   |
| LOS E | $>55 - \leq 80$   | $>35 - \leq 50$   |
| LOS F | $>80$   | $>50$   |

#### Analysis Traffic Volumes

Determination of the traffic impact associated with the Project is measured by comparing the incremental change in operational conditions during peak periods with and without site-related traffic. **Appendix A** provides exhibits summarizing the following:

- Existing traffic volumes during study peak hours
- Projected Background traffic volumes at the Site Buildout Year during study peak hours
- Projected Site-Generated traffic volumes during study peak hours
- Projected Background-plus-Site-Generated traffic volumes at the Site Buildout Year during study peak hours.

A summary of the existing intersection/roadway geometry and traffic control devices is shown in **Exhibit 2**.

#### Summary of Results

Intersection capacity analyses presented in this study were performed using the *Synchro 9* software package. **Table 5** (signalized intersections) and **Table 6** (unsignalized intersections) provide a summary of the peak period intersection operational conditions under the analysis conditions presented previously. Detailed software output is provided in **Appendix D**.

NOTE: Traffic signal operational parameters used in this analysis were based upon actual, existing traffic signal operational characteristics observed in the field at the time of traffic data collection.

See specific recommendations in the *Summary of Findings and Recommendations* section of this report.

**Table 5. Peak Hour Intersection Capacity Analysis Results  
(Signalized Intersections)**

| Signalized Intersections  | Conditions            |          |                 |                      |                        |                      |                      |                      |                        |                      |                      |                      |                        |                      |
|---|-----------------------|----------|-----------------|----------------------|------------------------|----------------------|----------------------|----------------------|------------------------|----------------------|----------------------|----------------------|------------------------|----------------------|
|   | Existing Contiditions |          | PHASE 1         |                      |                        |                      | PHASE 2              |                      |                        |                      | PHASE 3              |                      |                        |                      |
|   | 2016 Existing         |          | 2020 Background |                      | 2020 Background + Site |                      | 2022 Background      |                      | 2022 Background + Site |                      | 2024 Background      |                      | 2024 Background + Site |                      |
|   | AM                    | PM       | AM              | PM                   | AM                     | PM                   | AM                   | PM                   | AM                     | PM                   | AM                   | PM                   | AM                     | PM                   |
| <u>Martin Luther King Jr at</u><br>Guadalupe Street                                       | C (24.9)              | C (23.9) | C (22.2)        | C (24.6)             | C (22.7)               | C (29.4)             | C (23.0)             | C (31.3)             | C (23.9)               | D (42.4)             | C (24.2)             | D (42.6)             | C (25.5)               | D (44.1)             |
| <u>Martin Luther King Jr at</u><br>Lavaca Street  | B (15.6)              | C (26.7) | B (14.4)        | C (26.3)             | B (19.1)               | C (27.8)             | B (19.1)             | C (28.3)             | B (19.7)               | D (36.8)             | B (19.7)             | D (38.9)             | B (19.7)               | D (48.4)             |
| <u>Martin Luther King Jr at</u><br>N. Congress Avenue                                     | B (11.9)              | A (7.8)  | A (0.3)         | A (0.5)              | A (0.4)                | A (0.5)              | A (0.4)              | A (0.5)              | A (0.4)                | A (0.5)              | A (0.4)              | A (0.5)              | A (0.4)                | A (0.5)              |
| <u>Martin Luther King Jr at</u><br>Brazos Street  | B (13.2)              | A (8.9)  | B (11.2)        | A (9.9)              | B (16.5)               | B (13.3)             | B (17.1)             | B (13.6)             | B (18.0)               | B (13.9)             | B (18.9)             | B (14.3)             | C (20.7)               | B (15.7)             |
| <u>Martin Luther King Jr at</u><br>San Jacinto Boulevard<br>With Optimized Signal Timings | B (18.3)              | B (14.1) | B (12.7)        | B (15.2)             | C (23.6)               | B (19.4)             | C (24.2)             | C (20.4)             | D (47.9)               | C (23.9)             | D (46.2)<br>D (44.9) | C (25.4)             | E (61.1)<br>D (49.2)   | C (31.7)             |
| <u>Martin Luther King Jr at</u><br>Trinity Street<br>With Optimized Signal Timings        | B (17.5)              | C (27.1) | B (10.7)        | C (29.9)<br>C (24.8) | B (16.5)               | E (63.7)<br>C (28.0) | C (21.9)<br>B (14.0) | E (66.8)<br>C (28.8) | D (47.0)<br>D (38.7)   | F (>100)<br>C (32.9) | D (47.7)<br>D (35.1) | F (>100)<br>C (33.7) | E (66.6)<br>D (47.2)   | F (>100)<br>D (35.6) |
| <u>E 17<sup>th</sup> Street at</u><br>Guadalupe Street                                    | C (20.7)              | A (7.5)  | A (7.6)         | B (12.9)             | A (8.1)                | B (16.1)             | A (8.3)              | B (16.3)             | A (8.9)                | B (16.5)             | A (9.0)              | B (16.9)             | A (9.7)                | B (17.2)             |
| <u>E 17<sup>th</sup> Street at</u><br>Lavaca Street                                       | A (4.6)               | B (10.1) | A (8.2)         | B (12.3)             | B (12.9)               | B (12.8)             | B (12.2)             | B (12.8)             | B (12.3)               | B (13.8)             | B (12.1)             | B (13.6)             | B (12.8)               | B (15.3)             |
| <u>E 16<sup>th</sup> Street at</u><br>Lavaca Street                                       | A (8.2)               | A (9.2)  | A (3.7)         | A (8.6)              | A (3.7)                | A (8.3)              | A (3.3)              | A (8.4)              | A (6.8)                | B (15.7)             | A (6.7)              | B (16.2)             | A (7.9)                | C (21.3)             |
| <u>W 15<sup>th</sup> Street at</u><br>Guadalupe Street                                    | C (26.7)              | C (23.2) | C (29.5)        | C (24.1)             | C (31.9)               | C (27.8)             | C (33.5)             | C (28.3)             | D (40.1)               | C (30.2)             | D (43.6)             | C (31.1)             | D (53.4)               | C (34.1)             |
| <u>W 15<sup>th</sup> Street at</u><br>Lavaca Street                                       | B (14.4)              | C (23.2) | B (13.6)        | C (23.2)             | B (17.6)               | C (24.3)             | B (17.9)             | C (25.0)             | B (19.8)               | C (26.3)             | C (20.5)             | C (27.7)             | C (22.5)               | C (32.2)             |
| <u>W 15<sup>th</sup> Street at</u><br>Colorado Street                                     | A (7.4)               | B (12.7) | A (7.7)         | A (9.2)              | A (8.7)                | A (9.2)              | A (8.6)              | A (9.4)              | B (14.7)               | B (15.7)             | B (15.6)             | B (16.1)             | C (34.8)               | D (40.6)             |
| <u>W 15<sup>th</sup> Street at</u><br>N. Congress Avenue                                  | A (4.3)               | A (8.8)  | A (5.0)         | A (7.3)              | A (5.2)                | A (7.3)              | A (5.2)              | A (6.2)              | A (5.6)                | A (6.9)              | A (5.6)              | A (7.0)              | A (6.0)                | A (7.9)              |
| <u>W 15<sup>th</sup> Street at</u><br>Brazos Street                                       | A (6.8)               | B (11.4) | A (3.1)         | B (13.6)             | A (3.0)                | B (13.8)             | A (3.0)              | B (12.0)             | A (3.0)                | B (11.5)             | A (3.0)              | B (11.6)             | A (3.1)                | B (11.6)             |
| <u>W 15<sup>th</sup> Street at</u><br>San Jacinto Boulevard                               | A (5.7)               | B (19.8) | A (7.3)         | C (21.4)             | A (8.0)                | C (28.1)             | A (8.1)              | C (28.7)             | A (7.9)                | C (28.4)             | A (7.9)              | C (29.5)             | A (7.9)                | C (29.5)             |
| <u>W 15<sup>th</sup> Street at</u><br>Trinity Street                                      | A (9.3)               | B (15.5) | B (12.2)        | B (16.3)             | B (13.2)               | B (16.7)             | B (13.4)             | B (19.0)             | B (14.3)               | B (18.4)             | B (14.6)             | B (18.6)             | B (15.6)               | B (18.1)             |

Table 6. Peak Hour Intersection Capacity Analysis Results  
(Unsignalized Intersections)

| Unsignalized Intersections         | Traffic Movement | Conditions          |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
|------------------------------------|------------------|---------------------|----------|-----------------|-----------|------------------------|----------|-----------------|----------|------------------------|----------|-----------------|----------|------------------------|----------|
|                                    |                  | Existing Conditions |          | PHASE 1         |           |                        |          | PHASE 2         |          |                        |          | PHASE 3         |          |                        |          |
|                                    |                  | 2016 Existing       |          | 2020 Background |           | 2020 Background + Site |          | 2022 Background |          | 2022 Background + Site |          | 2024 Background |          | 2024 Background + Site |          |
|                                    |                  | AM                  | PM       | AM              | PM        | AM                     | PM       | AM              | PM       | AM                     | PM       | AM              | PM       | AM                     | PM       |
| <u>Martin Luther King Jr. at</u>   |                  |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
| Colorado Street                    | WBL              | B (13.5)            | A (9.2)  | B (14.1)        | A (9.3)   | C (15.6)               | A (9.5)  | C (16.0)        | A (9.4)  | C (19.8)               | A (9.5)  | C (20.6)        | A (9.6)  | E (42.5)               | A (9.7)  |
|                                    | NBLR             | B (13.6)            | B (12.7) | B (13.9)        | B (13.0)  | B (14.8)               | B (13.2) | B (15.0)        | B (13.4) | D (32.5)               | C (19.5) | E (35.3)        | C (20.1) | F (>100)               | F (>100) |
| <u>W 18<sup>th</sup> Street at</u> |                  |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
| Guadalupe Street                   | EBT              | --                  | --       | C (24.3)        | C (24.7)  | D (31.6)               | D (26.0) | D (32.8)        | D (26.8) | E (38.8)               | D (27.4) | E (40.1)        | D (28.5) | E (48.6)               | D (29.2) |
|                                    | EBR              | B (13.0)            | B (13.5) | B (14.0)        | B (13.7)  | B (14.8)               | B (13.9) | C (15.1)        | B (14.0) | C (16.2)               | B (14.2) | C (16.6)        | B (14.4) | C (17.9)               | B (14.5) |
|                                    | WBLT             | C (18.2)            | F (55.7) | C (19.6)        | F (52.4)  | D (27.6)               | F (>100) | D (29.4)        | F (>100) | E (35.5)               | F (>100) | E (36.8)        | F (>100) | E (46.3)               | F (>100) |
| <u>W 18th Street at</u>            |                  |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
| Lavaca Street                      | EBLT             | --                  | --       | C (17.7)        | D (31.1)  | D (26.9)               | --       | D (27.7)        | --       | D (28.7)               | --       | D (29.7)        | --       | D (30.6)               | --       |
|                                    | WBTR             | B (11.6)            | C (15.8) | C (15.7)        | D (29.8)  | C (18.6)               | F (>100) | C (18.9)        | F (>100) | C (19.3)               | F (>100) | C (19.7)        | F (>100) | C (20.0)               | F (>100) |
|                                    | NBL              | A (8.3)             | A (8.6)  | A (8.5)         | A (8.4)   | A (8.5)                | A (8.4)  | A (8.5)         | A (8.4)  | A (8.5)                | A (8.4)  | A (8.5)         | A (8.4)  | A (8.5)                | A (8.4)  |
| <u>W 18th Street at</u>            |                  |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
| Colorado Street                    | EBLTR            | --                  | --       | A (7.7)         | A (9.3)   | B (10.5)               | B (11.0) | B (10.6)        | B (11.2) | B (11.6)               | B (13.4) | B (11.8)        | B (13.7) | B (14.8)               | C (16.1) |
|                                    | WBLTR            | A (7.8)             | A (8.7)  | A (8.1)         | A (9.7)   | A (8.8)                | C (15.3) | A (8.8)         | C (15.7) | A (9.4)                | C (21.3) | A (9.4)         | C (21.9) | B (12.1)               | D (28.5) |
|                                    | SBTR             | A (8.5)             | A (8.0)  | A (9.1)         | A (9.3)   | B (10.4)               | B (11.1) | B (10.5)        | B (11.2) | B (13.2)               | B (13.6) | B (13.4)        | B (13.9) | D (29.9)               | C (17.1) |
|                                    | NBTL             | A (7.5)             | A (8.5)  | A (7.7)         | B (10.5)  | A (8.5)                | B (13.4) | A (8.5)         | B (13.8) | A (9.2)                | E (37.1) | A (9.2)         | F (69.7) | B (11.3)               | F (>100) |
| <u>W 18th Street at</u>            |                  |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
| N. Congress Avenue                 | EBLT             | --                  | --       | A (7.4)         | A (9.1)   | A (8.9)                | B (10.1) | A (8.9)         | B (10.1) | A (9.1)                | B (12.4) | A (9.1)         | B (12.6) | A (9.3)                | B (13.5) |
|                                    | WBLTR            | A (7.7)             | B (10.2) | --              | --        | --                     | --       | --              | --       | --                     | --       | --              | --       | --                     | --       |
|                                    | WBTR             | --                  | --       | A (7.2)         | A (8.4)   | A (7.5)                | B (10.7) | A (7.6)         | B (11.0) | A (7.6)                | B (11.4) | A (7.6)         | B (11.5) | A (8.0)                | B (11.9) |
|                                    | SBTR             | A (7.6)             | A (9.0)  | --              | --        | --                     | --       | --              | --       | --                     | --       | --              | --       | --                     | --       |
|                                    | NBTL             | A (7.9)             | B (10.1) | --              | --        | --                     | --       | --              | --       | --                     | --       | --              | --       | --                     | --       |
|                                    | SBR              | --                  | --       | A (6.6)         | A (7.4)   | A (7.1)                | A (7.9)  | A (7.1)         | A (8.0)  | A (7.2)                | A (8.2)  | A (7.2)         | A (8.3)  | A (7.3)                | A (8.4)  |
| <u>W 18th Street at</u>            |                  |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
| Brazos Street                      | EBLTR            | --                  | --       | A (9.3)         | B (12.1)  | B (12.1)               | C (23.1) | B (12.2)        | C (24.3) | B (12.8)               | F (62.1) | B (13.0)        | F (68.6) | B (13.7)               | F (87.8) |
|                                    | WBLTR            | A (7.9)             | A (8.4)  | A (8.3)         | A (9.6)   | B (12.0)               | B (12.4) | B (12.1)        | B (12.6) | B (12.2)               | B (14.2) | B (12.3)        | B (14.5) | C (15.2)               | B (15.0) |
|                                    | SBTR             | A (9.0)             | A (7.9)  | B (10.2)        | A (9.6)   | B (13.7)               | C (17.0) | B (13.9)        | C (17.5) | B (14.2)               | C (22.2) | B (14.5)        | C (23.3) | C (15.6)               | C (23.6) |
|                                    | NBTL             | A (7.6)             | B (10.2) | A (8.2)         | C (15.2)  | A (9.6)                | C (24.0) | A (9.6)         | D (25.7) | A (9.7)                | E (36.0) | A (9.8)         | E (39.9) | B (10.2)               | E (39.7) |
| <u>W 18th Street at</u>            |                  |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
| San Jacinto Boulevard              | EBTR             | --                  | --       | A (8.9)         | B (10.6)  | B (10.4)               | C (18.8) | B (10.5)        | C (19.3) | B (11.4)               | E (37.7) | B (10.9)        | E (39.6) | B (10.9)               | E (39.9) |
|                                    | WBTL             | B (12.3)            | B (11.5) | B (10.4)        | A (10.0)  | C (15.3)               | B (11.2) | C (15.4)        | B (11.2) | C (16.6)               | B (11.8) | C (16.6)        | B (11.9) | C (16.7)               | B (11.9) |
|                                    | SBT              | --                  | --       | B (11.1)        | B (11.4)  | C (15.1)               | B (14.0) | C (15.4)        | B (14.3) | C (19.6)               | C (16.3) | C (19.4)        | C (16.7) | C (19.5)               | C (16.7) |
|                                    | SBLT             | --                  | --       | B (11.1)        | B (11.4)  | C (15.1)               | B (14.0) | C (15.4)        | B (14.3) | C (19.6)               | C (16.3) | C (19.4)        | C (16.7) | C (19.5)               | C (16.7) |
|                                    | SBTR             | --                  | --       | A (5.4)         | A (5.6)   | A (6.3)                | A (6.4)  | A (6.3)         | A (6.4)  | A (6.4)                | A (6.9)  | A (6.3)         | A (6.9)  | A (6.6)                | A (6.9)  |
| <u>W 18th Street at</u>            |                  |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
| Trinity Street                     | EBL              |                     |          | B (13.4)        | C (18.4)  | C (21.3)               | D (28.7) | C (21.5)        | D (30.2) | C (23.1)               | F (74.6) | C (23.5)        | F (81.1) | C (23.6)               | F (95.2) |
|                                    | NBL              | Free                | Free     | A (7.6)         | A (7.5)   | A (7.9)                | A (7.6)  | A (7.9)         | A (7.6)  | A (7.9)                | A (7.6)  | A (8.0)         | A (7.6)  | A (8.0)                | A (7.6)  |
| <u>E 17<sup>th</sup> Street at</u> |                  |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
| Colorado Street                    | EBLTR            | A (8.7)             | B (11.0) | A (7.9)         | A (8.7)   | B (10.5)               | A (9.8)  | B (10.6)        | A (9.9)  | B (11.5)               | B (11.3) | B (11.6)        | B (11.4) | C (17.7)               | B (14.4) |
|                                    | WBLTR            | --                  | --       | A (7.7)         | A (7.9)   | A (8.4)                | B (10.3) | A (8.4)         | B (10.4) | A (8.9)                | B (12.1) | A (8.9)         | B (12.1) | B (10.4)               | C (15.4) |
|                                    | SBLT             | A (9.4)             | A (9.1)  | A (8.8)         | A (8.3)   | B (10.2)               | A (9.5)  | B (10.3)        | A (9.7)  | B (12.6)               | B (11.1) | B (12.8)        | B (11.2) | E (42.8)               | B (15.0) |
|                                    | NBTR             | A (7.7)             | A (9.6)  | A (7.8)         | A (8.7)   | A (8.6)                | A (10.0) | A (8.7)         | B (10.1) | A (9.2)                | C (15.7) | A (9.2)         | C (15.9) | B (11.3)               | F (98.0) |
| <u>E 17<sup>th</sup> Street at</u> |                  |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
| N. Congress Avenue                 | EBLTR            | A (8.6)             | B (14.0) | --              | --        | --                     | --       | --              | --       | --                     | --       | --              | --       | --                     | --       |
|                                    | EBT              | --                  | --       | --              | --        | --                     | --       | --              | --       | --                     | --       | --              | --       | --                     | --       |
|                                    | WBT              | --                  | --       | --              | --        | --                     | --       | --              | --       | --                     | --       | --              | --       | --                     | --       |
|                                    | SBLT             | A (8.3)             | B (11.0) | --              | --        | --                     | --       | --              | --       | --                     | --       | --              | --       | --                     | --       |
|                                    | NBTR             | A (8.7)             | A (9.9)  | --              | --        | --                     | --       | --              | --       | --                     | --       | --              | --       | --                     | --       |
| <u>E 17<sup>th</sup> Street at</u> |                  |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
| Brazos Street                      | EBLT             | A (7.5)             | A (9.2)  | A (0.0)         | A (7.3)   | A (7.4)                | A (9.1)  | A (7.5)         | A (9.1)  | A (7.5)                | A (9.1)  | A (7.5)         | A (9.1)  | A (7.5)                | A (9.1)  |
|                                    | WBTR             |                     |          | A (6.5)         | A (6.8)   | A (8.6)                | A (7.8)  | A (8.6)         | A (7.8)  | A (8.6)                | A (7.8)  | A (8.6)         | A (7.8)  | A (8.6)                | A (7.8)  |
|                                    | SBL              | B (12.9)            | B (12.7) | --              | --        | --                     | --       | --              | --       | --                     | --       | --              | --       | --                     | --       |
|                                    | SBLR             |                     |          | A (7.4)         | A (7.9)   | A (8.0)                | A (8.8)  | A (8.0)         | A (8.9)  | A (8.0)                | A (8.9)  | A (8.0)         | A (8.9)  | A (8.0)                | A (8.9)  |
| <u>E 17<sup>th</sup> Street at</u> |                  |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
| San Jacinto Boulevard              | EBT              | --                  | --       | C (15.2)        | F (67.1)  | C (16.1)               | F (>100) | C (16.3)        | F (>100) | C (18.8)               | F (>100) | C (19.2)        | F (>100) | C (19.2)               | F (>100) |
|                                    | EBR              | B (11.2)            | C (15.1) | B (10.6)        | F (134.0) | B (10.8)               | C (16.3) | B (10.9)        | C (19.4) | B (11.6)               | C (16.9) | B (11.7)        | C (20.5) | B (11.7)               | C (20.5) |
|                                    | WBLT             | --                  | --       | C (15.5)        | F (93.0)  | D (26.3)               | --       | D (27.4)        | --       | E (38.1)               | --       | E (40.7)        | --       | E (40.7)               | --       |
|                                    | SBL              | A (7.3)             | A (7.6)  | A (7.3)         | A (7.6)   | A (7.3)                | A (7.6)  | A (7.3)         | A (7.6)  | A (7.3)                | A (7.6)  | A (7.3)         | A (7.6)  | A (7.3)                | A (7.6)  |
| <u>E 17<sup>th</sup> Street at</u> |                  |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
| Trinity Street                     | EBL              | A (9.9)             | B (13.2) | A (9.8)         | B (11.3)  | B (12.0)               | B (13.8) | B (12.0)        | B (13.9) | B (12.0)               | B (13.9) | B (12.0)        | B (14.1) | B (12.0)               | B (14.1) |
| <u>E 16<sup>th</sup> Street at</u> |                  |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
| Guadalupe Street                   | EBTR             | --                  | --       | C (18.7)        | D (28.0)  | C (19.2)               | E (38.0) | C (20.0)        | E (39.0) | C (23.7)               | E (41.4) | C (24.4)        | E (44.6) | D (26.4)               | E (45.9) |
|                                    | WBLT             | C (15.1)            | E (38.6) | C (22.0)        | F (>100)  | C (22.8)               | F (>100) | C (23.4)        | F (>100) | E (40.3)               | F (>100) | E (43.7)        | F (>100) | F (60.8)               | F (>100) |
| <u>E 16<sup>th</sup> Street at</u> |                  |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
| Colorado Street                    | EBLTR            | --                  | --       | B (11.2)        | C (23.5)  | B (11.2)               | C (23.5) | B (11.2)        | C (24.3) | B (13.3)               | F (>100) | B (13.4)        | F (>100) | D (31.4)               | F (>100) |
|                                    | WBLTR            | B (11.2)            | B (12.5) | B (12.9)        | C (20.8)  | B (12.9)               | C (20.8) | B (13.1)        | C (21.5) | F (50.1)               | F (93.2) | F (53.6)        | F (>100) | F (>100)               | F (>100) |
|                                    | SBLR             | A (0.0)             | A (0.0)  | --              | --        | --                     | --       | --              | --       | --                     | --       | --              | --       | --                     | --       |
|                                    | SBLTR            | --                  | --       | A (8.1)         | A (7.5)   | A (8.1)                | A (7.5)  | A (8.1)         | A (7.5)  | A (8.2)                | A (8.0)  | A (8.2)         | A (8.0)  | A (8.9)                | A (8.1)  |
|                                    | NBLT             | A (7.5)             | A (8.9)  | --              | --        | --                     | --       | --              | --       | --                     | --       | --              | --       | --                     | --       |
|                                    | NBLTR            | --                  | --       | A (7.4)         | A (8.8)   | A (7.4)                | A (8.8)  | A (7.4)         | A (8.8)  | A (7.7)                | A (9.1)  | A (7.7)         | A (9.1)  | A (8.2)                | B (10.2) |
| <u>E 16<sup>th</sup> Street at</u> |                  |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
| N. Congress Avenue                 | EBT              | --                  | --       | A (9.2)         | A (9.8)   | A (9.2)                | A (9.8)  | A (9.2)         | A (9.9)  | A (9.2)                | A (9.9)  | A (9.2)         | A (9.9)  | A (9.2)                | A (9.9)  |
|                                    | WBLTR            | B (10.2)            | B (12.0) | --              | --        | --                     | --       | --              | --       | --                     | --       | --              | --       | --                     | --       |
|                                    | WBT              | --                  | --       | A (9.1)         | A (9.8)   | A (9.1)                | A (9.8)  | A (9.1)         | A (9.9)  | B (10.1)               | B (10.1) | B (10.1)        | B (10.1) | B (10.1)               | B (10.1) |
|                                    | SBLR             | A (0.0)             | A (0.0)  | --              | --        | --                     | --       | --              | --       | --                     | --       | --              | --       | --                     | --       |
|                                    | NBLT             | A (7.4)             | A (8.1)  | --              | --        | --                     | --       | --              | --       | --                     | --       | --              | --       | --                     | --       |
| <u>E 16<sup>th</sup> Street at</u> |                  |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
| Brazos Street                      | WBLT             | A (7.3)             | A (7.3)  | A (7.3)         | A (7.5)   | A (7.3)                | A (7.5)  | A (7.4)         | A (7.5)  | A (7.4)                | A (7.5)  | A (7.4)         | A (7.5)  | A (7.4)                | A (7.5)  |
|                                    | NBLR             | A (8.9)             | B (10.1) | A (9.1)         | B (10.6)  | A (9.1)                | B (10.6) | A (9.1)         | B (10.6) | B (10.3)               | B (11.0) | B (10.3)        | B (11.1) | B (10.3)               | B (11.1) |
| <u>E 16<sup>th</sup> Street at</u> |                  |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
| San Jacinto Boulevard              | EBR              | Free                | Free     | B (12.6)        | C (16.4)  | B (12.9)               | C (19.7) | B (13.0)        | C (20.1) | B (13.0)               | C (20.1) | B (13.1)        | C (20.5) | B (13.1)               | C (20.5) |
| <u>Brazos Street at</u>            |                  |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
| Parking Driveway 1                 | EBLR             | --                  | --       | --              | --        | C (17.2)               | C (16.7) | C (18.8)        | C (16.9) | C (17.3)               | C (16.9) | C (17.5)        | C (17.0) | C (17.7)               | C (18.8) |
|                                    | NBLT             | --                  | --       | --              | --        | A (9.3)                | A (7.5)  | A (9.3)         | A (7.5)  | A (9.3)                | A (7.5)  | A (9.3)         | A (7.5)  | A (9.3)                | A (7.5)  |
| <u>W 18<sup>th</sup> Street at</u> |                  |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
| Parking Driveway 2                 | EBLT             | --                  | --       | --              | --        | A (7.8)                | A (8.2)  | A (7.8)         | A (8.2)  | A (7.8)                | A (8.2)  | A (7.8)         | A (8.1)  | A (8.0)                | A (8.2)  |
|                                    | SBLR             | --                  | --       | --              | --        | B (10.9)               | C (18.7) | B (11.3)        | C (19.0) | B (11.1)               | C (21.8) | B (11.1)        | C (22.5) | B (11.7)               | C (24.0) |
|                                    | NBR              | --                  | --       | --              | --        |                        |          |                 |          |                        |          |                 |          |                        |          |
| <u>Colorado Street at</u>          |                  |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
| Parking Driveway 3                 | WBLR             | --                  | --       | --              | --        | --                     | --       | --              | --       | C (20.2)               | B (14.8) | C (20.6)        | B (15.0) | D (30.8)               | C (21.0) |
|                                    | SBLT             | --                  | --       | --              | --        | --                     | --       | --              | --       | A (9.2)                | A (7.5)  | A (9.3)         | A (7.5)  | B (10.5)               | A (7.6)  |
| <u>Colorado Street at</u>          |                  |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
| Parking Driveway 4                 | EBLR             | --                  | --       | --              | --        | --                     | --       | --              | --       | C (19.0)               | C (17.3) | C (19.2)        | C (17.5) | D (26.0)               | D (27.4) |
|                                    | NBLT             | --                  | --       | --              | --        | --                     | --       | --              | --       | A (9.0)                | A (8.5)  | A (9.1)         | A (8.5)  | A (9.2)                | A (9.2)  |
| <u>E 16<sup>th</sup> Street at</u> |                  |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
| Parking Driveway 5                 | WBLT             | --                  | --       | --              | --        | --                     | --       | --              | --       | A (8.0)                | A (7.5)  | A (8.0)         | A (7.5)  | A (8.0)                | A (7.7)  |
|                                    | NBLR             | --                  | --       | --              | --        | --                     | --       | --              | --       | B (11.1)               | B (11.5) | B (11.2)        | B (11.6) | B (12.2)               | B (13.2) |
| <u>E 16<sup>th</sup> Street at</u> |                  |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
| Parking Driveway 6                 | EBLT             | --                  | --       | --              | --        | --                     | --       | --              | --       | --                     | --       | --              | --       | A (7.8)                | A (7.9)  |
|                                    | SBLR             | --                  | --       | --              | --        | --                     | --       | --              | --       | --                     | --       | --              | --       | B (11.6)               | B (13.1) |
| <u>Colorado Street at</u>          |                  |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          |                        |          |
| Parking Driveway 7/Parking Dr. 8   | EBLR             | --                  | --       | --              | --        | --                     | --       | --              | --       | --                     | --       | --              | --       | D (35.0)               | C (18.8) |
|                                    | WBLR             | --                  | --       | --              | --        | --                     | --       | --              | --       | --                     | --       | --              | --       | D (29.2)               | C (17.4) |
|                                    | SBL              |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          | A (8.7)                | A (8.0)  |
|                                    | NBL              |                     |          |                 |           |                        |          |                 |          |                        |          |                 |          | A (9.0)                | A (7.6)  |

## Traffic Operational Analysis — Roadway Links

### Description

A roadway link is a segment of roadway between two intersections. Roadway link capacity analysis is a comparison of actual or forecasted traffic volumes to the theoretically optimum roadway capacity. The capacity of the roadway link is predominantly a function of the roadway's cross-section (i.e., number of lanes, lane widths, type of center divider, etc.). However, other more theoretical factors also apply, such as the character of environment and the functional classification of the roadway. Generally, roadway link capacity is less critical than intersection capacity; however, it can provide a gage of the utilization of given roadway.

A specific industry standard for roadway link capacity does not exist, but the typical concept is derived from a base saturation flow rate (i.e., the maximum theoretical rate of continuous flow under ideal, unobstructed conditions - in the traffic engineering industry, this value is generally considered to range between 1,900-2,100 vehicles per lane per hour). A series of adjustment factors are then applied to the saturation flow rate to reflect the characteristics of a given location. The following table was developed by North Central Texas Council of Government (NCTCOG) represents a typical capacity of hourly traffic volumes based on the characteristics and functional classification of the roadways.

**Table 7. Daily Service Volumes by Roadway Function**

| Area Type                   | Principal Arterial        |                   | Minor Arterial & Frontage Road |                   | Collector & Local Street  |                   |
|-----------------------------|---------------------------|-------------------|--------------------------------|-------------------|---------------------------|-------------------|
|                             | Median-Divided or One-Way | Undivided Two-Way | Median-Divided or One-Way      | Undivided Two-Way | Median-Divided or One-Way | Undivided Two-Way |
| <b>CBD</b>                  | <b>7,250</b>              | <b>6,500</b>      | <b>7,250</b>                   | <b>6,500</b>      | <b>4,750</b>              | <b>4,250</b>      |
| <b>Urban/Commercial</b>     | <b>8,500</b>              | <b>7,750</b>      | <b>8,250</b>                   | <b>7,500</b>      | <b>5,250</b>              | <b>4,750</b>      |
| <b>Suburban Residential</b> | <b>9,250</b>              | <b>8,750</b>      | <b>9,000</b>                   | <b>8,250</b>      | <b>5,750</b>              | <b>5,250</b>      |
| <b>Rural</b>                | <b>10,250</b>             | <b>9,250</b>      | <b>9,750</b>                   | <b>8,750</b>      | <b>6,000</b>              | <b>5,500</b>      |

NOTE: Daily capacity is equal to 10x peak hour capacity.

- Volume: Capacity Ratio  $\leq 45\%$  is LOS *A/B*,
- Volume: Capacity Ratio  $> 45\%$  and  $\leq 65\%$  is LOS *C*,
- Volume: Capacity Ratio  $> 65\%$  and  $\leq 80\%$  is LOS *D*,
- Volume: Capacity Ratio  $< 80\%$  and  $\leq 100\%$  is LOS *E*,
- Volume: Capacity Ratio  $\geq 100\%$  is LOS *F*

### Summary of Results

For roadways adjacent to or in the vicinity of the subject site, the volume/capacity ratio was calculated for existing and site buildout conditions. The following table provides a summary of volume to capacity ratio for all roadways within the study area. The results of the analysis shows that all roadways links within the project area are expected to operate at LOS E or better.

**Table 8. Roadway Link Capacity Analysis Results Summary**

| Roadway                 | Condition        | Daily Traffic Volume | Functional Classification           | Theoretical Capacity | V/C  | LOS |
|-------------------------|------------------|----------------------|-------------------------------------|----------------------|------|-----|
| 16 <sup>th</sup> Street | Existing         | 3,210                | Collector(One way)                  | 5,250                | 0.61 | C   |
|                         | Background       | 2,450                | Collector(Two way)                  | 10,500               | 0.23 | A/B |
|                         | Phase 1 Buildout | 2,450                | Collector(Two way)                  | 10,501               | 0.23 | A/B |
|                         | Phase 2 Buildout | 3,650                | Collector(Two way)                  | 10,502               | 0.35 | A/B |
|                         | Phase 3 Buildout | 4,920                | Collector(Two way)                  | 10,503               | 0.47 | C   |
| 17 <sup>th</sup> Street | Existing         | 3,150                | Collector(One way)                  | 5,250                | 0.60 | C   |
|                         | Background       | 2,110                | Collector(Two way)                  | 10,500               | 0.20 | A/B |
|                         | Phase 1 Buildout | 3,900                | Collector(Two way)                  | 10,501               | 0.37 | A/B |
|                         | Phase 2 Buildout | 4,580                | Collector(Two way)                  | 10,502               | 0.44 | A/B |
|                         | Phase 3 Buildout | 6,490                | Collector(Two way)                  | 10,503               | 0.62 | C   |
| 18 <sup>th</sup> Street | Existing         | 2,350                | Collector(One way)                  | 5,250                | 0.45 | A/B |
|                         | Background       | 3,570                | Collector(Two way)                  | 10,500               | 0.34 | A/B |
|                         | Phase 1 Buildout | 5,630                | Collector(Two way)                  | 10,501               | 0.54 | C   |
|                         | Phase 2 Buildout | 6,760                | Collector(Two way)                  | 10,502               | 0.64 | C   |
|                         | Phase 3 Buildout | 7,210                | Collector(Two way)                  | 10,503               | 0.69 | C   |
| 15 <sup>th</sup> Street | Existing         | 25,990               | Minor Arterial - Divided(4 lanes)   | 33,000               | 0.79 | D   |
|                         | Background       | 27,050               | Minor Arterial - Divided(4 lanes)   | 33,000               | 0.82 | E   |
|                         | Phase 1 Buildout | 27,050               | Minor Arterial - Divided(4 lanes)   | 33,000               | 0.82 | E   |
|                         | Phase 2 Buildout | 29,110               | Minor Arterial - Divided(4 lanes)   | 33,000               | 0.88 | E   |
|                         | Phase 3 Buildout | 30,630               | Minor Arterial - Divided(4 lanes)   | 33,000               | 0.93 | E   |
| MLK Jr Blvd             | Existing         | 19,190               | Minor Arterial - Undivided(4 lanes) | 30,000               | 0.64 | C   |
|                         | Background       | 19,980               | Minor Arterial - Undivided(4 lanes) | 30,000               | 0.67 | D   |
|                         | Phase 1 Buildout | 21,720               | Minor Arterial - Undivided(4 lanes) | 30,000               | 0.72 | D   |
|                         | Phase 2 Buildout | 22,760               | Minor Arterial - Undivided(4 lanes) | 30,000               | 0.76 | D   |
|                         | Phase 3 Buildout | 24,000               | Minor Arterial - Undivided(4 lanes) | 30,000               | 0.80 | D   |
| Guadalupe Street        | Existing         | 11,290               | Minor Arterial(One way)             | 24,750               | 0.46 | C   |
|                         | Background       | 11,490               | Minor Arterial(One way)             | 24,750               | 0.46 | C   |
|                         | Phase 1 Buildout | 13,420               | Minor Arterial(One way)             | 24,750               | 0.54 | C   |
|                         | Phase 2 Buildout | 14,040               | Minor Arterial(One way)             | 24,750               | 0.57 | C   |
|                         | Phase 3 Buildout | 14,640               | Minor Arterial(One way)             | 24,750               | 0.59 | C   |
| Lavaca Street           | Existing         | 11,270               | Minor Arterial(One way)             | 33,000               | 0.34 | A/B |
|                         | Background       | 10,990               | Minor Arterial(One way)             | 33,000               | 0.33 | A/B |
|                         | Phase 1 Buildout | 11,390               | Minor Arterial(One way)             | 33,000               | 0.35 | A/B |
|                         | Phase 2 Buildout | 12,820               | Minor Arterial(One way)             | 33,000               | 0.39 | A/B |
|                         | Phase 3 Buildout | 13,470               | Minor Arterial(One way)             | 33,000               | 0.41 | A/B |
| Colorado Street         | Existing         | 3,130                | Collector(Two way)                  | 9,500                | 0.33 | A/B |
|                         | Background       | 2,500                | Collector(Two way)                  | 9,500                | 0.26 | A/B |
|                         | Phase 1 Buildout | 2,500                | Collector(Two way)                  | 9,500                | 0.26 | A/B |
|                         | Phase 2 Buildout | 4,370                | Collector(Two way)                  | 9,500                | 0.46 | C   |
|                         | Phase 3 Buildout | 6,670                | Collector(Two way)                  | 9,500                | 0.70 | D   |
| San Jacinto Blvd        | Existing         | 10,620               | Minor Arterial(One way)             | 24,750               | 0.43 | A/B |
|                         | Background       | 10,450               | Minor Arterial(One way)             | 24,750               | 0.42 | A/B |
|                         | Phase 1 Buildout | 12,860               | Minor Arterial(One way)             | 24,750               | 0.52 | C   |
|                         | Phase 2 Buildout | 13,290               | Minor Arterial(One way)             | 24,750               | 0.54 | C   |
|                         | Phase 3 Buildout | 14,040               | Minor Arterial(One way)             | 24,750               | 0.57 | C   |
| Trinity Street          | Existing         | 7,280                | Minor Arterial(One way)             | 24,750               | 0.29 | A/B |
|                         | Background       | 6,280                | Minor Arterial(One way)             | 24,750               | 0.25 | A/B |
|                         | Phase 1 Buildout | 7,550                | Minor Arterial(One way)             | 24,750               | 0.31 | A/B |
|                         | Phase 2 Buildout | 7,680                | Minor Arterial(One way)             | 24,750               | 0.31 | A/B |
|                         | Phase 3 Buildout | 8,600                | Minor Arterial(One way)             | 24,750               | 0.35 | A/B |

Based on the above table, the relocated trips calculated for 16<sup>th</sup> Street, 17<sup>th</sup> Street and 18<sup>th</sup> Street conversion from one-way to two way operation, these streets are expected to have enough capacity to handle the additional traffic generated by the conversion as well as proposed office spaces. The existing on-street parking will be eliminated after the conversion takes place. The **Table 8** above summarizes the results of link analysis performed for project roadways on existing condition, background condition and at the end of each phases.

## SITE ACCESS REVIEW

The only roadway in the study area that has a raised divided median is 15<sup>th</sup> Street. The 2025 Austin Metropolitan Area Transportation designates 15<sup>th</sup> Street to be a MAD-6. The proposed Master Plan does not proposed an additional median access opening and therefore is not applicable to this analysis. All the other roadways within the study area are undivided or have a flush median or two-way left turn lane (MLK Boulevard).

### Driveway Spacing

Section 5 of the City of Austin's Transportation Criteria Manual establishes the spacing requirements for driveways with the City of Austin. **Table 9** below summarizes the minimum driveway spacing for the classification of the roadway being accessed.

**Table 9. Capitol District Plan – Driveway Spacing Criteria**

| Classification | Street Name           | Minimum Spacing to the Nearest Conflict point |
|----------------|-----------------------|---|
| MAU-4          | MLK BOULEVARD         | 150 FT.                                       |
| C              | 18th STREET           | 100 FT.                                       |
| C              | 17th STREET           | 100 FT.                                       |
| C              | 16th STREET           | 100 FT.                                       |
| MAD-4          | 15th STREET           | 150 FT.                                       |
| MA             | GUADALUPE STREET      | 150 FT.                                       |
| MA             | LAVACA STREET         | 150 FT.                                       |
| C              | COLORADO STREET       | 100 FT.                                       |
| C              | CONGRESS AVENUE       | 100 FT.                                       |
| MA             | SAN JACINTO BOULEVARD | 150 FT.                                       |
| MA             | TRINITY STREET        | 150 FT.                                       |

LEGEND: MA - MINOR ARTERIAL  
C - COLLECTOR  
MA - D MINOR ARTERIAL DIVIDED

Based on the review of the development plan, the parking driveways proposed for Phase 1 at Brazos Street and 18th Street meets the City of Austin's driveway spacing requirements. Similarly, the driveways proposed at 17th Street for Phase 2 and Phase 3 also meets the requirements. Parking driveways proposed at Colorado Street and 16th Street should be located at the middle of respective blocks to form a four way intersection at these driveways on order to meet the driveway spacing requirements as shown above. This will allow an opportunity to maximize the spacing between respective cross streets and the both parking entrances will be at the middle of the block.

## SUMMARY OF FINDINGS AND RECOMMENDATIONS

The following findings and recommendations are based upon buildout of the subject property in accordance with the phased development scenario outlined in the *Project Description* section of this report. It should be noted that the merit of any recommended mitigation measures may warrant re-evaluation should the site develop to a lower or higher intensity.

FINDING: The existing roadway system generally provides enough capacity to accommodate the projected traffic generated by the proposed changes included in the Texas Capitol Master Plan 2018 update with some minor modification to traffic signals and other traffic controls.

FINDING: Based on the analysis discussed above in this report, the 16<sup>th</sup> Street, 17<sup>th</sup> Street and 18<sup>th</sup> Street has enough capacity to accommodate additional traffic due to one way to two way conversion and additional traffic due to proposed office spaces.

- ❖ RECOMMENDATION: The existing stop sign on east west approaches on 16<sup>th</sup> Street and 18<sup>th</sup> Street is recommended to be kept at the intersection with Congress Street as it will allow pedestrian to safely cross these streets after the development of Pedestrian Boulevard along Congress Street.
- ❖ RECOMMENDATION: Driveway 4 and Driveway 5 is recommended to be constructed in the middle of 15th Street and 16th Street to form a four way intersection to maximize available spacing in order to meet the City of Austin driveway spacing requirements.
- ❖ RECOMMENDATION: It is also recommended that the driveway 6 and driveway 7 to be constructed in the middle of Lavaca Street and Colorado Street to form four way intersection and maximize available spacing.
- ❖ RECOMMENDATION: It is also recommended that the traffic signal should be considered at the intersections of Lavaca Street and 18<sup>th</sup> Street as well as MLK Blvd and Colorado Street. If reviewing agency selected a new traffic signal at these intersections, a detailed traffic signal warrant analysis should be performed prior to the signal installation.

Furthermore, the following **Table 10** below provides the summary of proposed changes and mitigation for each intersection.

**Table 10. Detailed Recommendation by Intersection**

| Intersection                         | Proposed Changes   | Proposed Mitigation   |
|--------------------------------------|--|---|
| 15th Street at Trinity Street        | Traffic signal operation remains the same, 3-northbound lanes and bike lane on east side of street, west outside lane is reduced to 12 feet wide.  | No mitigation measures required.  |
| 15th Street at San Jacinto Boulevard | No change.   | Optimize the current PM peak hour traffic signal timings to improve the level of service. |
| 15th Street at Brazos Street         | No change.   | No mitigation measures required.  |
| 15th Street at Congress Avenue       | The southbound leg of Congress Avenue will be closed to vehicular traffic.   | No mitigation measures required.  |
| 15th Street at Colorado Street       | No change.   | No mitigation measures required.  |
| 15th Street at Lavaca Street         | No change.   | No mitigation measures required.  |
| 15th Street at Guadalupe Street      | No change.   | No mitigation measures required.  |
| 16th Street at San Jacinto Boulevard | 16th St will be converted from one-way westbound to a two-way street; the on-street parking will be removed; travel lanes will be 11 ft wide.  | A stop sign is required for the eastbound approach.                                       |
| 16th Street at Brazos Street         | 16th St will be converted from one-way westbound to two-way; on-street parking will be removed; travel lanes will be 11 ft wide  | No mitigation measures required.  |
| 16th Street at Congress Avenue       | 16th St will be converted from one-way westbound to a two-way street; on-street parking will be removed; travel lanes will be 11 ft wide. Vehicular traffic on Congress Avenue will be prohibited.                   | A stop sign is required for the eastbound approach.                                       |
| 16th Street at Colorado Street       | 16th St will be converted from one-way westbound to a two-way street; on-street parking will be removed; travel lanes will be 11 ft wide.  | A stop sign is required for the eastbound approach.                                       |
| 16th Street at Lavaca Street         | 16th St will be converted from one-way westbound to a two-way street; on-street parking will be removed; travel lanes will be 11 ft wide.  | A traffic signal head will be required for the eastbound approach.                        |
| 16th Street at Guadalupe Street      | 16th St will be converted from one-way westbound to a two-way street; on-street parking will be removed; travel lanes will be 11 ft wide.  | A stop sign is required for the eastbound approach.                                       |
| 17th Street at Trinity Street        | 17th St will be converted from one-way westbound to a two-way street; on-street parking will be removed; travel lanes will be 11 ft wide.  | No mitigation measures required.  |
| 17th Street at San Jacinto Boulevard | 17th St will be converted from one-way westbound to a two-way street; on-street parking will be removed; travel lanes will be 11 ft wide.  | A stop sign is required for the eastbound approach.                                       |
| 17th Street at Brazos Street         | 17th St will be converted from one-way westbound to a two-way street; on-street parking will be removed; travel lanes will be 11 ft wide.  | Provide all way stop signs at this intersection   |
| 17th Street at Congress Avenue       | 17th St will be converted from one-way eastbound to two-way; parking remains on north side of street; travel lanes will be 11 ft. wide; 17th Street will be terminated and no longer intersect with Congress Avenue. | Remove stop signs on Congress Avenue. Retain stop sign on 16th Street.                    |
| 17th Street at Colorado Street       | 17th St will be converted from one-way westbound to a two-way street; on-street parking will be removed; travel lanes will be 11 ft wide.  | A stop sign is required for the westbound approach.                                       |
| 17th Street at Lavaca Street         | 17th St will be converted from one-way westbound to a two-way street; on-street parking will be removed; travel lanes will be 11 ft wide.  | A traffic signal head will be required for the westbound approach.                        |
| 17th Street at Guadalupe Street      | 17th St will be converted from one-way westbound to a two-way street; on-street parking will be removed; travel lanes will be 11 ft wide.  | A traffic signal head will be required for the westbound approach.                        |

| Intersection                              | Proposed Changes  | Proposed Mitigation   |
|---|---|---|
| 18th Street at Trinity Street             | The west outside lane on Trinity Street will be reduced from 23 ft to 12 feet wide. 18th St gets converted from a one-way westbound to a two-way street.  | No mitigation measures required.  |
| 18th Street at San Jacinto Boulevard      | 18th St will be converted from a one-way westbound to a two-way street; parking will be removed; travel lanes will be 12 ft wide.   | All-way-stop operation is recommended.  |
| 18th Street at Brazos Street              | 18th St will be converted from a one-way westbound to a two-way street; parking will be removed; travel lanes will be 12 ft wide.   | A stop sign is required for the eastbound approach.   |
| 18th Street at Congress Avenue            | 18th St will be converted from a one-way westbound to a two-way street; parking will be removed; travel lanes will be 12 ft wide. Northbound vehicular traffic on Congress Avenue will be prohibited.                   | A stop sign is required for the eastbound approach. Remove stop sign for northbound approach on Congress Avenue.  |
| 18th Street at Colorado Street            | 18th St will be converted from a one-way westbound to a two-way street; parking will be removed; travel lanes will be 12 ft wide.   | A stop sign is required for the eastbound approach.   |
| 18th Street at Lavaca Street              | 18th St will be converted from a one-way westbound to a two-way street; parking will be removed; travel lanes will be 12 ft wide.   | A stop sign is required for the eastbound approach. Perform traffic signal warrant analysis. Consider installing traffic signal at this intersection.   |
| 18th Street at Guadalupe Street           | 18th St will be converted from a one-way westbound to a two-way street; parking will be removed; travel lanes will be 12 ft wide.   | A stop sign is required for the eastbound approach.   |
| MLK Jr Boulevard at Trinity Street        | No change   | Optimize the PM peak hour traffic signal timings in phase 1. Optimize the peak hour traffic signal timings in phases 1 and 2.   |
| MLK Jr Boulevard at San Jacinto Boulevard | No change   | Optimize the AM peak hour traffic signal timings in phase 3.  |
| MLK Jr Boulevard at Brazos Street         | No change   | No mitigation measures required.  |
| MLK Jr Boulevard at Congress Avenue       | Congress will be closed for through traffic and pedestrian Mall will be provided along congress. Only southbound bus traffic will be permitted along Congress Avenue. All other traffic will be restricted on Congress. | Restrict MLK Blvd westbound left and eastbound right turns to only allow buses only. Provide signage to restrict these movement to other vehicle. Also provide exclusive pedestrian phase at this intersection. |
| MLK Jr Boulevard at Colorado Street       | no changes at this time   | Perform traffic signal warrant analysis. Consider installing traffic signal at this intersection.   |
| MLK Jr Boulevard at Lavaca Street         | no changes at this time   | No mitigation measures required.  |
| MLK Jr Boulevard at Guadalupe Street      | no changes at this time   | No mitigation measures required.  |
| Brazos Street at Parking Driveway 1       | no changes at this time   | No mitigation measures required.  |
| 18th Street at Parking Driveway 2         | no changes at this time   | No mitigation measures required.  |
| 17th Street at Parking Driveway 3         | no changes at this time   | No mitigation measures required.  |
| Colorado Street at Parking Driveway 4     | Consider aligning Parking Driveway 4 with Parking Driveway 5 at midblock on Colorado Street.  | No mitigation measures required.  |
| Colorado Street at Parking Driveway 5     | Consider aligning Parking Driveway 5 with Parking Driveway 4 at midblock on Colorado Street.  | No mitigation measures required.  |
| 16th Street at Parking Driveway 6         | Consider aligning Parking Driveway 6 with Parking Driveway 7 at midblock on 16th Street.  | No mitigation measures required.  |
| 16th Street at Parking Driveway 7         | Consider aligning Parking Driveway 7 with Parking Driveway 6 at midblock on 16th Street.  | No mitigation measures required.  |
| Colorado Street at Parking Driveway 8     | no changes at this time   | No mitigation measures required.  |
| 17th Street at Parking Driveway 9         | no changes at this time   | No mitigation measures required.  |

END OF MEMO

Exhibit 2. Existing Roaway Geometry and Traffic Control

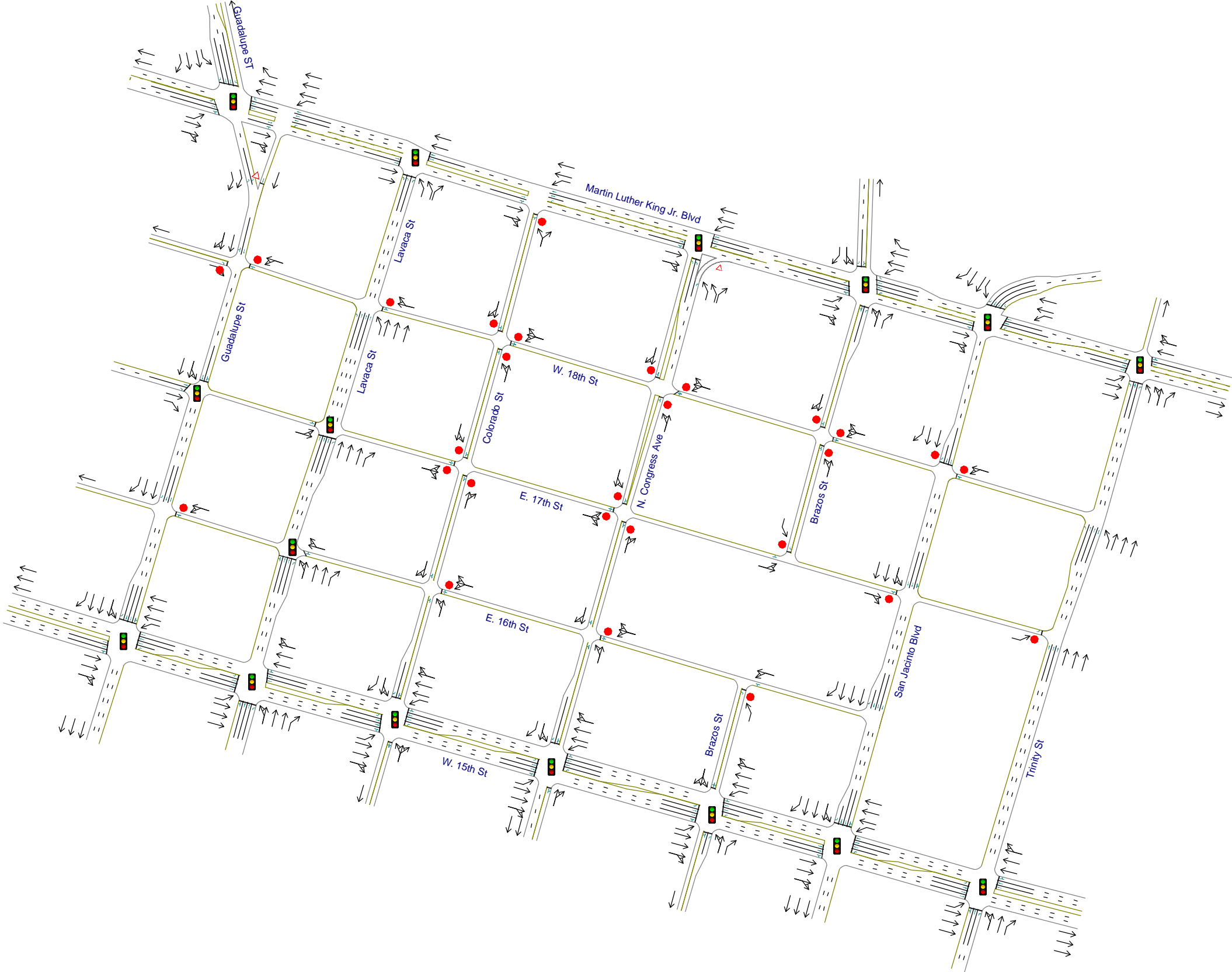


Exhibit 3. Phase I Roadway Geometry and Traffic Control

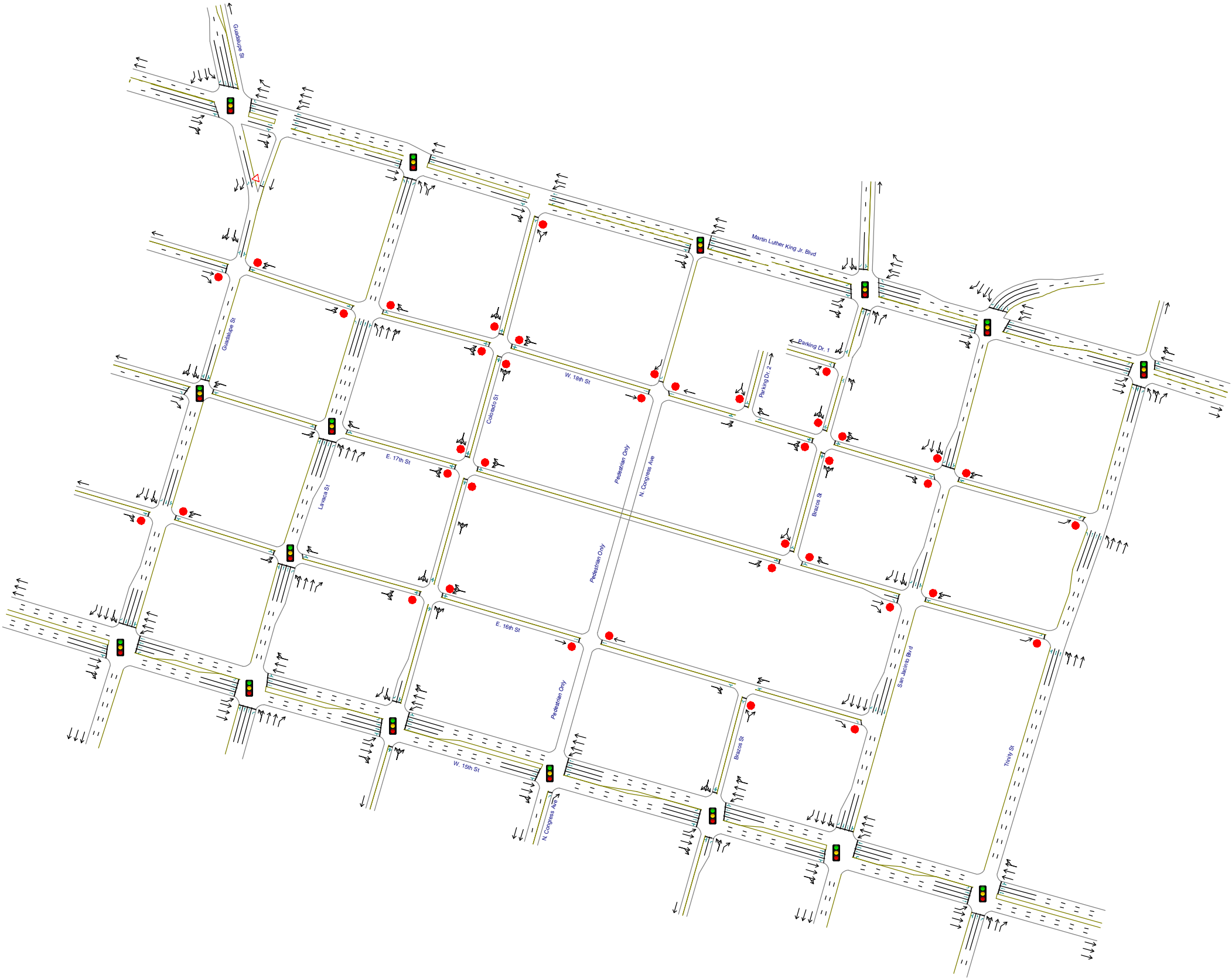


Exhibit 4. Phase II Roadway Geometry and Traffic Control

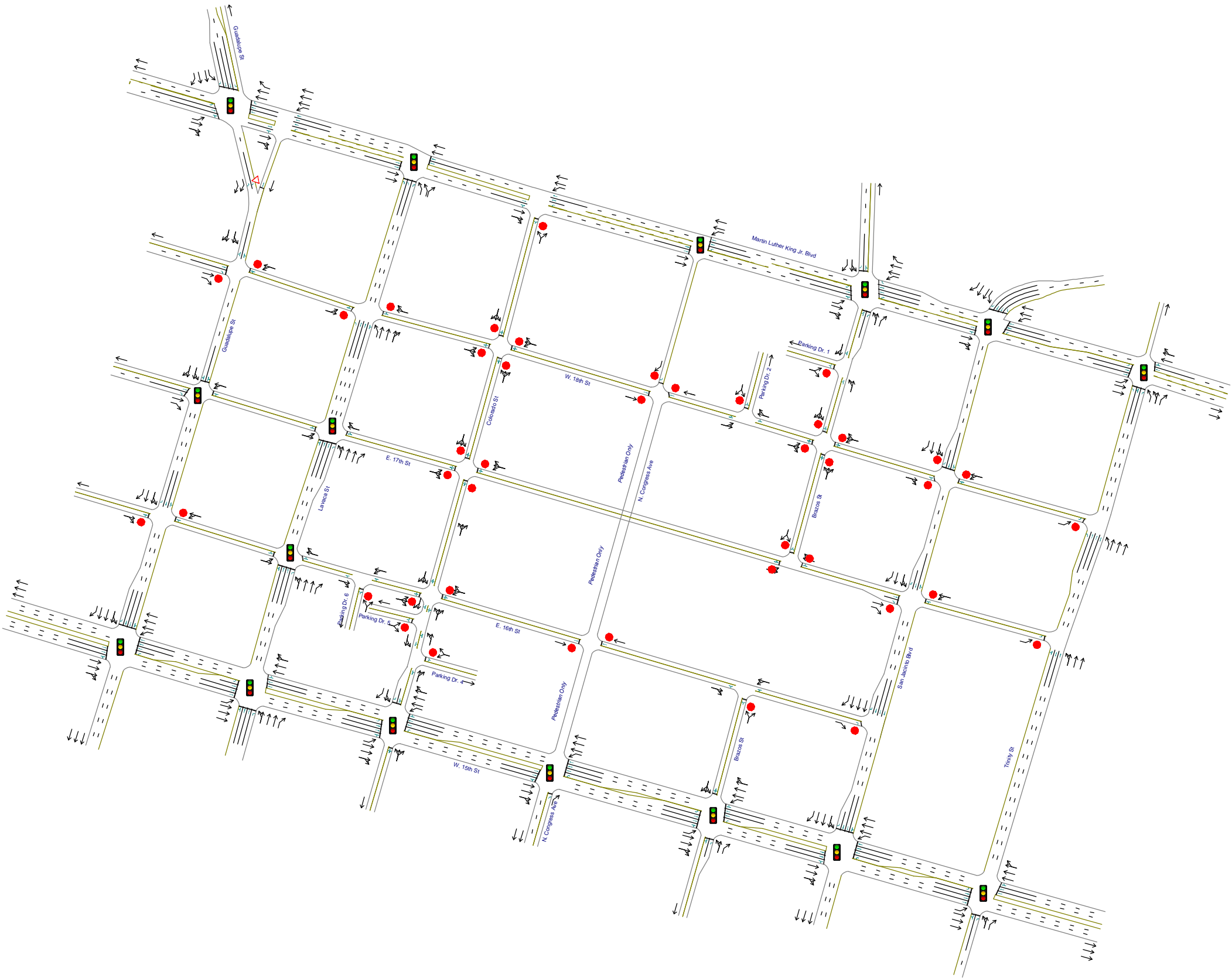
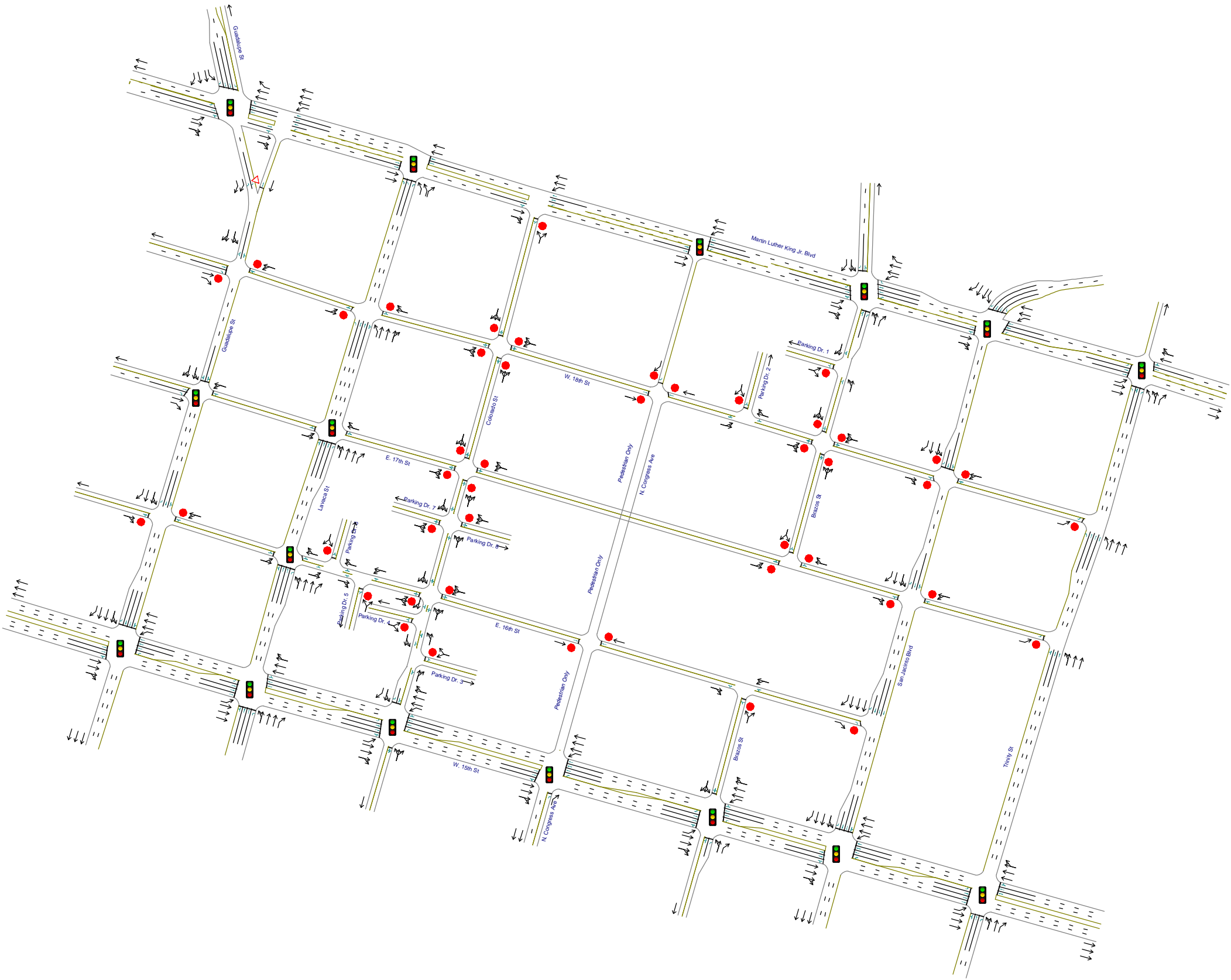
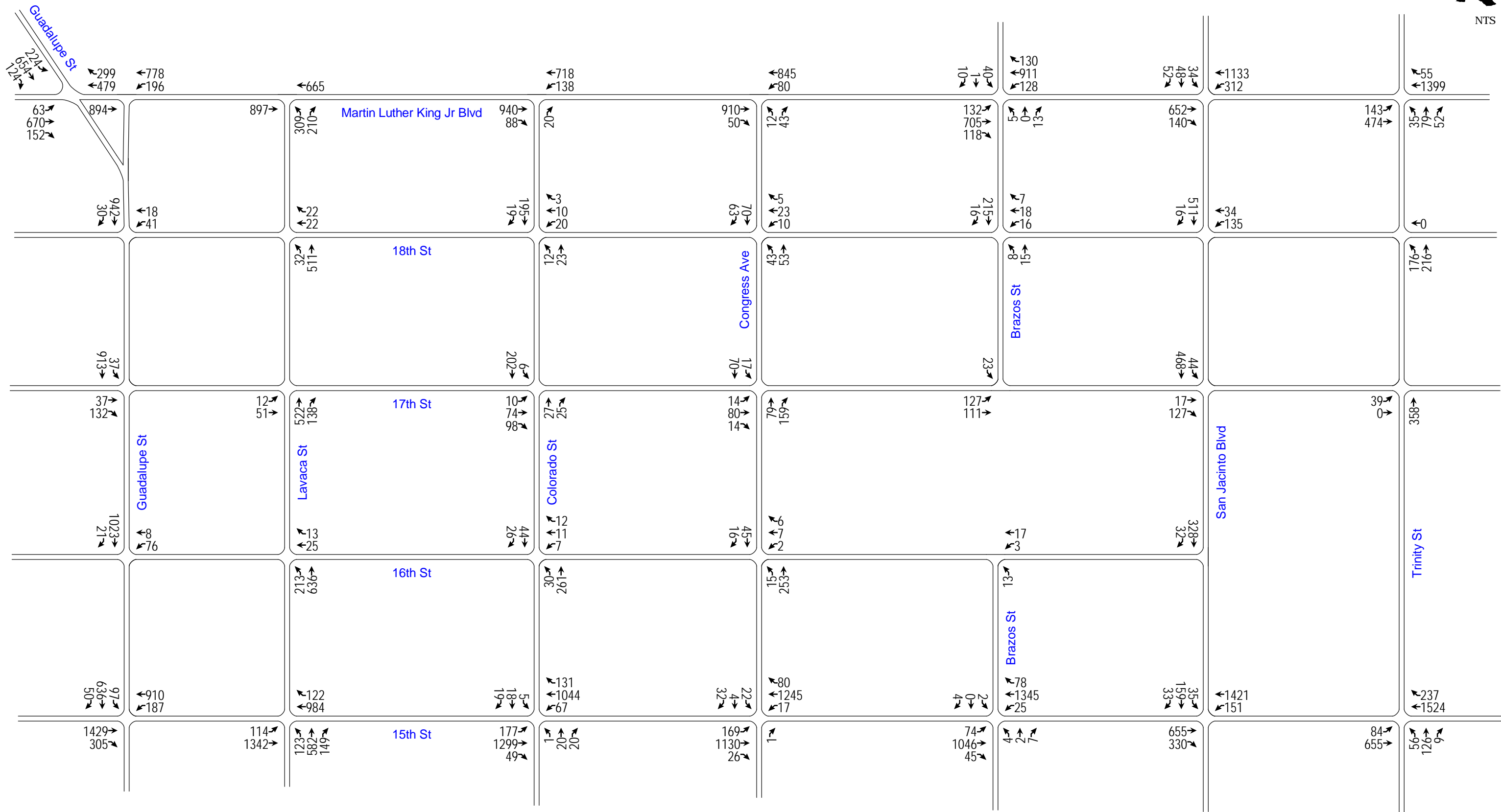


Exhibit 5. Phase III Roadway Geometry and Traffic Control



## ***Appendix A. Traffic Volume Exhibits***

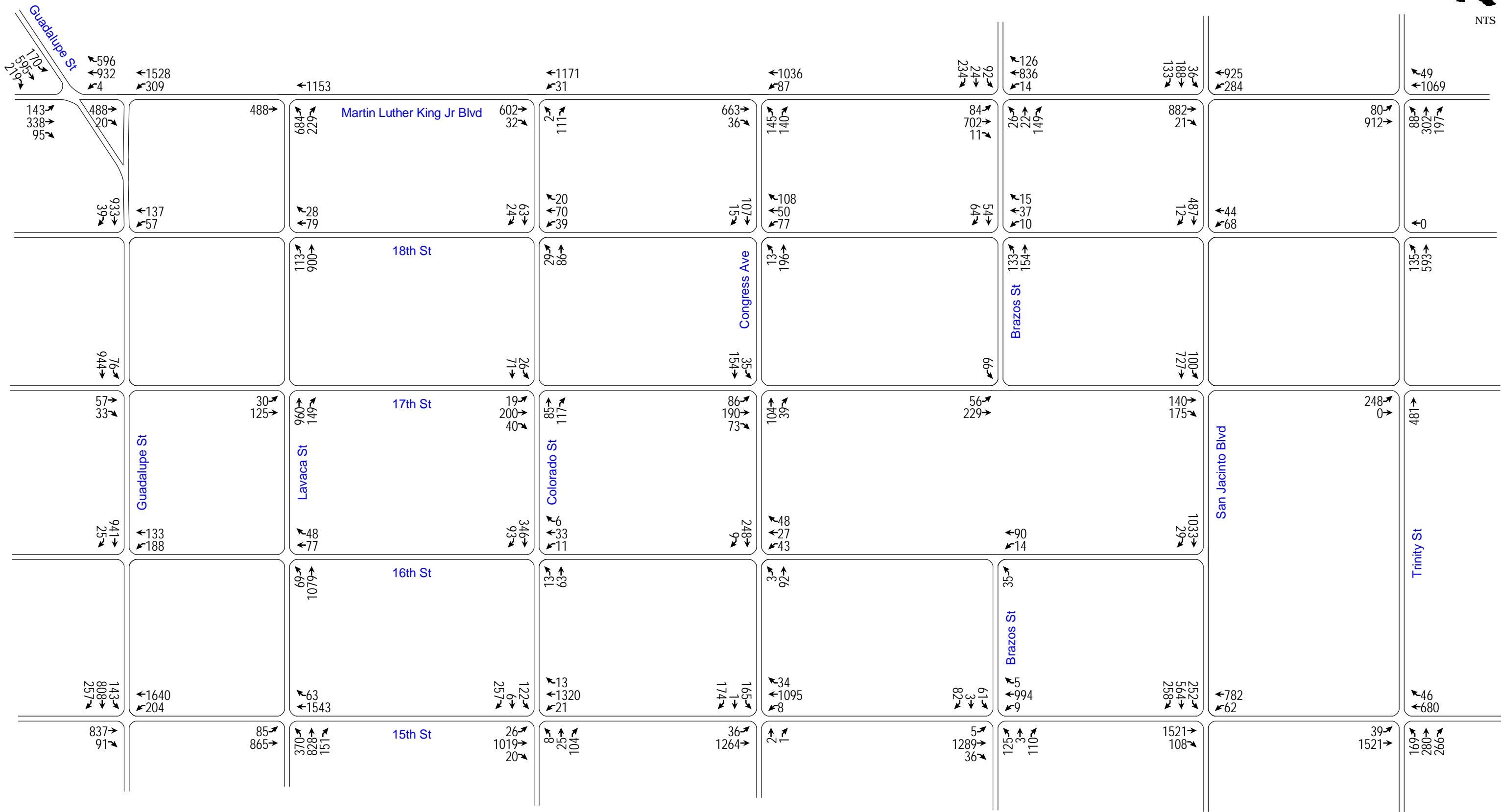
Appendix A1. Existing Conditions AM Peak Hour Traffic Volumes



Appendix A2. Existing Conditions PM Peak Hour Traffic Volumes



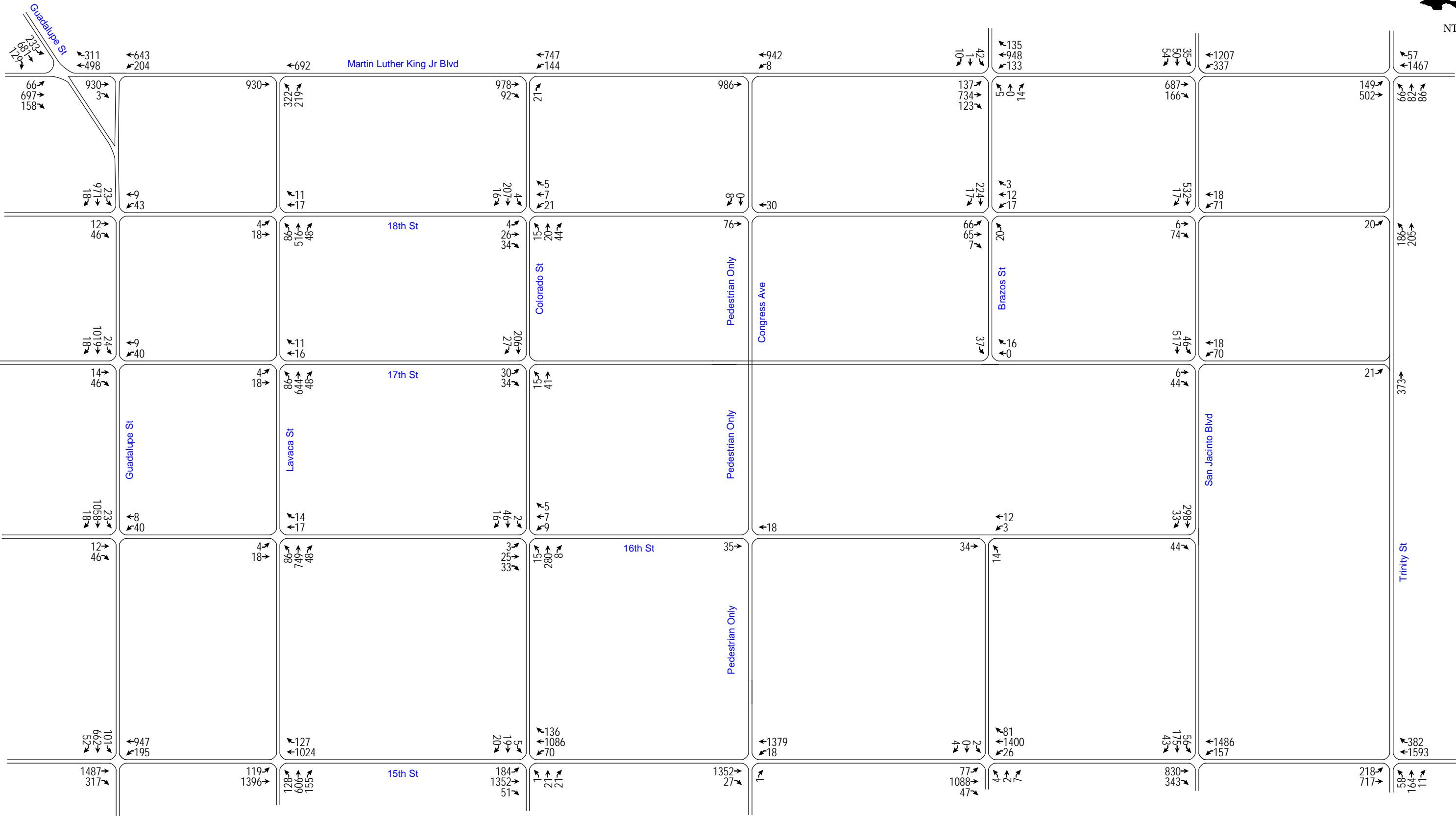
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Appendix A3. 2020 Background AM Peak Hour Traffic Volumes (Phase I)



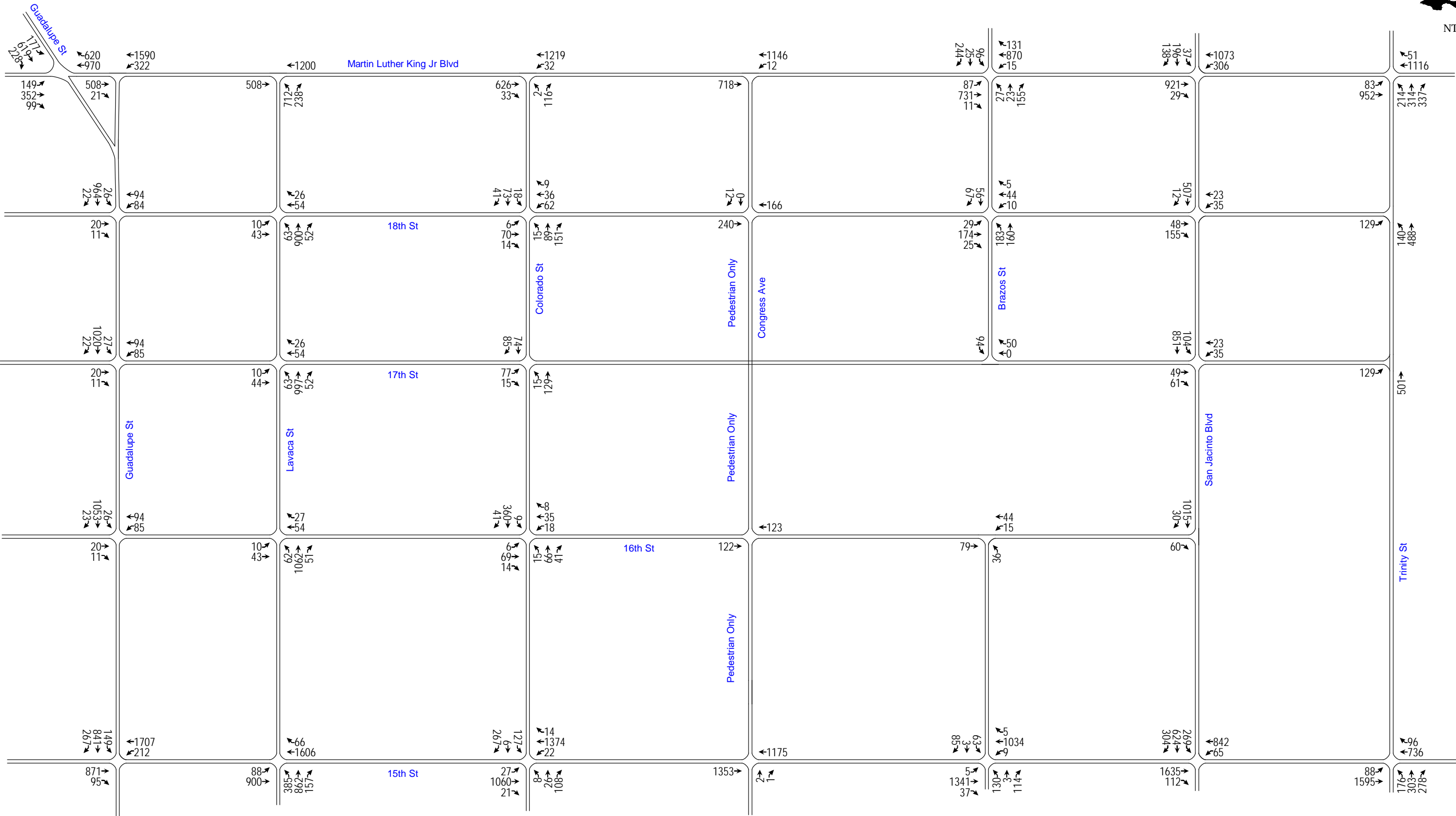
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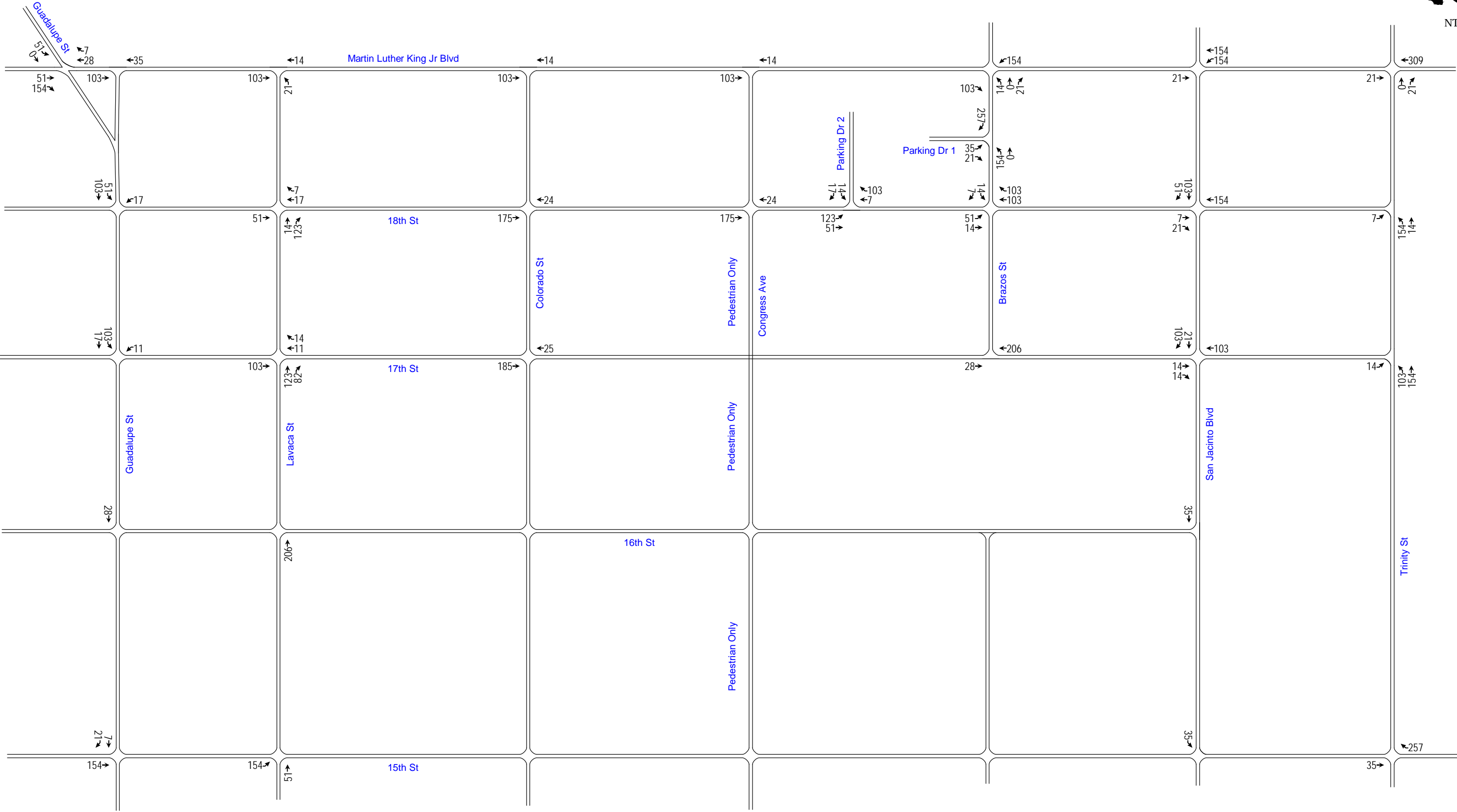
Appendix A4. 2020 Background PM Peak Hour Traffic Volumes (Phase I)



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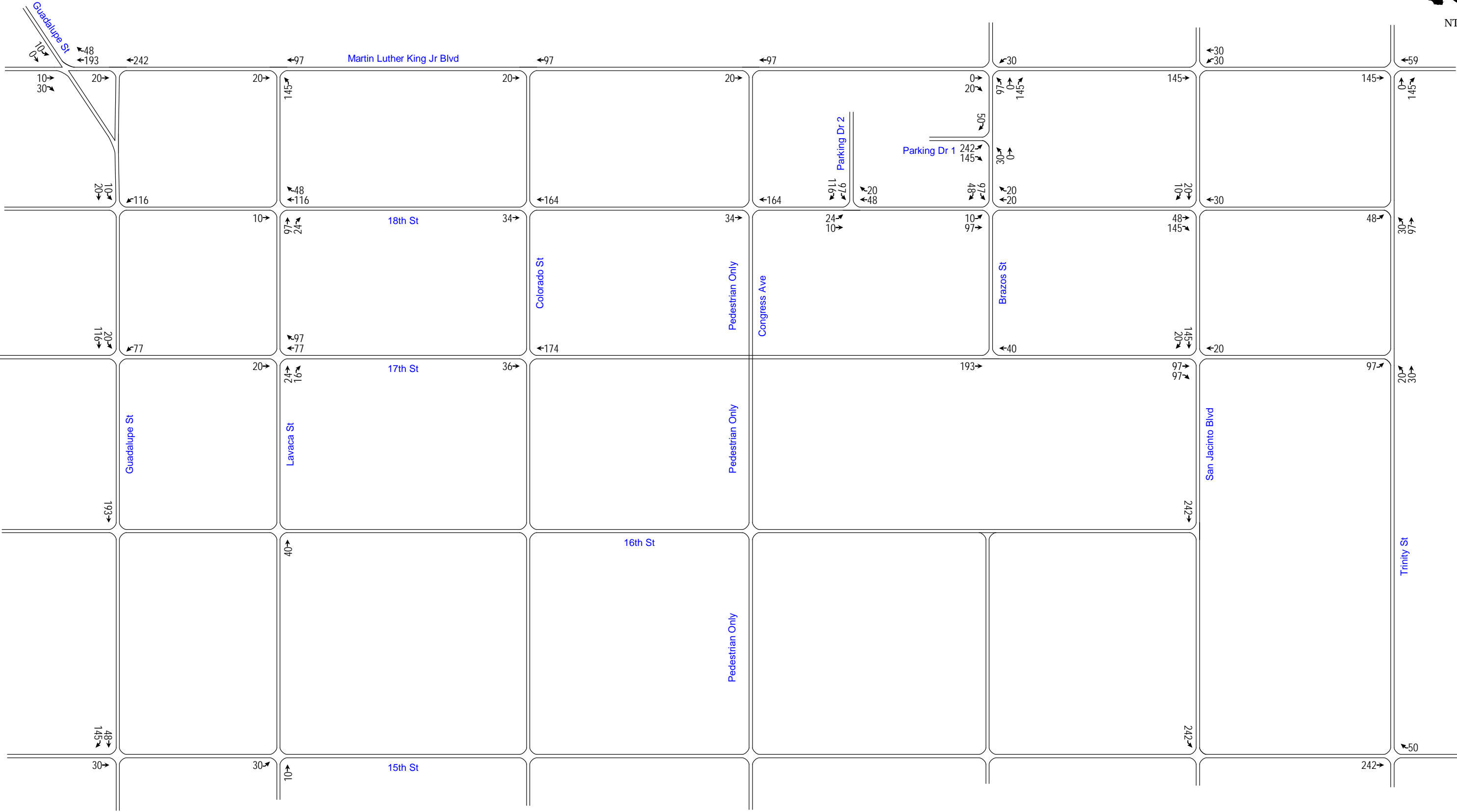
Appendix A5. Site-Generated AM Peak Hour Traffic Volumes (Phase I)



Appendix A6. Site-Generated PM Peak Hour Traffic Volumes (Phase I)



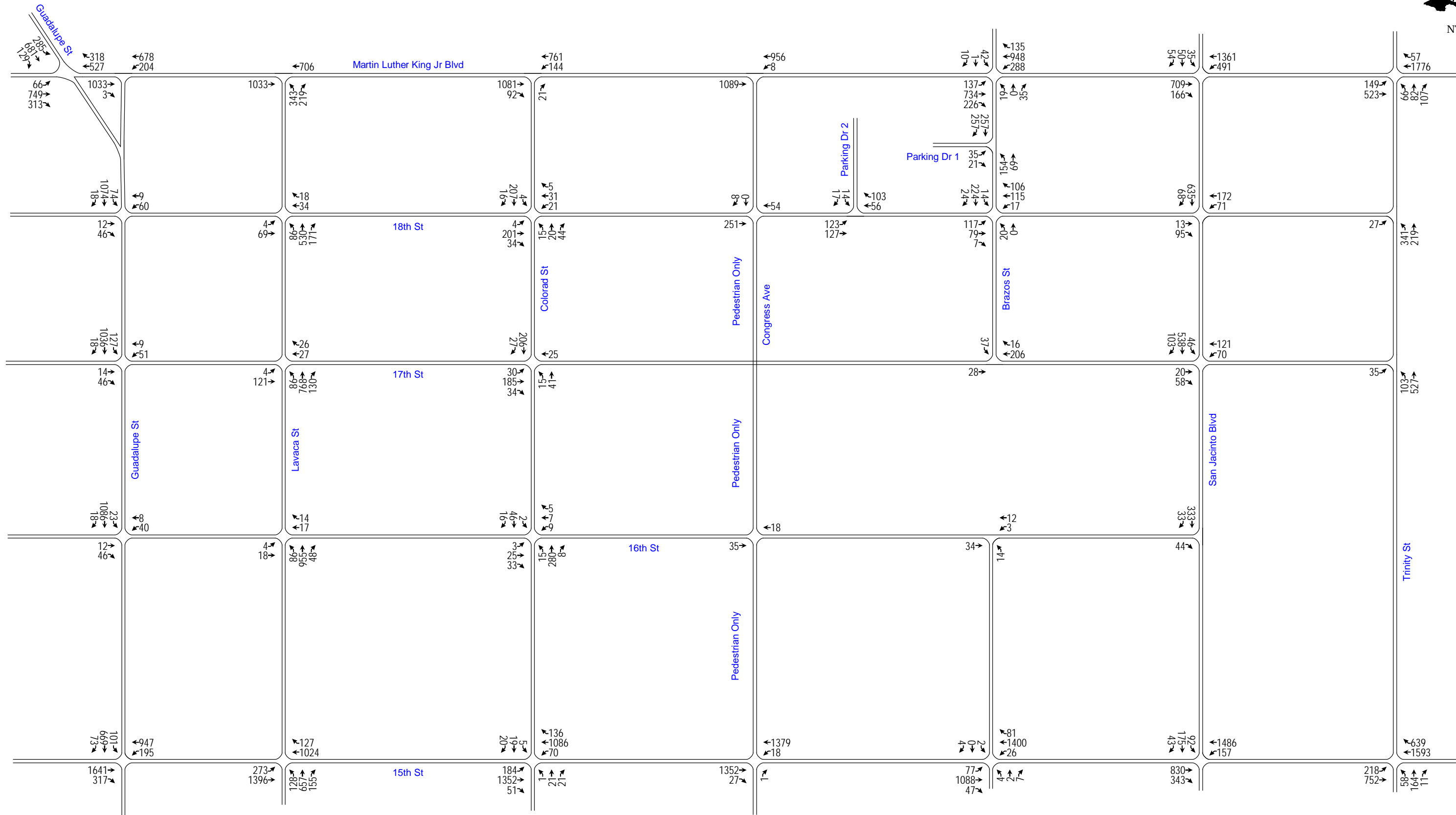
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Appendix A7. 2020 Background Plus Site-Generated AM Peak Hour Traffic Volumes (Phase I)



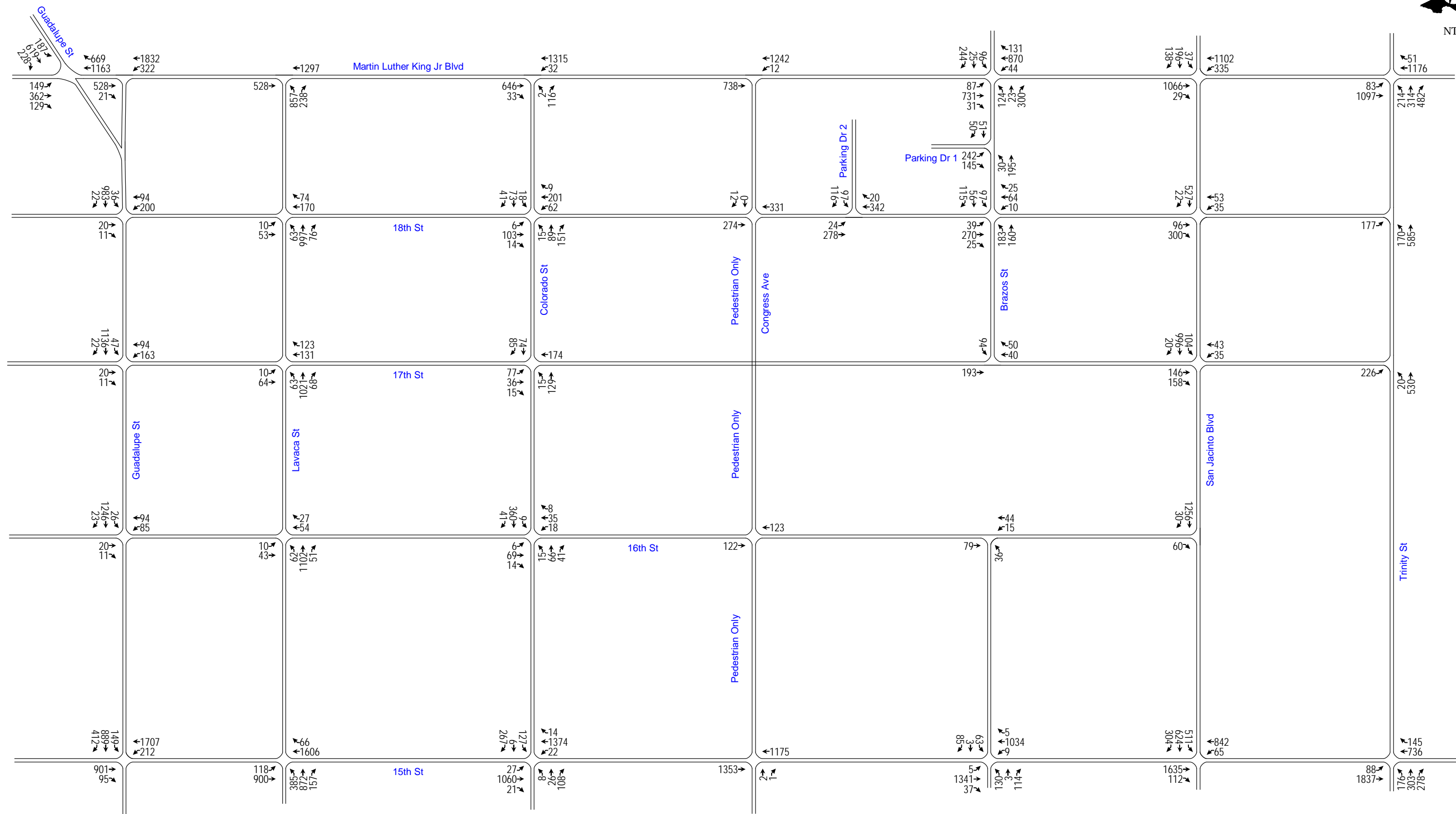
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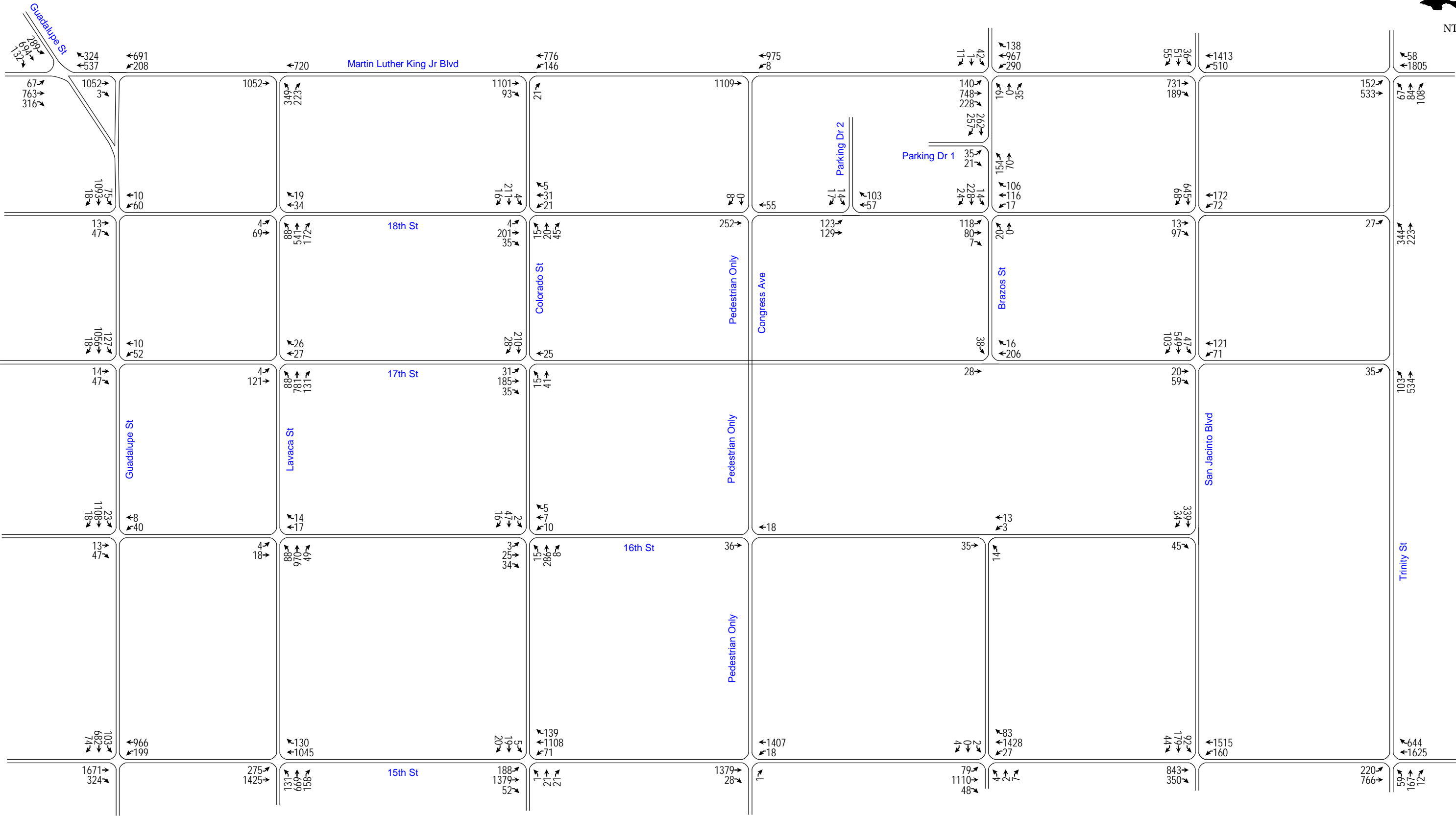
Appendix A8. 2020 Background Plus Site-Generated PM Peak Hour Traffic Volumes (Phase I)



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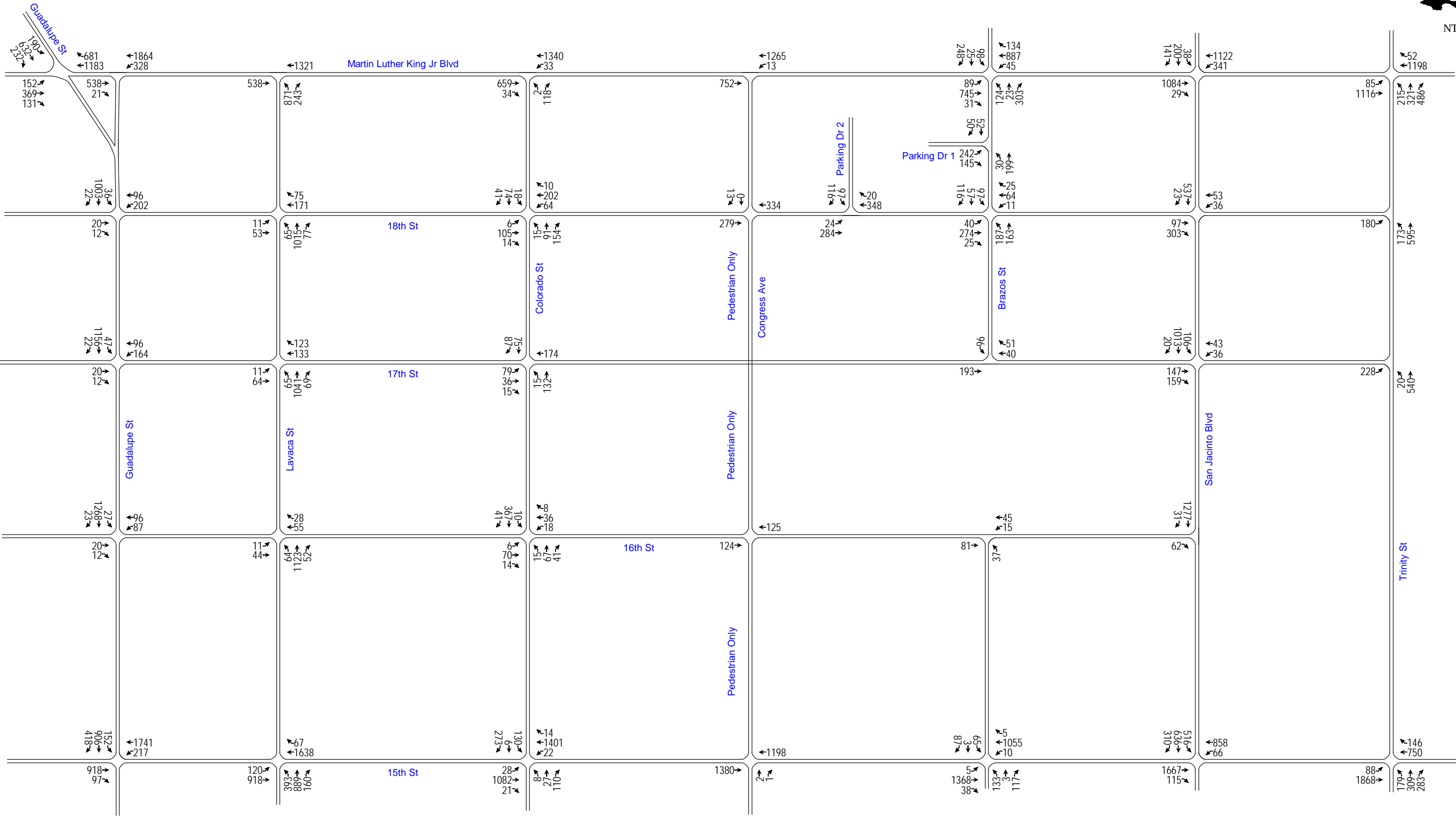
Appendix A9. 2022 Background AM Peak Hour Traffic Volumes (Phase II)



Appendix A10. 2022 Background PM Peak Hour Traffic Volumes (Phase II)



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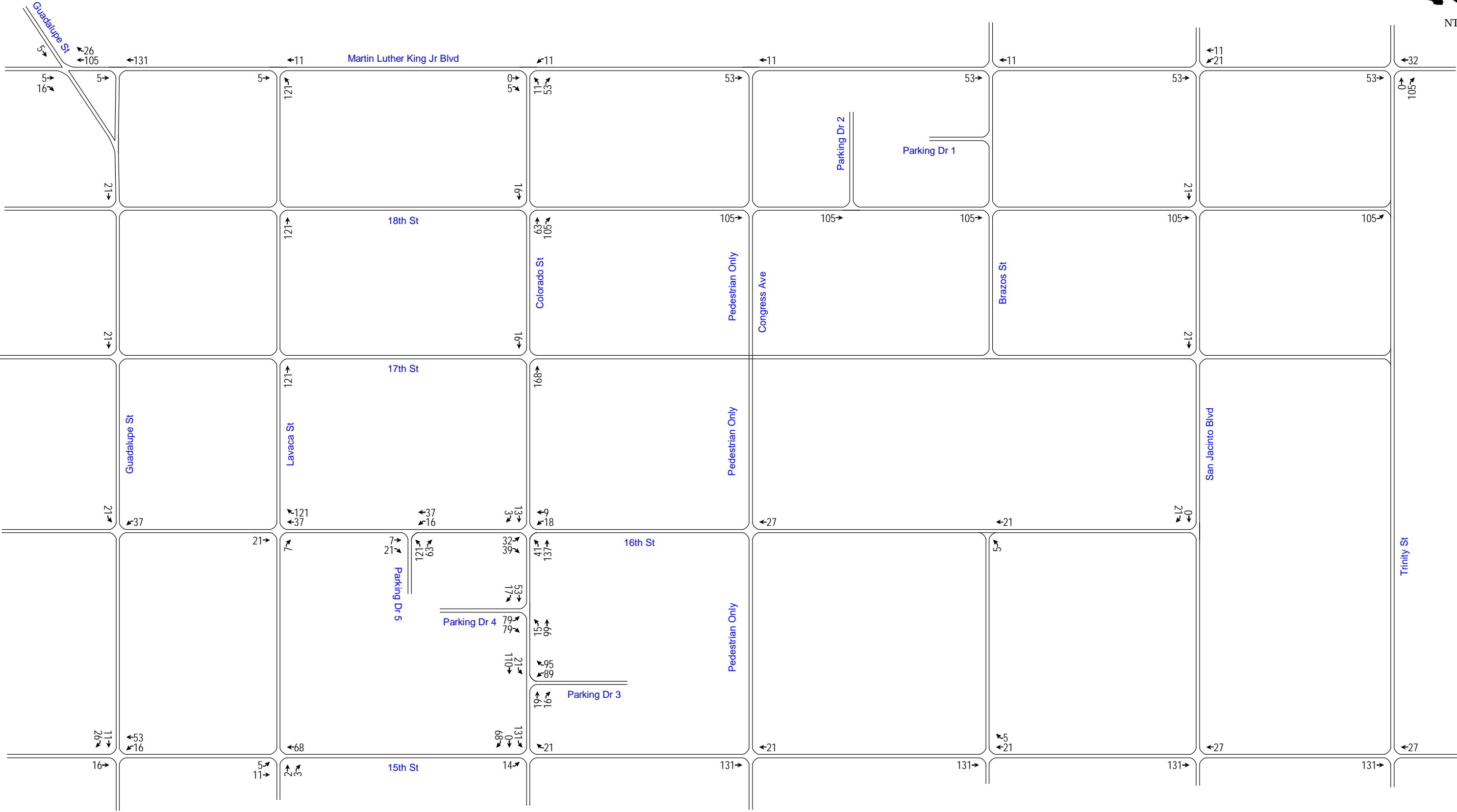




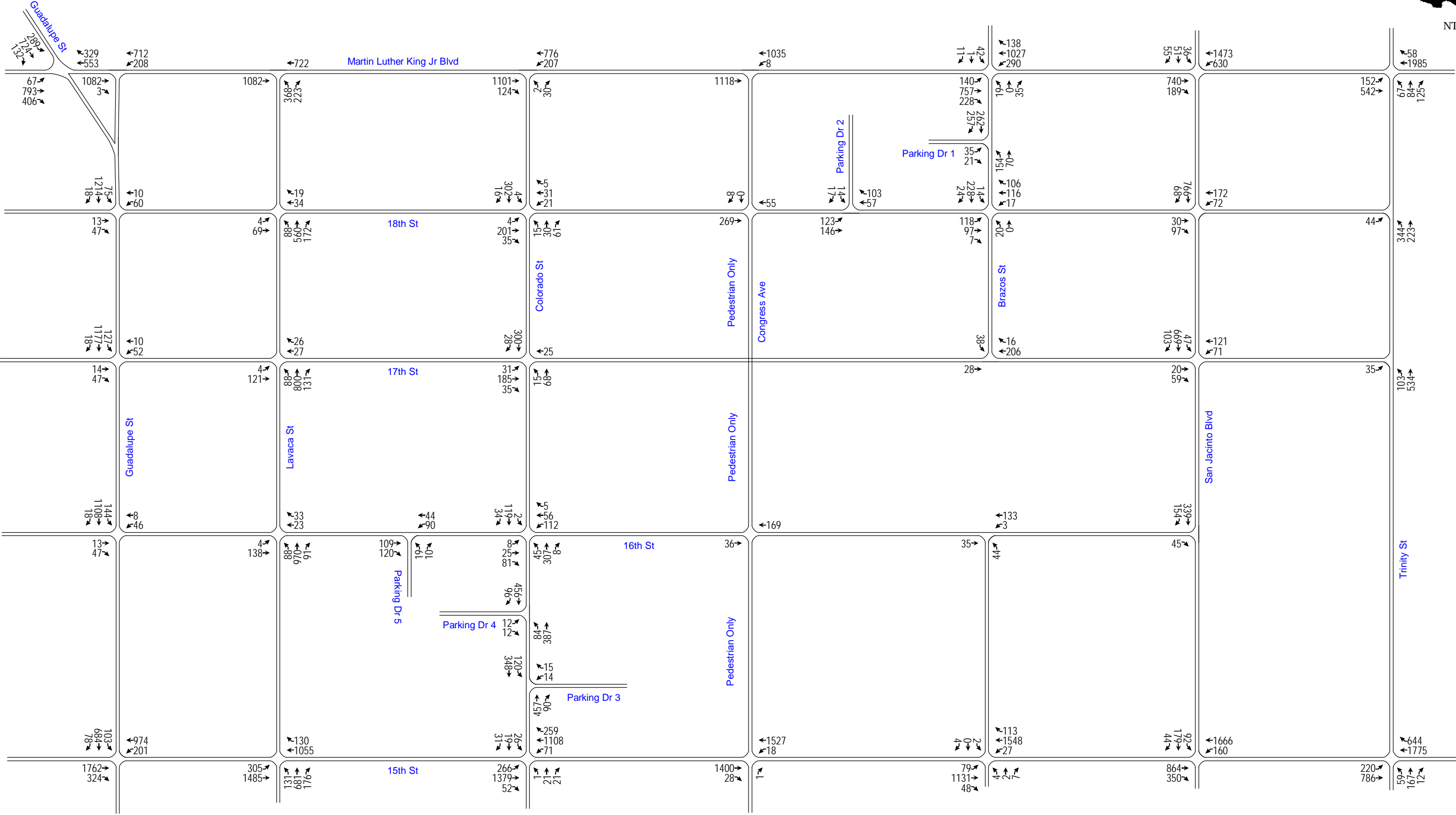
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Appendix A12. Site-Generated PM Peak Hour Traffic Volumes (Phase II)



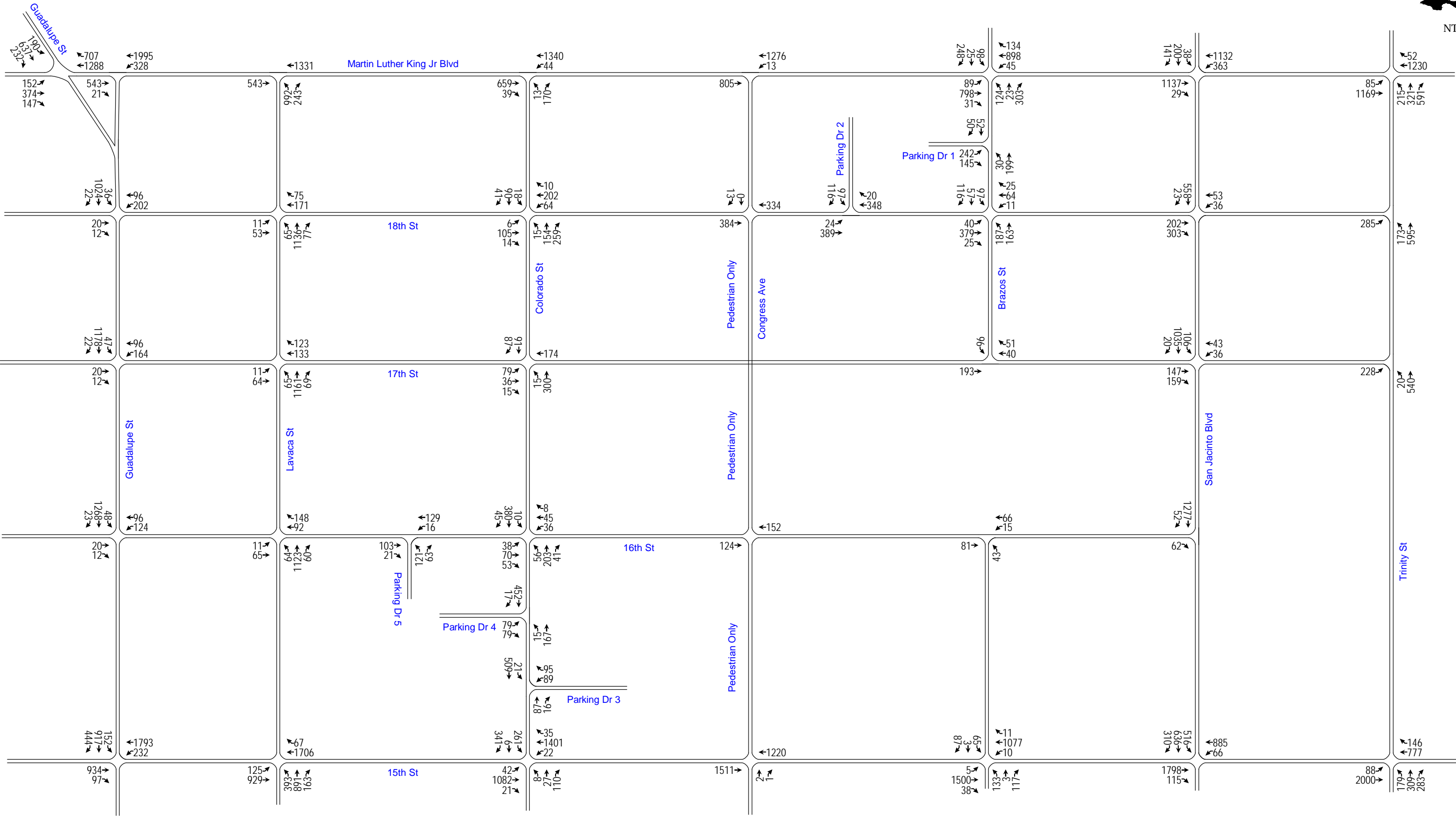
Appendix A13. 2022 Background Plus Site-Generated AM Peak Hour Traffic Volumes (Phase II)



Appendix A14. 2022 Background Plus Site-Generated PM Peak Hour Traffic Volumes (Phase II)



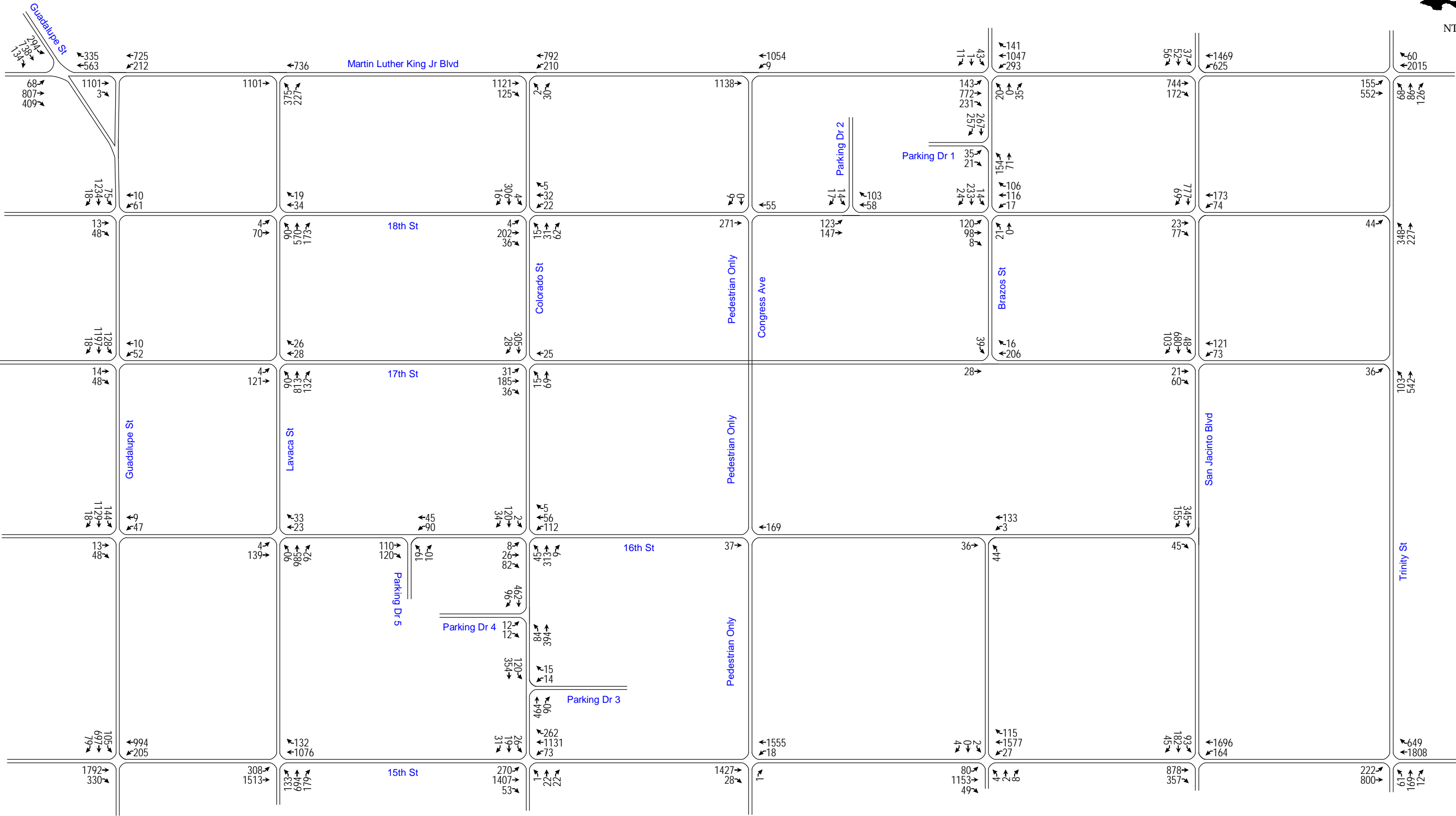
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Appendix A15. 2024 Background AM Peak Hour Traffic Volumes (Phase III)



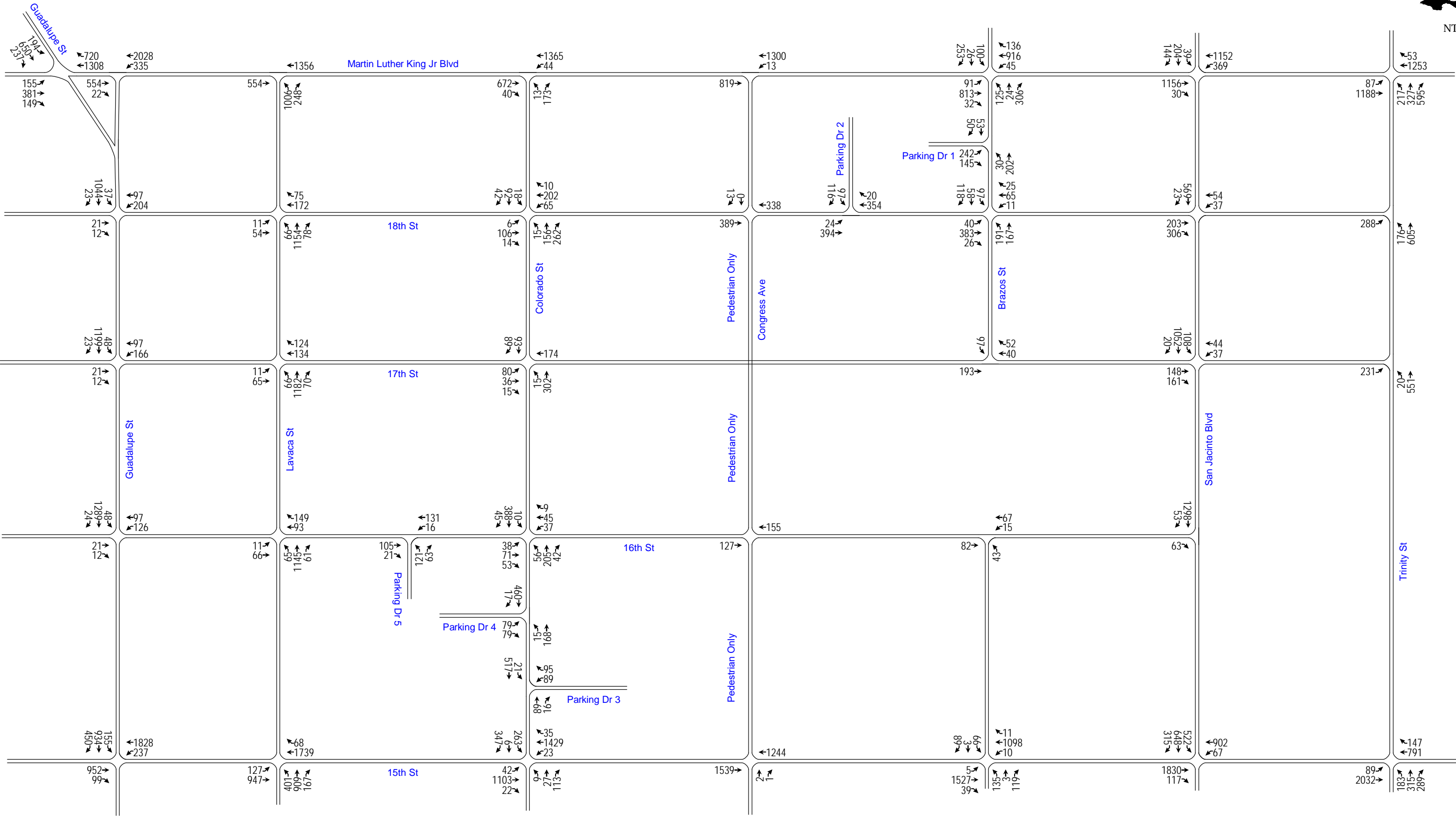
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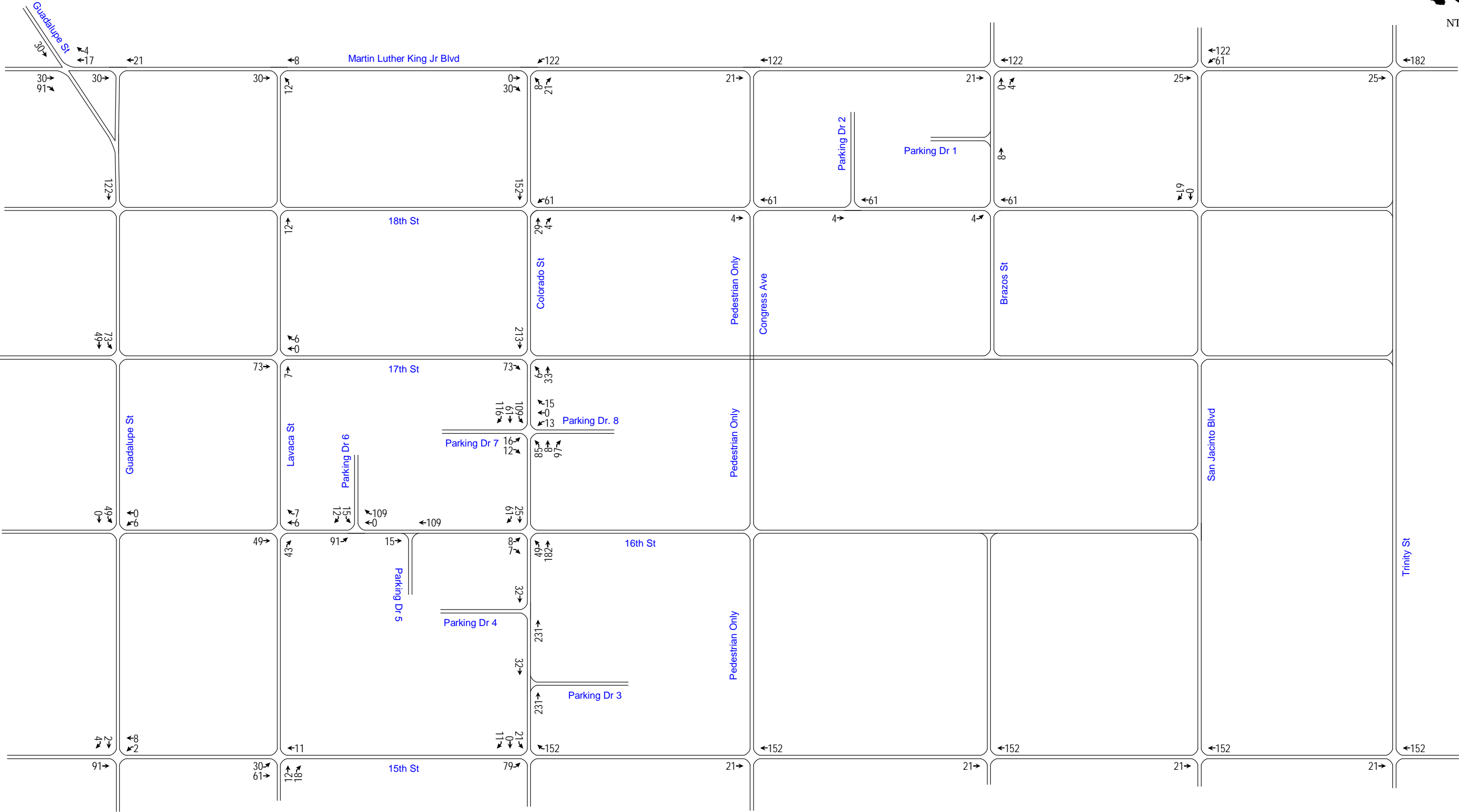
Appendix A16. 2024 Background PM Peak Hour Traffic Volumes (Phase III)



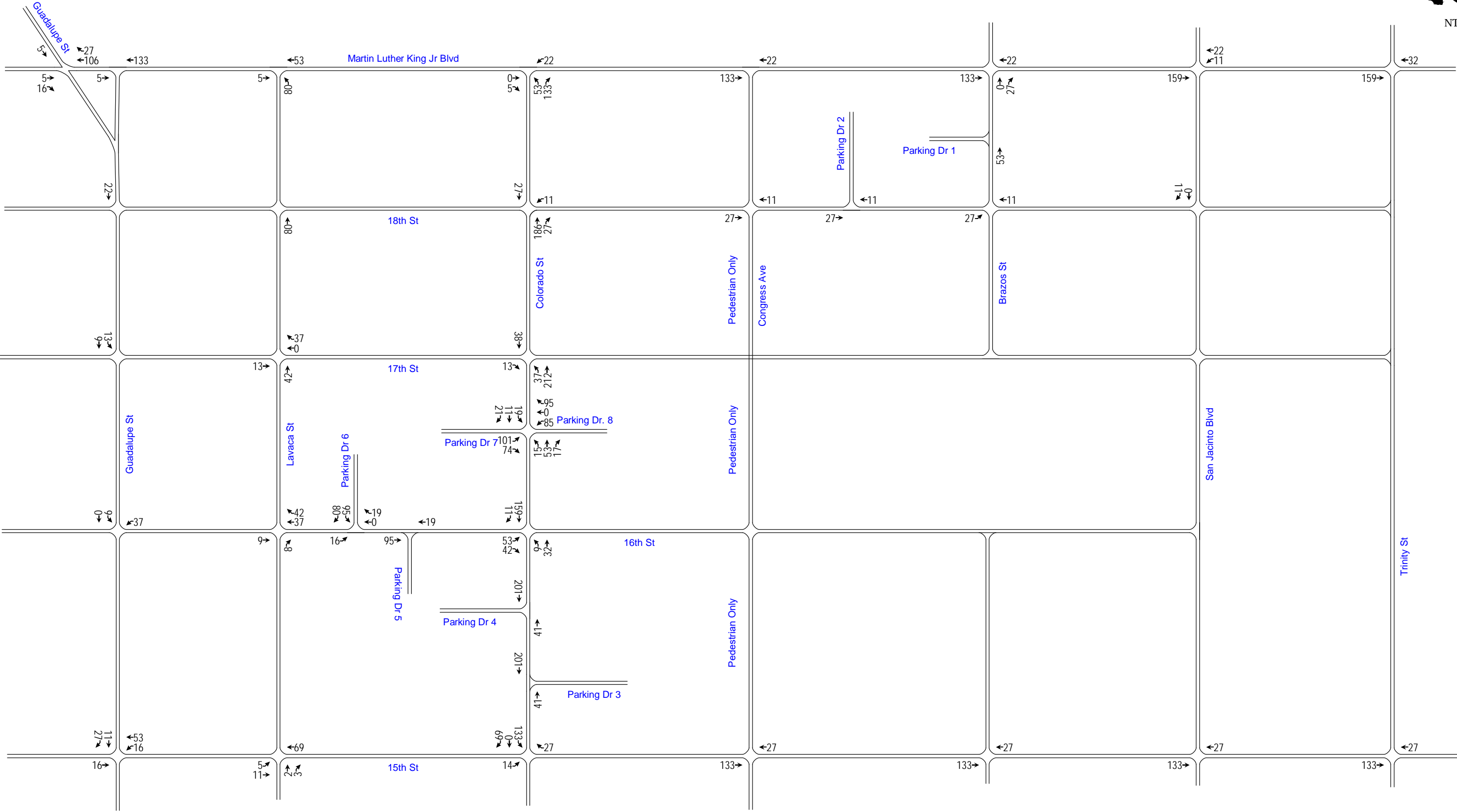
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Appendix A17. Site-Generated AM Peak Hour Traffic Volumes (Phase III)



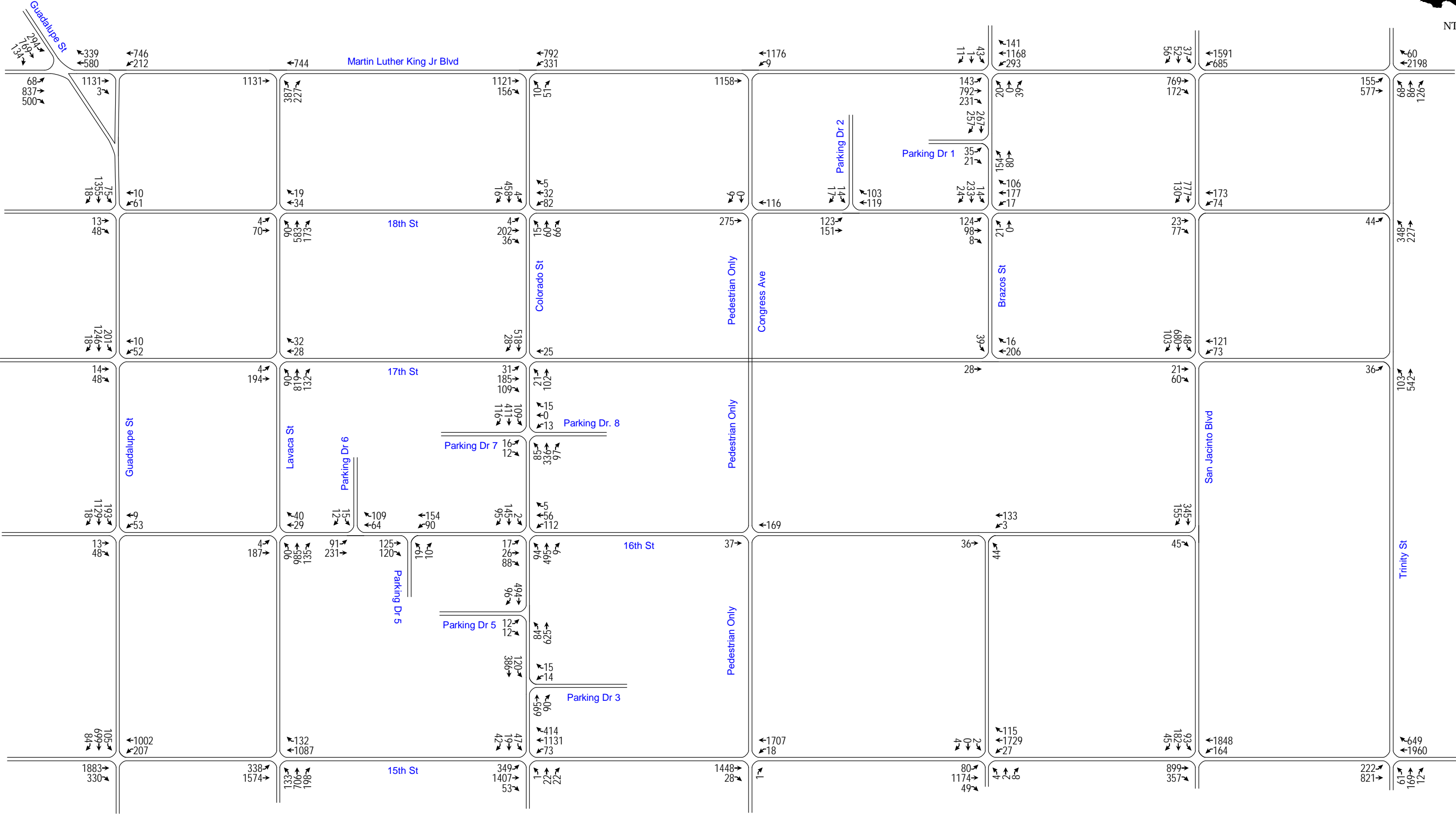
Appendix A18. Site-Generated PM Peak Hour Traffic Volumes (Phase III)



Appendix A19. 2024 Background Plus Site-Generated AM Peak Hour Traffic Volumes (Phase III)



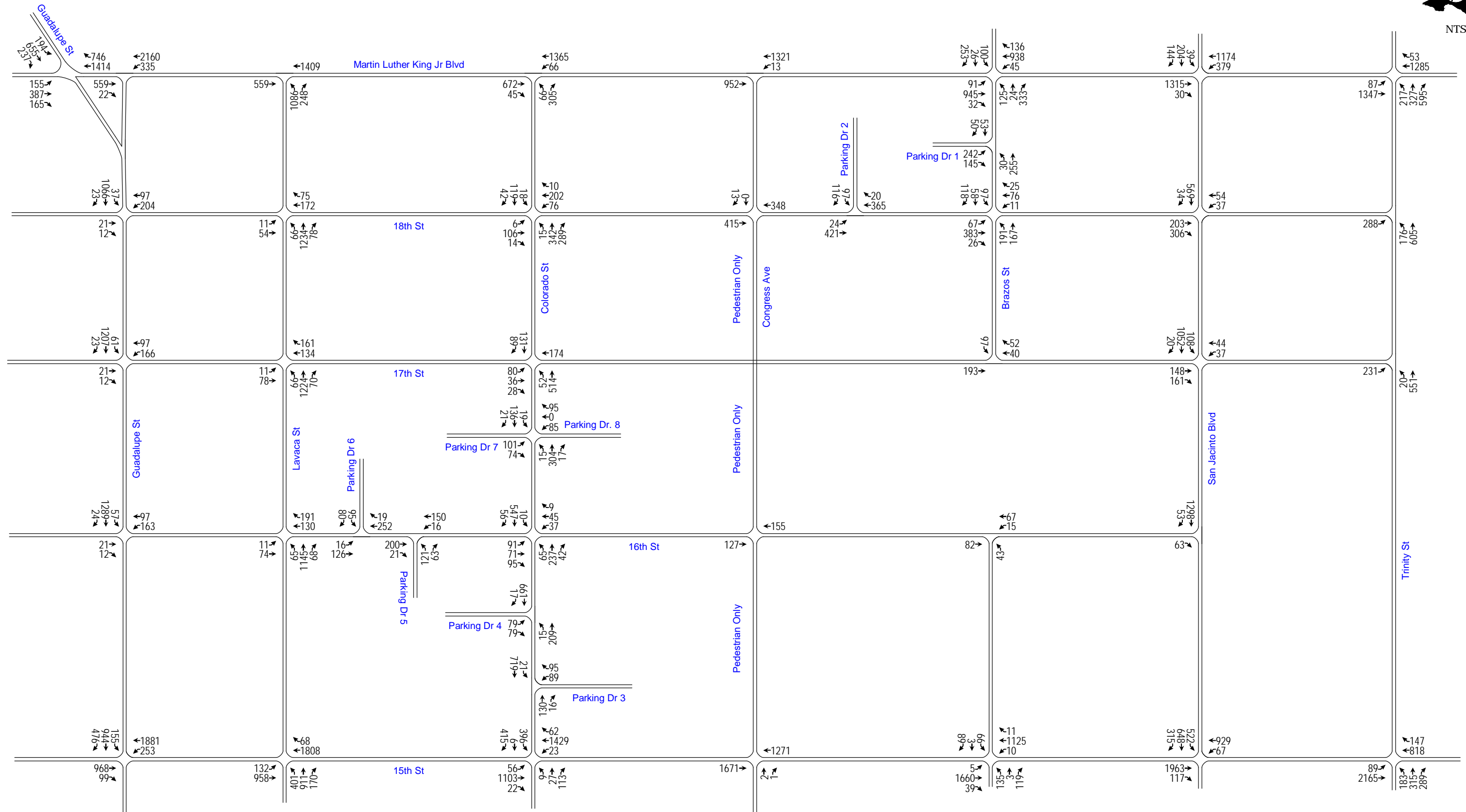
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# Appendix A20. 2024 Background Plus Site-Generated PM Peak Hour Traffic Volumes (Phase III)



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***Appendix B. Detailed Traffic Volume Data***

| Intersection Traffic Movements   |                |                                   |          |          |          |                                   |           |            |           |                             |          | DeShazo Group, Inc.   |           |                             |           |            |          |                        |  |  |  |
|--|----------------|-----------------------------------|----------|----------|----------|-----------------------------------|-----------|------------|-----------|-----------------------------|----------|---|-----------|-----------------------------|-----------|------------|----------|------------------------|--|--|--|
| Location: <b>Guadalupe Street at 15th Street</b><br>City/State: <b>Austin, Texas</b><br>Day/Date: <b>Tuesday, March 22, 2016</b><br>Project-ID #: <b>15206-01</b><br>Data Source: <b>CJ Hensch</b> |                |                                   |          |          |          |                                   |           |            |           |                             |          | Data Collector(s): <b>Camera</b><br>Weather Conditions: <b>Mild/Normal Conditions</b><br>Traffic Control: <b>Signalized</b> |           |                             |           |            |          |                        |  |  |  |
| Time of Count  |                | Northbound on<br>Guadalupe Street |          |          |          | Southbound on<br>Guadalupe Street |           |            |           | Eastbound on<br>15th Street |          |   |           | Westbound on<br>15th Street |           |            |          |                        |  |  |  |
| Begin  | End            | Peds                              | L        | T        | R        | Peds                              | L         | T          | R         | Peds                        | L        | T   | R         | Peds                        | L         | T          | R        |                        |  |  |  |
| 7:00 AM  | 7:15 AM        | 2                                 | -        | -        | -        | 7                                 | 13        | 57         | 5         | 4                           | -        | 381   | 49        | 0                           | 34        | 123        | -        |                        |  |  |  |
| 7:15 AM  | 7:30 AM        | 5                                 | -        | -        | -        | 8                                 | 12        | 92         | 6         | 4                           | -        | 336   | 41        | 0                           | 35        | 185        | -        |                        |  |  |  |
| 7:30 AM  | 7:45 AM        | 5                                 | -        | -        | -        | 3                                 | 16        | 102        | 11        | 4                           | -        | 333   | 38        | 0                           | 41        | 232        | -        |                        |  |  |  |
| <b>7:45 AM</b>   | <b>8:00 AM</b> | <b>8</b>                          | <b>-</b> | <b>-</b> | <b>-</b> | <b>25</b>                         | <b>30</b> | <b>121</b> | <b>12</b> | <b>3</b>                    | <b>-</b> | <b>403</b>  | <b>68</b> | <b>0</b>                    | <b>45</b> | <b>224</b> | <b>-</b> |                        |  |  |  |
| <b>8:00 AM</b>   | <b>8:15 AM</b> | <b>10</b>                         | <b>-</b> | <b>-</b> | <b>-</b> | <b>14</b>                         | <b>24</b> | <b>154</b> | <b>10</b> | <b>2</b>                    | <b>-</b> | <b>360</b>  | <b>81</b> | <b>0</b>                    | <b>42</b> | <b>210</b> | <b>-</b> |                        |  |  |  |
| <b>8:15 AM</b>   | <b>8:30 AM</b> | <b>10</b>                         | <b>-</b> | <b>-</b> | <b>-</b> | <b>13</b>                         | <b>20</b> | <b>181</b> | <b>13</b> | <b>2</b>                    | <b>-</b> | <b>340</b>  | <b>80</b> | <b>0</b>                    | <b>44</b> | <b>233</b> | <b>-</b> |                        |  |  |  |
| <b>8:30 AM</b>   | <b>8:45 AM</b> | <b>9</b>                          | <b>-</b> | <b>-</b> | <b>-</b> | <b>9</b>                          | <b>23</b> | <b>180</b> | <b>15</b> | <b>7</b>                    | <b>-</b> | <b>326</b>  | <b>76</b> | <b>0</b>                    | <b>56</b> | <b>243</b> | <b>-</b> |                        |  |  |  |
| 8:45 AM  | 9:00 AM        | 9                                 | -        | -        | -        | 16                                | 24        | 191        | 15        | 12                          | -        | 348   | 101       | 0                           | 47        | 235        | -        |                        |  |  |  |
| Intersection PHV:  |                | 0 0 0                             |          |          |          | 91 706 53                         |           |            |           | 0 1,374 338                 |          |   |           | 189 921 0                   |           |            |          |                        |  |  |  |
| PHF:   |                | 0.00 0.00 0.00                    |          |          |          | 0.95 0.92 0.88                    |           |            |           | 0.00 0.95 0.84              |          |   |           | 0.84 0.95 0.00              |           |            |          |                        |  |  |  |
| Intersection Peak Hour: 8:00 AM - 9:00 AM  |                |                                   |          |          |          |                                   |           |            |           |                             |          |   |           |                             |           |            |          | Intersection PHF: 0.96 |  |  |  |
| Study Area PHV:  |                | 0 0 0                             |          |          |          | 97 636 50                         |           |            |           | 0 1,429 305                 |          |   |           | 187 910 0                   |           |            |          |                        |  |  |  |
| PHF:   |                | 0.00 0.00 0.00                    |          |          |          | 0.81 0.88 0.83                    |           |            |           | 0.00 0.89 0.94              |          |   |           | 0.83 0.94 0.00              |           |            |          |                        |  |  |  |
| Study Peak Hour: 7:45 AM - 8:45 AM   |                |                                   |          |          |          |                                   |           |            |           |                             |          |   |           |                             |           |            |          | Study Area PHF: 0.98   |  |  |  |
| <b>4:30 PM</b>   | <b>4:45 PM</b> | <b>3</b>                          | <b>-</b> | <b>-</b> | <b>-</b> | <b>7</b>                          | <b>47</b> | <b>227</b> | <b>69</b> | <b>1</b>                    | <b>-</b> | <b>284</b>  | <b>32</b> | <b>7</b>                    | <b>61</b> | <b>440</b> | <b>-</b> |                        |  |  |  |
| <b>4:45 PM</b>   | <b>5:00 PM</b> | <b>7</b>                          | <b>-</b> | <b>-</b> | <b>-</b> | <b>5</b>                          | <b>44</b> | <b>205</b> | <b>57</b> | <b>5</b>                    | <b>-</b> | <b>221</b>  | <b>27</b> | <b>3</b>                    | <b>51</b> | <b>394</b> | <b>-</b> |                        |  |  |  |
| <b>5:00 PM</b>   | <b>5:15 PM</b> | <b>2</b>                          | <b>-</b> | <b>-</b> | <b>-</b> | <b>9</b>                          | <b>35</b> | <b>191</b> | <b>81</b> | <b>9</b>                    | <b>-</b> | <b>165</b>  | <b>19</b> | <b>7</b>                    | <b>55</b> | <b>422</b> | <b>-</b> |                        |  |  |  |
| <b>5:15 PM</b>   | <b>5:30 PM</b> | <b>4</b>                          | <b>-</b> | <b>-</b> | <b>-</b> | <b>8</b>                          | <b>17</b> | <b>185</b> | <b>50</b> | <b>12</b>                   | <b>-</b> | <b>167</b>  | <b>13</b> | <b>3</b>                    | <b>37</b> | <b>384</b> | <b>-</b> |                        |  |  |  |
| 5:30 PM  | 5:45 PM        | 2                                 | -        | -        | -        | 6                                 | 38        | 141        | 47        | 9                           | -        | 256   | 16        | 10                          | 33        | 321        | -        |                        |  |  |  |
| 5:45 PM  | 6:00 PM        | 3                                 | -        | -        | -        | 8                                 | 44        | 207        | 42        | 6                           | -        | 228   | 28        | 5                           | 37        | 288        | -        |                        |  |  |  |
| 6:00 PM  | 6:15 PM        | 5                                 | -        | -        | -        | 7                                 | 39        | 196        | 39        | 6                           | -        | 277   | 20        | 5                           | 43        | 291        | -        |                        |  |  |  |
| 6:15 PM  | 6:30 PM        | 8                                 | -        | -        | -        | 6                                 | 39        | 174        | 42        | 6                           | -        | 272   | 34        | 12                          | 31        | 293        | -        |                        |  |  |  |
| Intersection PHV:  |                | 0 0 0                             |          |          |          | 143 808 257                       |           |            |           | 0 837 91                    |          |   |           | 204 1,640 0                 |           |            |          |                        |  |  |  |
| PHF:   |                | 0.00 0.00 0.00                    |          |          |          | 0.76 0.89 0.79                    |           |            |           | 0.00 0.74 0.71              |          |   |           | 0.84 0.93 0.00              |           |            |          |                        |  |  |  |
| Intersection Peak Hour: 4:30 PM - 5:30 PM  |                |                                   |          |          |          |                                   |           |            |           |                             |          |   |           |                             |           |            |          | Intersection PHF: 0.86 |  |  |  |
| Study Area PHV:  |                | 0 0 0                             |          |          |          | 143 808 257                       |           |            |           | 0 837 91                    |          |   |           | 204 1,640 0                 |           |            |          |                        |  |  |  |
| PHF:   |                | 0.00 0.00 0.00                    |          |          |          | 0.76 0.89 0.79                    |           |            |           | 0.00 0.74 0.71              |          |   |           | 0.84 0.93 0.00              |           |            |          |                        |  |  |  |
| Study Peak Hour: 4:30 PM - 5:30 PM   |                |                                   |          |          |          |                                   |           |            |           |                             |          |   |           |                             |           |            |          | Study Area PHF: 0.86   |  |  |  |
| Observations:  |                |                                   |          |          |          |                                   |           |            |           |                             |          |   |           |                             |           |            |          |                        |  |  |  |
|   |                |                                   |          |          |          |                                   |           |            |           |                             |          |   |           |                             |           |            |          |                        |  |  |  |
| File: C2X3HRS - 4L&12Mv_Peds.XLS   |                |                                   |          |          |          |                                   |           |            |           |                             |          |   |           |                             |           |            |          |                        |  |  |  |

## Intersection Traffic Movements

DeShazo Group, Inc.

Location: **Lavaca Street at 15th Street**City/State: **Austin, Texas**Day/Date: **Tuesday, March 22, 2016**Project-ID #: **15206-02**Data Source: **CJ Hensch**Data Collector(s): **Camera**Weather Conditions: **Mild/Normal Conditions**Traffic Control: **Signalized**

| Time of Count     |                | Northbound on Lavaca Street |           |            |           | Southbound on Lavaca Street |   |   |   | Eastbound on 15th Street |           |            |   | Westbound on 15th Street |   |            |           |
|-------------------|----------------|-----------------------------|-----------|------------|-----------|-----------------------------|---|---|---|--------------------------|-----------|------------|---|--------------------------|---|------------|-----------|
| Begin             | End            | Peds                        | L         | T          | R         | Peds                        | L | T | R | Peds                     | L         | T          | R | Peds                     | L | T          | R         |
| 7:00 AM           | 7:15 AM        | 11                          | 23        | 127        | 37        | 2                           | - | - | - | 4                        | 38        | 293        | - | 7                        | - | 133        | 31        |
| 7:15 AM           | 7:30 AM        | 4                           | 15        | 128        | 37        | 5                           | - | - | - | 5                        | 27        | 293        | - | 7                        | - | 211        | 37        |
| 7:30 AM           | 7:45 AM        | 0                           | 28        | 170        | 36        | 1                           | - | - | - | 3                        | 19        | 306        | - | 6                        | - | 247        | 27        |
| <b>7:45 AM</b>    | <b>8:00 AM</b> | <b>5</b>                    | <b>30</b> | <b>154</b> | <b>34</b> | <b>7</b>                    | - | - | - | <b>3</b>                 | <b>31</b> | <b>373</b> | - | <b>8</b>                 | - | <b>241</b> | <b>41</b> |
| <b>8:00 AM</b>    | <b>8:15 AM</b> | <b>4</b>                    | <b>28</b> | <b>164</b> | <b>44</b> | <b>7</b>                    | - | - | - | <b>8</b>                 | <b>36</b> | <b>332</b> | - | <b>8</b>                 | - | <b>219</b> | <b>30</b> |
| <b>8:15 AM</b>    | <b>8:30 AM</b> | <b>2</b>                    | <b>29</b> | <b>127</b> | <b>30</b> | <b>12</b>                   | - | - | - | <b>3</b>                 | <b>22</b> | <b>330</b> | - | <b>11</b>                | - | <b>254</b> | <b>32</b> |
| <b>8:30 AM</b>    | <b>8:45 AM</b> | <b>2</b>                    | <b>36</b> | <b>137</b> | <b>41</b> | <b>10</b>                   | - | - | - | <b>9</b>                 | <b>25</b> | <b>307</b> | - | <b>16</b>                | - | <b>270</b> | <b>19</b> |
| 8:45 AM           | 9:00 AM        | 3                           | 24        | 104        | 27        | 10                          | - | - | - | 4                        | 29        | 337        | - | 15                       | - | 288        | 16        |
| Intersection PHV: |                | 123 582 149                 |           |            |           | 0 0 0                       |   |   |   | 114 1,342 0              |           |            |   | 0 984 122                |   |            |           |
| PHF:              |                | 0.85 0.89 0.85              |           |            |           | 0.00 0.00 0.00              |   |   |   | 0.79 0.90 0.00           |           |            |   | 0.00 0.91 0.74           |   |            |           |

Intersection Peak Hour: 7:45 AM - 8:45 AM

Intersection PHF: 0.94

|                 |      |      |      |      |      |      |      |       |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|-------|------|------|------|------|
| Study Area PHV: | 123  | 582  | 149  | 0    | 0    | 0    | 114  | 1,342 | 0    | 0    | 984  | 122  |
| PHF:            | 0.85 | 0.89 | 0.85 | 0.00 | 0.00 | 0.00 | 0.79 | 0.90  | 0.00 | 0.00 | 0.91 | 0.74 |

Study Peak Hour: 7:45 AM - 8:45 AM

Study Area PHF: 0.94

|                   |                |                |            |            |           |                |   |   |   |                |           |            |   |                |   |            |           |
|-------------------|----------------|----------------|------------|------------|-----------|----------------|---|---|---|----------------|-----------|------------|---|----------------|---|------------|-----------|
| <b>4:30 PM</b>    | <b>4:45 PM</b> | <b>7</b>       | <b>87</b>  | <b>177</b> | <b>45</b> | <b>6</b>       | - | - | - | <b>4</b>       | <b>21</b> | <b>305</b> | - | <b>10</b>      | - | <b>433</b> | <b>16</b> |
| <b>4:45 PM</b>    | <b>5:00 PM</b> | <b>5</b>       | <b>83</b>  | <b>214</b> | <b>39</b> | <b>6</b>       | - | - | - | <b>8</b>       | <b>18</b> | <b>238</b> | - | <b>9</b>       | - | <b>375</b> | <b>13</b> |
| <b>5:00 PM</b>    | <b>5:15 PM</b> | <b>10</b>      | <b>102</b> | <b>234</b> | <b>43</b> | <b>6</b>       | - | - | - | <b>11</b>      | <b>21</b> | <b>162</b> | - | <b>15</b>      | - | <b>405</b> | <b>20</b> |
| <b>5:15 PM</b>    | <b>5:30 PM</b> | <b>4</b>       | <b>98</b>  | <b>203</b> | <b>24</b> | <b>2</b>       | - | - | - | <b>6</b>       | <b>25</b> | <b>160</b> | - | <b>10</b>      | - | <b>330</b> | <b>14</b> |
| 5:30 PM           | 5:45 PM        | 7              | 101        | 188        | 48        | 10             | - | - | - | 6              | 25        | 273        | - | 10             | - | 284        | 6         |
| 5:45 PM           | 6:00 PM        | 5              | 110        | 202        | 48        | 3              | - | - | - | 12             | 15        | 276        | - | 5              | - | 210        | 13        |
| 6:00 PM           | 6:15 PM        | 5              | 107        | 177        | 44        | 4              | - | - | - | 7              | 17        | 284        | - | 15             | - | 244        | 12        |
| 6:15 PM           | 6:30 PM        | 2              | 97         | 159        | 36        | 4              | - | - | - | 12             | 11        | 300        | - | 1              | - | 229        | 9         |
| Intersection PHV: |                | 370 828 151    |            |            |           | 0 0 0          |   |   |   | 85 865 0       |           |            |   | 0 1,543 63     |   |            |           |
| PHF:              |                | 0.91 0.88 0.84 |            |            |           | 0.00 0.00 0.00 |   |   |   | 0.85 0.71 0.00 |           |            |   | 0.00 0.89 0.79 |   |            |           |

Intersection Peak Hour: 4:30 PM - 5:30 PM

Intersection PHF: 0.90

|                 |      |      |      |      |      |      |      |      |      |      |       |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|-------|------|
| Study Area PHV: | 370  | 828  | 151  | 0    | 0    | 0    | 85   | 865  | 0    | 0    | 1,543 | 63   |
| PHF:            | 0.91 | 0.88 | 0.84 | 0.00 | 0.00 | 0.00 | 0.85 | 0.71 | 0.00 | 0.00 | 0.89  | 0.79 |

Study Peak Hour: 4:30 PM - 5:30 PM

Study Area PHF: 0.90

Observations:



File: C2X3HRS - 4L&amp;12Mv\_Peds.XLS

**Intersection Traffic Movements****DeShazo Group, Inc.**Location: **Colorado Street at 15th Street**City/State: **Austin, Texas**Day/Date: **Tuesday, March 22, 2016**Project-ID #: **15206-03**Data Source: **CJ Hensch**Data Collector(s): **Camera**Weather Conditions: **Mild/Normal Conditions**Traffic Control: **Signalized**

| Time of Count     |                | Northbound on Colorado Street |          |           |          | Southbound on Colorado Street |          |          |          | Eastbound on 15th Street |           |            |           | Westbound on 15th Street |           |            |           |
|-------------------|----------------|-------------------------------|----------|-----------|----------|-------------------------------|----------|----------|----------|--------------------------|-----------|------------|-----------|--------------------------|-----------|------------|-----------|
| Begin             | End            | Peds                          | L        | T         | R        | Peds                          | L        | T        | R        | Peds                     | L         | T          | R         | Peds                     | L         | T          | R         |
| 7:00 AM           | 7:15 AM        | 6                             | 0        | 6         | 2        | 0                             | 1        | 1        | 4        | 9                        | 48        | 304        | 1         | 6                        | 13        | 156        | 25        |
| 7:15 AM           | 7:30 AM        | 5                             | 1        | 3         | 6        | 4                             | 2        | 3        | 6        | 7                        | 34        | 305        | 7         | 8                        | 10        | 245        | 27        |
| 7:30 AM           | 7:45 AM        | 2                             | 0        | 7         | 1        | 4                             | 5        | 1        | 8        | 19                       | 47        | 285        | 7         | 7                        | 10        | 249        | 27        |
| <b>7:45 AM</b>    | <b>8:00 AM</b> | <b>7</b>                      | <b>1</b> | <b>13</b> | <b>8</b> | <b>2</b>                      | <b>1</b> | <b>4</b> | <b>4</b> | <b>20</b>                | <b>45</b> | <b>364</b> | <b>8</b>  | <b>14</b>                | <b>11</b> | <b>252</b> | <b>48</b> |
| <b>8:00 AM</b>    | <b>8:15 AM</b> | <b>3</b>                      | <b>0</b> | <b>2</b>  | <b>4</b> | <b>1</b>                      | <b>1</b> | <b>4</b> | <b>6</b> | <b>13</b>                | <b>54</b> | <b>319</b> | <b>12</b> | <b>6</b>                 | <b>25</b> | <b>244</b> | <b>26</b> |
| <b>8:15 AM</b>    | <b>8:30 AM</b> | <b>4</b>                      | <b>0</b> | <b>3</b>  | <b>4</b> | <b>3</b>                      | <b>2</b> | <b>6</b> | <b>4</b> | <b>19</b>                | <b>37</b> | <b>319</b> | <b>15</b> | <b>2</b>                 | <b>12</b> | <b>267</b> | <b>33</b> |
| <b>8:30 AM</b>    | <b>8:45 AM</b> | <b>0</b>                      | <b>0</b> | <b>2</b>  | <b>4</b> | <b>1</b>                      | <b>1</b> | <b>4</b> | <b>5</b> | <b>22</b>                | <b>41</b> | <b>297</b> | <b>14</b> | <b>2</b>                 | <b>19</b> | <b>281</b> | <b>24</b> |
| 8:45 AM           | 9:00 AM        | 5                             | 1        | 3         | 4        | 5                             | 4        | 5        | 7        | 15                       | 26        | 331        | 21        | 6                        | 22        | 280        | 26        |
| Intersection PHV: |                | 1 20 20                       |          |           |          | 5 18 19                       |          |          |          | 177 1,299 49             |           |            |           | 67 1,044 131             |           |            |           |
| PHF:              |                | 0.25 0.38 0.63                |          |           |          | 0.63 0.75 0.79                |          |          |          | 0.82 0.89 0.82           |           |            |           | 0.67 0.93 0.68           |           |            |           |

Intersection Peak Hour: 7:45 AM - 8:45 AM

Intersection PHF: 0.94

|                 |      |      |      |      |      |      |      |       |      |      |       |      |
|-----------------|------|------|------|------|------|------|------|-------|------|------|-------|------|
| Study Area PHV: | 1    | 20   | 20   | 5    | 18   | 19   | 177  | 1,299 | 49   | 67   | 1,044 | 131  |
| PHF:            | 0.25 | 0.38 | 0.63 | 0.63 | 0.75 | 0.79 | 0.82 | 0.89  | 0.82 | 0.67 | 0.93  | 0.68 |

Study Peak Hour: 7:45 AM - 8:45 AM

Study Area PHF: 0.94

|                   |                |                |          |           |           |                |           |          |           |                |           |            |          |                |          |            |          |
|-------------------|----------------|----------------|----------|-----------|-----------|----------------|-----------|----------|-----------|----------------|-----------|------------|----------|----------------|----------|------------|----------|
| <b>4:30 PM</b>    | <b>4:45 PM</b> | <b>6</b>       | <b>0</b> | <b>4</b>  | <b>17</b> | <b>2</b>       | <b>39</b> | <b>1</b> | <b>79</b> | <b>23</b>      | <b>7</b>  | <b>333</b> | <b>5</b> | <b>10</b>      | <b>3</b> | <b>358</b> | <b>1</b> |
| <b>4:45 PM</b>    | <b>5:00 PM</b> | <b>8</b>       | <b>2</b> | <b>2</b>  | <b>19</b> | <b>0</b>       | <b>26</b> | <b>2</b> | <b>59</b> | <b>17</b>      | <b>11</b> | <b>289</b> | <b>4</b> | <b>9</b>       | <b>8</b> | <b>336</b> | <b>4</b> |
| <b>5:00 PM</b>    | <b>5:15 PM</b> | <b>11</b>      | <b>3</b> | <b>10</b> | <b>45</b> | <b>2</b>       | <b>36</b> | <b>0</b> | <b>70</b> | <b>31</b>      | <b>1</b>  | <b>213</b> | <b>5</b> | <b>6</b>       | <b>7</b> | <b>368</b> | <b>7</b> |
| <b>5:15 PM</b>    | <b>5:30 PM</b> | <b>8</b>       | <b>3</b> | <b>9</b>  | <b>23</b> | <b>4</b>       | <b>21</b> | <b>3</b> | <b>49</b> | <b>24</b>      | <b>7</b>  | <b>184</b> | <b>6</b> | <b>10</b>      | <b>3</b> | <b>258</b> | <b>1</b> |
| 5:30 PM           | 5:45 PM        | 6              | 2        | 8         | 19        | 1              | 17        | 1        | 43        | 4              | 16        | 318        | 4        | 3              | 3        | 234        | 4        |
| 5:45 PM           | 6:00 PM        | 8              | 2        | 1         | 12        | 1              | 29        | 0        | 29        | 14             | 9         | 333        | 4        | 4              | 5        | 204        | 3        |
| 6:00 PM           | 6:15 PM        | 4              | 0        | 1         | 8         | 4              | 22        | 2        | 46        | 9              | 2         | 331        | 1        | 4              | 4        | 191        | 3        |
| 6:15 PM           | 6:30 PM        | 0              | 1        | 0         | 7         | 6              | 15        | 0        | 25        | 15             | 3         | 337        | 2        | 4              | 7        | 203        | 0        |
| Intersection PHV: |                | 8 25 104       |          |           |           | 122 6 257      |           |          |           | 26 1,019 20    |           |            |          | 21 1,320 13    |          |            |          |
| PHF:              |                | 0.67 0.63 0.58 |          |           |           | 0.78 0.50 0.81 |           |          |           | 0.59 0.77 0.83 |           |            |          | 0.66 0.90 0.46 |          |            |          |

Intersection Peak Hour: 4:30 PM - 5:30 PM

Intersection PHF: 0.87

|                 |      |      |      |      |      |      |      |       |      |      |       |      |
|-----------------|------|------|------|------|------|------|------|-------|------|------|-------|------|
| Study Area PHV: | 8    | 25   | 104  | 122  | 6    | 257  | 26   | 1,019 | 20   | 21   | 1,320 | 13   |
| PHF:            | 0.67 | 0.63 | 0.58 | 0.78 | 0.50 | 0.81 | 0.59 | 0.77  | 0.83 | 0.66 | 0.90  | 0.46 |

Study Peak Hour: 4:30 PM - 5:30 PM

Study Area PHF: 0.87

Observations:



File: C2X3HRS - 4L&amp;12Mv\_Peds.XLS

## Intersection Traffic Movements

DeShazo Group, Inc.

Location: **Congress Avenue at 15th Street**City/State: **Austin, Texas**Day/Date: **Tuesday, March 22, 2016**Project-ID #: **15206-04**Data Source: **CJ Hensch**Data Collector(s): **Camera**Weather Conditions: **Mild/Normal Conditions**Traffic Control: **Signalized**

| Time of Count     |         | Northbound on Congress Avenue |   |   |   | Southbound on Congress Avenue |    |   |   | Eastbound on 15th Street |    |     |    | Westbound on 15th Street |   |     |    |
|-------------------|---------|-------------------------------|---|---|---|-------------------------------|----|---|---|--------------------------|----|-----|----|--------------------------|---|-----|----|
| Begin             | End     | Peds                          | L | T | R | Peds                          | L  | T | R | Peds                     | L  | T   | R  | Peds                     | L | T   | R  |
| 7:00 AM           | 7:15 AM | 1                             | - | 0 | 0 | 0                             | 5  | 0 | 4 | 4                        | 59 | 291 | 2  | 1                        | 1 | 169 | 13 |
| 7:15 AM           | 7:30 AM | 0                             | - | 1 | 0 | 3                             | 6  | 1 | 6 | 7                        | 72 | 296 | 0  | 0                        | 0 | 245 | 9  |
| 7:30 AM           | 7:45 AM | 5                             | - | 0 | 0 | 1                             | 5  | 1 | 4 | 9                        | 60 | 289 | 2  | 0                        | 1 | 292 | 18 |
| 7:45 AM           | 8:00 AM | 9                             | - | 0 | 0 | 2                             | 5  | 1 | 7 | 7                        | 57 | 298 | 3  | 0                        | 2 | 301 | 20 |
| 8:00 AM           | 8:15 AM | 5                             | - | 0 | 1 | 1                             | 2  | 2 | 9 | 7                        | 38 | 292 | 6  | 1                        | 4 | 299 | 17 |
| 8:15 AM           | 8:30 AM | 7                             | - | 0 | 0 | 0                             | 4  | 0 | 7 | 10                       | 33 | 282 | 5  | 0                        | 7 | 333 | 25 |
| 8:30 AM           | 8:45 AM | 4                             | - | 0 | 0 | 3                             | 11 | 1 | 9 | 5                        | 41 | 258 | 12 | 1                        | 4 | 312 | 18 |
| 8:45 AM           | 9:00 AM | 2                             | - | 0 | 3 | 2                             | 7  | 0 | 5 | 7                        | 50 | 293 | 8  | 0                        | 7 | 364 | 11 |
| Intersection PHV: |         | 0 0 4                         |   |   |   | 24 3 30                       |    |   |   | 162 1,125 31             |    |     |    | 22 1,308 71              |   |     |    |
| PHF:              |         | 0.00 0.00 0.33                |   |   |   | 0.55 0.38 0.83                |    |   |   | 0.81 0.96 0.65           |    |     |    | 0.79 0.90 0.71           |   |     |    |

Intersection Peak Hour: 8:00 AM - 9:00 AM

Intersection PHF: 0.93

|                 |      |      |      |      |      |      |      |       |      |      |       |      |
|-----------------|------|------|------|------|------|------|------|-------|------|------|-------|------|
| Study Area PHV: | 0    | 0    | 1    | 22   | 4    | 32   | 169  | 1,130 | 26   | 17   | 1,245 | 80   |
| PHF:            | 0.00 | 0.00 | 0.25 | 0.50 | 0.50 | 0.89 | 0.74 | 0.95  | 0.54 | 0.61 | 0.93  | 0.80 |

Study Peak Hour: 7:45 AM - 8:45 AM

Study Area PHF: 0.98

|                   |         |                |   |   |   |                |    |   |    |                |    |     |   |                |   |     |    |
|-------------------|---------|----------------|---|---|---|----------------|----|---|----|----------------|----|-----|---|----------------|---|-----|----|
| 4:30 PM           | 4:45 PM | 11             | - | 1 | 0 | 2              | 38 | 0 | 49 | 18             | 13 | 373 | 0 | 5              | 2 | 322 | 11 |
| 4:45 PM           | 5:00 PM | 5              | - | 0 | 0 | 3              | 33 | 0 | 34 | 8              | 12 | 384 | 0 | 0              | 2 | 225 | 9  |
| 5:00 PM           | 5:15 PM | 9              | - | 0 | 0 | 6              | 62 | 0 | 53 | 19             | 5  | 270 | 0 | 7              | 0 | 289 | 8  |
| 5:15 PM           | 5:30 PM | 5              | - | 1 | 1 | 2              | 32 | 1 | 38 | 14             | 6  | 237 | 0 | 2              | 4 | 259 | 6  |
| 5:30 PM           | 5:45 PM | 0              | - | 1 | 0 | 1              | 28 | 0 | 29 | 6              | 7  | 341 | 0 | 1              | 2 | 228 | 7  |
| 5:45 PM           | 6:00 PM | 8              | - | 0 | 0 | 0              | 12 | 0 | 35 | 12             | 11 | 304 | 2 | 1              | 0 | 179 | 5  |
| 6:00 PM           | 6:15 PM | 18             | - | 1 | 1 | 6              | 13 | 0 | 25 | 12             | 6  | 340 | 1 | 22             | 2 | 200 | 4  |
| 6:15 PM           | 6:30 PM | 11             | - | 0 | 0 | 3              | 11 | 0 | 25 | 6              | 8  | 321 | 0 | 0              | 0 | 185 | 3  |
| Intersection PHV: |         | 0 2 1          |   |   |   | 165 1 174      |    |   |    | 36 1,264 0     |    |     |   | 8 1,095 34     |   |     |    |
| PHF:              |         | 0.00 0.50 0.25 |   |   |   | 0.67 0.25 0.82 |    |   |    | 0.69 0.82 0.00 |    |     |   | 0.50 0.85 0.77 |   |     |    |

Intersection Peak Hour: 4:30 PM - 5:30 PM

Intersection PHF: 0.86

|                 |      |      |      |      |      |      |      |       |      |      |       |      |
|-----------------|------|------|------|------|------|------|------|-------|------|------|-------|------|
| Study Area PHV: | 0    | 2    | 1    | 165  | 1    | 174  | 36   | 1,264 | 0    | 8    | 1,095 | 34   |
| PHF:            | 0.00 | 0.50 | 0.25 | 0.67 | 0.25 | 0.82 | 0.69 | 0.82  | 0.00 | 0.50 | 0.85  | 0.77 |

Study Peak Hour: 4:30 PM - 5:30 PM

Study Area PHF: 0.86

Observations:



File: C2X3HRS - 4L&amp;12Mv\_Peds.XLS

## Intersection Traffic Movements

DeShazo Group, Inc.

Location: **Brazos Street at 15th Street**City/State: **Austin, Texas**Day/Date: **Tuesday, March 22, 2016**Project-ID #: **15206-05**Data Source: **CJ Hensch**Data Collector(s): **Camera**Weather Conditions: **Mild/Normal Conditions**Traffic Control: **Signalized**

| Time of Count     |                | Northbound on Brazos Street |          |          |          | Southbound on Brazos Street |          |          |          | Eastbound on 15th Street |           |            |           | Westbound on 15th Street |          |            |           |
|-------------------|----------------|-----------------------------|----------|----------|----------|-----------------------------|----------|----------|----------|--------------------------|-----------|------------|-----------|--------------------------|----------|------------|-----------|
| Begin             | End            | Peds                        | L        | T        | R        | Peds                        | L        | T        | R        | Peds                     | L         | T          | R         | Peds                     | L        | T          | R         |
| 7:00 AM           | 7:15 AM        | 0                           | 2        | 1        | 2        | 6                           | 0        | 0        | 1        | 1                        | 12        | 224        | 11        | 0                        | 8        | 203        | 15        |
| 7:15 AM           | 7:30 AM        | 1                           | 1        | 0        | 2        | 5                           | 1        | 0        | 1        | 0                        | 20        | 226        | 16        | 0                        | 3        | 287        | 22        |
| 7:30 AM           | 7:45 AM        | 6                           | 3        | 0        | 1        | 8                           | 0        | 1        | 0        | 1                        | 19        | 233        | 9         | 1                        | 8        | 315        | 26        |
| <b>7:45 AM</b>    | <b>8:00 AM</b> | <b>5</b>                    | <b>0</b> | <b>1</b> | <b>1</b> | <b>7</b>                    | <b>0</b> | <b>0</b> | <b>1</b> | <b>0</b>                 | <b>25</b> | <b>268</b> | <b>16</b> | <b>1</b>                 | <b>6</b> | <b>347</b> | <b>14</b> |
| <b>8:00 AM</b>    | <b>8:15 AM</b> | <b>3</b>                    | <b>2</b> | <b>0</b> | <b>2</b> | <b>1</b>                    | <b>0</b> | <b>0</b> | <b>2</b> | <b>1</b>                 | <b>19</b> | <b>266</b> | <b>10</b> | <b>0</b>                 | <b>8</b> | <b>323</b> | <b>18</b> |
| <b>8:15 AM</b>    | <b>8:30 AM</b> | <b>2</b>                    | <b>0</b> | <b>1</b> | <b>2</b> | <b>1</b>                    | <b>1</b> | <b>0</b> | <b>0</b> | <b>1</b>                 | <b>12</b> | <b>248</b> | <b>8</b>  | <b>0</b>                 | <b>7</b> | <b>333</b> | <b>20</b> |
| <b>8:30 AM</b>    | <b>8:45 AM</b> | <b>0</b>                    | <b>2</b> | <b>0</b> | <b>2</b> | <b>1</b>                    | <b>1</b> | <b>0</b> | <b>1</b> | <b>1</b>                 | <b>18</b> | <b>264</b> | <b>11</b> | <b>0</b>                 | <b>4</b> | <b>342</b> | <b>26</b> |
| 8:45 AM           | 9:00 AM        | 3                           | 3        | 0        | 1        | 1                           | 0        | 0        | 1        | 0                        | 12        | 272        | 5         | 3                        | 1        | 360        | 16        |
| Intersection PHV: |                | 4 2 7                       |          |          |          | 2 0 4                       |          |          |          | 74 1,046 45              |           |            |           | 25 1,345 78              |          |            |           |
| PHF:              |                | 0.50 0.50 0.88              |          |          |          | 0.50 0.00 0.50              |          |          |          | 0.74 0.98 0.70           |           |            |           | 0.78 0.97 0.75           |          |            |           |

Intersection Peak Hour: 7:45 AM - 8:45 AM

Intersection PHF: 0.97

|                 |      |      |      |      |      |      |      |       |      |      |       |      |
|-----------------|------|------|------|------|------|------|------|-------|------|------|-------|------|
| Study Area PHV: | 4    | 2    | 7    | 2    | 0    | 4    | 74   | 1,046 | 45   | 25   | 1,345 | 78   |
| PHF:            | 0.50 | 0.50 | 0.88 | 0.50 | 0.00 | 0.50 | 0.74 | 0.98  | 0.70 | 0.78 | 0.97  | 0.75 |

Study Peak Hour: 7:45 AM - 8:45 AM

Study Area PHF: 0.97

|                   |                |                |           |          |           |                |           |          |           |                |          |            |           |                |          |            |          |
|-------------------|----------------|----------------|-----------|----------|-----------|----------------|-----------|----------|-----------|----------------|----------|------------|-----------|----------------|----------|------------|----------|
| <b>4:30 PM</b>    | <b>4:45 PM</b> | <b>7</b>       | <b>28</b> | <b>2</b> | <b>22</b> | <b>1</b>       | <b>20</b> | <b>0</b> | <b>19</b> | <b>2</b>       | <b>1</b> | <b>354</b> | <b>9</b>  | <b>1</b>       | <b>3</b> | <b>260</b> | <b>2</b> |
| <b>4:45 PM</b>    | <b>5:00 PM</b> | <b>2</b>       | <b>25</b> | <b>0</b> | <b>23</b> | <b>2</b>       | <b>10</b> | <b>0</b> | <b>20</b> | <b>2</b>       | <b>1</b> | <b>364</b> | <b>6</b>  | <b>1</b>       | <b>2</b> | <b>277</b> | <b>1</b> |
| <b>5:00 PM</b>    | <b>5:15 PM</b> | <b>13</b>      | <b>48</b> | <b>0</b> | <b>42</b> | <b>2</b>       | <b>22</b> | <b>2</b> | <b>31</b> | <b>1</b>       | <b>1</b> | <b>294</b> | <b>7</b>  | <b>1</b>       | <b>1</b> | <b>258</b> | <b>2</b> |
| <b>5:15 PM</b>    | <b>5:30 PM</b> | <b>2</b>       | <b>24</b> | <b>1</b> | <b>23</b> | <b>3</b>       | <b>9</b>  | <b>1</b> | <b>12</b> | <b>0</b>       | <b>2</b> | <b>277</b> | <b>14</b> | <b>1</b>       | <b>3</b> | <b>199</b> | <b>0</b> |
| 5:30 PM           | 5:45 PM        | 1              | 17        | 0        | 17        | 2              | 12        | 0        | 16        | 0              | 1        | 351        | 6         | 0              | 2        | 186        | 2        |
| 5:45 PM           | 6:00 PM        | 6              | 14        | 0        | 9         | 3              | 7         | 0        | 8         | 1              | 0        | 400        | 6         | 1              | 1        | 169        | 0        |
| 6:00 PM           | 6:15 PM        | 4              | 12        | 0        | 9         | 0              | 7         | 0        | 5         | 0              | 0        | 379        | 2         | 0              | 3        | 171        | 0        |
| 6:15 PM           | 6:30 PM        | 1              | 11        | 0        | 4         | 0              | 7         | 0        | 6         | 0              | 0        | 357        | 1         | 0              | 0        | 174        | 1        |
| Intersection PHV: |                | 125 3 110      |           |          |           | 61 3 82        |           |          |           | 5 1,289 36     |          |            |           | 9 994 5        |          |            |          |
| PHF:              |                | 0.65 0.38 0.65 |           |          |           | 0.69 0.38 0.66 |           |          |           | 0.63 0.89 0.64 |          |            |           | 0.75 0.90 0.63 |          |            |          |

Intersection Peak Hour: 4:30 PM - 5:30 PM

Intersection PHF: 0.93

|                 |      |      |      |      |      |      |      |       |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|-------|------|------|------|------|
| Study Area PHV: | 125  | 3    | 110  | 61   | 3    | 82   | 5    | 1,289 | 36   | 9    | 994  | 5    |
| PHF:            | 0.65 | 0.38 | 0.65 | 0.69 | 0.38 | 0.66 | 0.63 | 0.89  | 0.64 | 0.75 | 0.90 | 0.63 |

Study Peak Hour: 4:30 PM - 5:30 PM

Study Area PHF: 0.93

Observations:



File: C2X3HRS - 4L&amp;12Mv\_Peds.XLS

**Intersection Traffic Movements****DeShazo Group, Inc.**Location: **San Jacinto Boulevard at 15th Street**City/State: **Austin, Texas**Day/Date: **Tuesday, March 22, 2016**Project-ID #: **15206-06**Data Source: **CJ Hensch**Data Collector(s): **Camera**Weather Conditions: **Mild/Normal Conditions**Traffic Control: **Signalized**

| Time of Count     |                | Northbound on San Jacinto Blvd. |          |          |          | Southbound on San Jacinto Blvd. |           |           |           | Eastbound on 15th Street |          |            |           | Westbound on 15th Street |           |            |          |
|-------------------|----------------|---------------------------------|----------|----------|----------|---------------------------------|-----------|-----------|-----------|--------------------------|----------|------------|-----------|--------------------------|-----------|------------|----------|
| Begin             | End            | Peds                            | L        | T        | R        | Peds                            | L         | T         | R         | Peds                     | L        | T          | R         | Peds                     | L         | T          | R        |
| 7:00 AM           | 7:15 AM        | 1                               | -        | -        | -        | 0                               | 8         | 25        | 4         | 1                        | -        | 152        | 66        | 1                        | 32        | 223        | -        |
| 7:15 AM           | 7:30 AM        | 6                               | -        | -        | -        | 0                               | 4         | 28        | 6         | 3                        | -        | 141        | 59        | 1                        | 48        | 315        | -        |
| 7:30 AM           | 7:45 AM        | 8                               | -        | -        | -        | 2                               | 10        | 38        | 6         | 2                        | -        | 155        | 57        | 1                        | 46        | 352        | -        |
| <b>7:45 AM</b>    | <b>8:00 AM</b> | <b>15</b>                       | <b>-</b> | <b>-</b> | <b>-</b> | <b>1</b>                        | <b>9</b>  | <b>38</b> | <b>6</b>  | <b>5</b>                 | <b>-</b> | <b>169</b> | <b>90</b> | <b>2</b>                 | <b>39</b> | <b>354</b> | <b>-</b> |
| <b>8:00 AM</b>    | <b>8:15 AM</b> | <b>2</b>                        | <b>-</b> | <b>-</b> | <b>-</b> | <b>0</b>                        | <b>15</b> | <b>37</b> | <b>7</b>  | <b>0</b>                 | <b>-</b> | <b>173</b> | <b>86</b> | <b>3</b>                 | <b>44</b> | <b>343</b> | <b>-</b> |
| <b>8:15 AM</b>    | <b>8:30 AM</b> | <b>1</b>                        | <b>-</b> | <b>-</b> | <b>-</b> | <b>3</b>                        | <b>7</b>  | <b>44</b> | <b>6</b>  | <b>1</b>                 | <b>-</b> | <b>173</b> | <b>68</b> | <b>5</b>                 | <b>35</b> | <b>362</b> | <b>-</b> |
| <b>8:30 AM</b>    | <b>8:45 AM</b> | <b>2</b>                        | <b>-</b> | <b>-</b> | <b>-</b> | <b>1</b>                        | <b>4</b>  | <b>40</b> | <b>14</b> | <b>3</b>                 | <b>-</b> | <b>140</b> | <b>86</b> | <b>1</b>                 | <b>33</b> | <b>362</b> | <b>-</b> |
| 8:45 AM           | 9:00 AM        | 2                               | -        | -        | -        | 0                               | 12        | 48        | 11        | 9                        | -        | 187        | 85        | 2                        | 38        | 395        | -        |
| Intersection PHV: |                | 0 0 0                           |          |          |          | 38 169 38                       |           |           |           | 0 673 325                |          |            |           | 150 1,462 0              |           |            |          |
| PHF:              |                | 0.00 0.00 0.00                  |          |          |          | 0.63 0.88 0.68                  |           |           |           | 0.00 0.90 0.94           |          |            |           | 0.85 0.93 0.00           |           |            |          |

Intersection Peak Hour: 8:00 AM - 9:00 AM

Intersection PHF: 0.92

|                 |      |      |      |      |      |      |      |      |      |      |       |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|-------|------|
| Study Area PHV: | 0    | 0    | 0    | 35   | 159  | 33   | 0    | 655  | 330  | 151  | 1,421 | 0    |
| PHF:            | 0.00 | 0.00 | 0.00 | 0.58 | 0.90 | 0.59 | 0.00 | 0.95 | 0.92 | 0.86 | 0.98  | 0.00 |

Study Peak Hour: 7:45 AM - 8:45 AM

Study Area PHF: 0.99

|                   |                |                |          |          |          |                |           |            |           |                |          |            |           |                |           |            |          |
|-------------------|----------------|----------------|----------|----------|----------|----------------|-----------|------------|-----------|----------------|----------|------------|-----------|----------------|-----------|------------|----------|
| <b>4:30 PM</b>    | <b>4:45 PM</b> | <b>13</b>      | <b>-</b> | <b>-</b> | <b>-</b> | <b>1</b>       | <b>68</b> | <b>139</b> | <b>80</b> | <b>1</b>       | <b>-</b> | <b>414</b> | <b>24</b> | <b>5</b>       | <b>17</b> | <b>208</b> | <b>-</b> |
| <b>4:45 PM</b>    | <b>5:00 PM</b> | <b>1</b>       | <b>-</b> | <b>-</b> | <b>-</b> | <b>3</b>       | <b>62</b> | <b>125</b> | <b>53</b> | <b>9</b>       | <b>-</b> | <b>403</b> | <b>41</b> | <b>2</b>       | <b>17</b> | <b>215</b> | <b>-</b> |
| <b>5:00 PM</b>    | <b>5:15 PM</b> | <b>12</b>      | <b>-</b> | <b>-</b> | <b>-</b> | <b>0</b>       | <b>57</b> | <b>163</b> | <b>73</b> | <b>5</b>       | <b>-</b> | <b>370</b> | <b>21</b> | <b>3</b>       | <b>17</b> | <b>214</b> | <b>-</b> |
| <b>5:15 PM</b>    | <b>5:30 PM</b> | <b>0</b>       | <b>-</b> | <b>-</b> | <b>-</b> | <b>2</b>       | <b>65</b> | <b>137</b> | <b>52</b> | <b>2</b>       | <b>-</b> | <b>334</b> | <b>22</b> | <b>5</b>       | <b>11</b> | <b>145</b> | <b>-</b> |
| 5:30 PM           | 5:45 PM        | 1              | -        | -        | -        | 3              | 50        | 120        | 37        | 4              | -        | 434        | 21        | 5              | 17        | 152        | -        |
| 5:45 PM           | 6:00 PM        | 1              | -        | -        | -        | 4              | 44        | 105        | 21        | 3              | -        | 390        | 33        | 1              | 9         | 154        | -        |
| 6:00 PM           | 6:15 PM        | 1              | -        | -        | -        | 0              | 45        | 102        | 35        | 2              | -        | 383        | 35        | 4              | 15        | 144        | -        |
| 6:15 PM           | 6:30 PM        | 4              | -        | -        | -        | 0              | 20        | 81         | 36        | 2              | -        | 322        | 37        | 4              | 24        | 130        | -        |
| Intersection PHV: |                | 0 0 0          |          |          |          | 252 564 258    |           |            |           | 0 1,521 108    |          |            |           | 62 782 0       |           |            |          |
| PHF:              |                | 0.00 0.00 0.00 |          |          |          | 0.93 0.87 0.81 |           |            |           | 0.00 0.92 0.66 |          |            |           | 0.91 0.91 0.00 |           |            |          |

Intersection Peak Hour: 4:30 PM - 5:30 PM

Intersection PHF: 0.93

|                 |      |      |      |      |      |      |      |       |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|-------|------|------|------|------|
| Study Area PHV: | 0    | 0    | 0    | 252  | 564  | 258  | 0    | 1,521 | 108  | 62   | 782  | 0    |
| PHF:            | 0.00 | 0.00 | 0.00 | 0.93 | 0.87 | 0.81 | 0.00 | 0.92  | 0.66 | 0.91 | 0.91 | 0.00 |

Study Peak Hour: 4:30 PM - 5:30 PM

Study Area PHF: 0.93

Observations:



File: C2X3HRS - 4L&amp;12Mv\_Peds.XLS

**Intersection Traffic Movements****DeShazo Group, Inc.**Location: **Trinity Street at 15th Street**City/State: **Austin, Texas**Day/Date: **Tuesday, March 22, 2016**Project-ID #: **15206-07**Data Source: **CJ Hensch**Data Collector(s): **Camera**Weather Conditions: **Mild/Normal Conditions**Traffic Control: **Signalized**

| Time of Count     |                | Northbound on Trinity Street |           |           |          | Southbound on Trinity Street |   |   |   | Eastbound on 15th Street |           |            |   | Westbound on 15th Street |   |            |           |
|-------------------|----------------|------------------------------|-----------|-----------|----------|------------------------------|---|---|---|--------------------------|-----------|------------|---|--------------------------|---|------------|-----------|
| Begin             | End            | Peds                         | L         | T         | R        | Peds                         | L | T | R | Peds                     | L         | T          | R | Peds                     | L | T          | R         |
| 7:00 AM           | 7:15 AM        | 0                            | 11        | 30        | 0        | 0                            | - | - | - | 0                        | 16        | 152        | - | 7                        | - | 238        | 47        |
| 7:15 AM           | 7:30 AM        | 5                            | 11        | 35        | 0        | 1                            | - | - | - | 2                        | 18        | 141        | - | 1                        | - | 362        | 55        |
| 7:30 AM           | 7:45 AM        | 5                            | 7         | 44        | 0        | 2                            | - | - | - | 2                        | 28        | 155        | - | 1                        | - | 383        | 48        |
| <b>7:45 AM</b>    | <b>8:00 AM</b> | <b>5</b>                     | <b>11</b> | <b>39</b> | <b>0</b> | <b>0</b>                     | - | - | - | <b>2</b>                 | <b>14</b> | <b>169</b> | - | <b>2</b>                 | - | <b>393</b> | <b>65</b> |
| <b>8:00 AM</b>    | <b>8:15 AM</b> | <b>3</b>                     | <b>11</b> | <b>37</b> | <b>1</b> | <b>0</b>                     | - | - | - | <b>2</b>                 | <b>27</b> | <b>173</b> | - | <b>0</b>                 | - | <b>365</b> | <b>72</b> |
| <b>8:15 AM</b>    | <b>8:30 AM</b> | <b>3</b>                     | <b>18</b> | <b>23</b> | <b>1</b> | <b>0</b>                     | - | - | - | <b>1</b>                 | <b>17</b> | <b>173</b> | - | <b>0</b>                 | - | <b>390</b> | <b>53</b> |
| <b>8:30 AM</b>    | <b>8:45 AM</b> | <b>0</b>                     | <b>16</b> | <b>27</b> | <b>7</b> | <b>0</b>                     | - | - | - | <b>0</b>                 | <b>26</b> | <b>140</b> | - | <b>0</b>                 | - | <b>376</b> | <b>47</b> |
| 8:45 AM           | 9:00 AM        | 2                            | 7         | 38        | 5        | 1                            | - | - | - | 1                        | 20        | 187        | - | 2                        | - | 424        | 41        |
| Intersection PHV: |                | 52 125 14                    |           |           |          | 0 0 0                        |   |   |   | 90 673 0                 |           |            |   | 0 1,555 213              |   |            |           |
| PHF:              |                | 0.72 0.82 0.50               |           |           |          | 0.00 0.00 0.00               |   |   |   | 0.83 0.90 0.00           |           |            |   | 0.00 0.92 0.74           |   |            |           |

Intersection Peak Hour: 8:00 AM - 9:00 AM

Intersection PHF: 0.94

|                 |      |      |      |      |      |      |      |      |      |      |       |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|-------|------|
| Study Area PHV: | 56   | 126  | 9    | 0    | 0    | 0    | 84   | 655  | 0    | 0    | 1,524 | 237  |
| PHF:            | 0.78 | 0.81 | 0.32 | 0.00 | 0.00 | 0.00 | 0.78 | 0.95 | 0.00 | 0.00 | 0.97  | 0.82 |

Study Peak Hour: 7:45 AM - 8:45 AM

Study Area PHF: 0.97

|                   |                |                |           |           |           |                |   |   |   |                |           |            |   |                |   |            |           |
|-------------------|----------------|----------------|-----------|-----------|-----------|----------------|---|---|---|----------------|-----------|------------|---|----------------|---|------------|-----------|
| <b>4:30 PM</b>    | <b>4:45 PM</b> | <b>7</b>       | <b>43</b> | <b>55</b> | <b>51</b> | <b>0</b>       | - | - | - | <b>5</b>       | <b>14</b> | <b>414</b> | - | <b>1</b>       | - | <b>184</b> | <b>12</b> |
| <b>4:45 PM</b>    | <b>5:00 PM</b> | <b>0</b>       | <b>29</b> | <b>51</b> | <b>58</b> | <b>0</b>       | - | - | - | <b>2</b>       | <b>18</b> | <b>403</b> | - | <b>1</b>       | - | <b>209</b> | <b>13</b> |
| <b>5:00 PM</b>    | <b>5:15 PM</b> | <b>2</b>       | <b>57</b> | <b>78</b> | <b>84</b> | <b>1</b>       | - | - | - | <b>6</b>       | <b>3</b>  | <b>370</b> | - | <b>1</b>       | - | <b>168</b> | <b>13</b> |
| <b>5:15 PM</b>    | <b>5:30 PM</b> | <b>1</b>       | <b>40</b> | <b>96</b> | <b>73</b> | <b>0</b>       | - | - | - | <b>2</b>       | <b>4</b>  | <b>334</b> | - | <b>0</b>       | - | <b>119</b> | <b>8</b>  |
| 5:30 PM           | 5:45 PM        | 0              | 26        | 58        | 63        | 2              | - | - | - | 0              | 6         | 434        | - | 0              | - | 143        | 7         |
| 5:45 PM           | 6:00 PM        | 0              | 27        | 67        | 50        | 0              | - | - | - | 0              | 14        | 390        | - | 0              | - | 135        | 12        |
| 6:00 PM           | 6:15 PM        | 0              | 30        | 43        | 40        | 0              | - | - | - | 0              | 9         | 383        | - | 1              | - | 127        | 2         |
| 6:15 PM           | 6:30 PM        | 0              | 13        | 20        | 24        | 0              | - | - | - | 0              | 12        | 322        | - | 0              | - | 140        | 8         |
| Intersection PHV: |                | 169 280 266    |           |           |           | 0 0 0          |   |   |   | 39 1,521 0     |           |            |   | 0 680 46       |   |            |           |
| PHF:              |                | 0.74 0.73 0.79 |           |           |           | 0.00 0.00 0.00 |   |   |   | 0.54 0.92 0.00 |           |            |   | 0.00 0.81 0.88 |   |            |           |

Intersection Peak Hour: 4:30 PM - 5:30 PM

Intersection PHF: 0.96

|                 |      |      |      |      |      |      |      |       |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|-------|------|------|------|------|
| Study Area PHV: | 169  | 280  | 266  | 0    | 0    | 0    | 39   | 1,521 | 0    | 0    | 680  | 46   |
| PHF:            | 0.74 | 0.73 | 0.79 | 0.00 | 0.00 | 0.00 | 0.54 | 0.92  | 0.00 | 0.00 | 0.81 | 0.88 |

Study Peak Hour: 4:30 PM - 5:30 PM

Study Area PHF: 0.96

Observations:



File: C2X3HRS - 4L&amp;12Mv\_Peds.XLS

**Intersection Traffic Movements****DeShazo Group, Inc.**Location: **Guadalupe Street at 16th Street**City/State: **Austin, Texas**Day/Date: **Tuesday, March 22, 2016**Project-ID #: **15206-08**Data Source: **CJ Hensch**Data Collector(s): **Camera**Weather Conditions: **Mild/Normal Conditions**Traffic Control: **Unsignalized**Description: **Minor-Street STOP Controlled**

| Time of Count     |         | Northbound on Guadalupe Street |   |   |   | Southbound on Guadalupe Street |   |     |   | Eastbound on 16th Street |   |   |   | Westbound on 16th Street |    |   |   |
|-------------------|---------|--------------------------------|---|---|---|--------------------------------|---|-----|---|--------------------------|---|---|---|--------------------------|----|---|---|
| Begin             | End     | Peds                           | L | T | R | Peds                           | L | T   | R | Peds                     | L | T | R | Peds                     | L  | T | R |
| 7:00 AM           | 7:15 AM | 2                              | - | - | - | 0                              | - | 107 | 2 | 12                       | - | - | - | 5                        | 13 | 3 | - |
| 7:15 AM           | 7:30 AM | 0                              | - | - | - | 2                              | - | 159 | 3 | 7                        | - | - | - | 6                        | 13 | 2 | - |
| 7:30 AM           | 7:45 AM | 1                              | - | - | - | 1                              | - | 160 | 2 | 5                        | - | - | - | 0                        | 10 | 8 | - |
| 7:45 AM           | 8:00 AM | 1                              | - | - | - | 2                              | - | 245 | 3 | 3                        | - | - | - | 5                        | 16 | 0 | - |
| 8:00 AM           | 8:15 AM | 2                              | - | - | - | 6                              | - | 243 | 7 | 5                        | - | - | - | 4                        | 18 | 2 | - |
| 8:15 AM           | 8:30 AM | 0                              | - | - | - | 11                             | - | 279 | 2 | 7                        | - | - | - | 4                        | 21 | 4 | - |
| 8:30 AM           | 8:45 AM | 1                              | - | - | - | 5                              | - | 256 | 9 | 9                        | - | - | - | 14                       | 21 | 2 | - |
| 8:45 AM           | 9:00 AM | 0                              | - | - | - | 7                              | - | 287 | 6 | 16                       | - | - | - | 5                        | 18 | 6 | - |
| Intersection PHV: |         | 0 0 0                          |   |   |   | 0 1,065 24                     |   |     |   | 0 0 0                    |   |   |   | 78 14 0                  |    |   |   |
| PHF:              |         | 0.00 0.00 0.00                 |   |   |   | 0.00 0.93 0.67                 |   |     |   | 0.00 0.00 0.00           |   |   |   | 0.93 0.58 0.00           |    |   |   |

Intersection Peak Hour: 8:00 AM - 9:00 AM

Intersection PHF: 0.93

|                 |      |      |      |      |       |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|-------|------|------|------|------|------|------|------|
| Study Area PHV: | 0    | 0    | 0    | 0    | 1,023 | 21   | 0    | 0    | 0    | 76   | 8    | 0    |
| PHF:            | 0.00 | 0.00 | 0.00 | 0.00 | 0.92  | 0.58 | 0.00 | 0.00 | 0.00 | 0.90 | 0.50 | 0.00 |

Study Peak Hour: 7:45 AM - 8:45 AM

Study Area PHF: 0.92

|                   |         |                |   |   |   |                |   |     |    |                |   |   |   |                |    |    |   |
|-------------------|---------|----------------|---|---|---|----------------|---|-----|----|----------------|---|---|---|----------------|----|----|---|
| 4:30 PM           | 4:45 PM | 0              | - | - | - | 4              | - | 265 | 3  | 12             | - | - | - | 3              | 65 | 38 | - |
| 4:45 PM           | 5:00 PM | 1              | - | - | - | 7              | - | 242 | 7  | 10             | - | - | - | 0              | 44 | 25 | - |
| 5:00 PM           | 5:15 PM | 0              | - | - | - | 2              | - | 234 | 4  | 22             | - | - | - | 8              | 48 | 45 | - |
| 5:15 PM           | 5:30 PM | 1              | - | - | - | 1              | - | 200 | 11 | 12             | - | - | - | 3              | 31 | 25 | - |
| 5:30 PM           | 5:45 PM | 2              | - | - | - | 2              | - | 203 | 5  | 16             | - | - | - | 6              | 29 | 26 | - |
| 5:45 PM           | 6:00 PM | 1              | - | - | - | 3              | - | 257 | 9  | 13             | - | - | - | 6              | 24 | 23 | - |
| 6:00 PM           | 6:15 PM | 1              | - | - | - | 3              | - | 241 | 3  | 9              | - | - | - | 1              | 24 | 10 | - |
| 6:15 PM           | 6:30 PM | 0              | - | - | - | 7              | - | 225 | 5  | 14             | - | - | - | 5              | 19 | 24 | - |
| Intersection PHV: |         | 0 0 0          |   |   |   | 0 941 25       |   |     |    | 0 0 0          |   |   |   | 188 133 0      |    |    |   |
| PHF:              |         | 0.00 0.00 0.00 |   |   |   | 0.00 0.89 0.57 |   |     |    | 0.00 0.00 0.00 |   |   |   | 0.72 0.74 0.00 |    |    |   |

Intersection Peak Hour: 4:30 PM - 5:30 PM

Intersection PHF: 0.87

|                 |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Study Area PHV: | 0    | 0    | 0    | 0    | 941  | 25   | 0    | 0    | 0    | 188  | 133  | 0    |
| PHF:            | 0.00 | 0.00 | 0.00 | 0.00 | 0.89 | 0.57 | 0.00 | 0.00 | 0.00 | 0.72 | 0.74 | 0.00 |

Study Peak Hour: 4:30 PM - 5:30 PM

Study Area PHF: 0.87

Observations:



File: C2X3HRS - 4L&amp;12Mv\_Peds.XLS

**Intersection Traffic Movements****DeShazo Group, Inc.**Location: **Lavaca Street at 16th Street**City/State: **Austin, Texas**Day/Date: **Tuesday, March 22, 2016**Project-ID #: **15206-09**Data Source: **CJ Hensch**Data Collector(s): **Camera**Weather Conditions: **Mild/Normal Conditions**Traffic Control: **Signalized**

| Time of Count     |                | Northbound on Lavaca Street |           |            |          | Southbound on Lavaca Street |          |          |          | Eastbound on 16th Street |          |          |          | Westbound on 16th Street |          |          |          |
|-------------------|----------------|-----------------------------|-----------|------------|----------|-----------------------------|----------|----------|----------|--------------------------|----------|----------|----------|--------------------------|----------|----------|----------|
| Begin             | End            | Peds                        | L         | T          | R        | Peds                        | L        | T        | R        | Peds                     | L        | T        | R        | Peds                     | L        | T        | R        |
| 7:00 AM           | 7:15 AM        | 4                           | 62        | 133        | -        | 8                           | -        | -        | -        | 10                       | -        | -        | -        | 10                       | -        | 2        | 0        |
| 7:15 AM           | 7:30 AM        | 9                           | 57        | 161        | -        | 6                           | -        | -        | -        | 7                        | -        | -        | -        | 17                       | -        | 4        | 2        |
| 7:30 AM           | 7:45 AM        | 7                           | 58        | 158        | -        | 10                          | -        | -        | -        | 18                       | -        | -        | -        | 18                       | -        | 6        | 4        |
| <b>7:45 AM</b>    | <b>8:00 AM</b> | <b>15</b>                   | <b>61</b> | <b>191</b> | <b>-</b> | <b>13</b>                   | <b>-</b> | <b>-</b> | <b>-</b> | <b>17</b>                | <b>-</b> | <b>-</b> | <b>-</b> | <b>15</b>                | <b>-</b> | <b>7</b> | <b>4</b> |
| <b>8:00 AM</b>    | <b>8:15 AM</b> | <b>17</b>                   | <b>65</b> | <b>150</b> | <b>-</b> | <b>10</b>                   | <b>-</b> | <b>-</b> | <b>-</b> | <b>16</b>                | <b>-</b> | <b>-</b> | <b>-</b> | <b>18</b>                | <b>-</b> | <b>8</b> | <b>1</b> |
| <b>8:15 AM</b>    | <b>8:30 AM</b> | <b>7</b>                    | <b>50</b> | <b>153</b> | <b>-</b> | <b>18</b>                   | <b>-</b> | <b>-</b> | <b>-</b> | <b>26</b>                | <b>-</b> | <b>-</b> | <b>-</b> | <b>11</b>                | <b>-</b> | <b>3</b> | <b>5</b> |
| <b>8:30 AM</b>    | <b>8:45 AM</b> | <b>27</b>                   | <b>37</b> | <b>142</b> | <b>-</b> | <b>12</b>                   | <b>-</b> | <b>-</b> | <b>-</b> | <b>20</b>                | <b>-</b> | <b>-</b> | <b>-</b> | <b>34</b>                | <b>-</b> | <b>7</b> | <b>3</b> |
| 8:45 AM           | 9:00 AM        | 17                          | 28        | 126        | -        | 22                          | -        | -        | -        | 26                       | -        | -        | -        | 25                       | -        | 4        | 2        |
| Intersection PHV: |                | 241                         | 660       | 0          |          | 0                           | 0        | 0        |          | 0                        | 0        | 0        |          | 0                        | 25       | 11       |          |
| PHF:              |                | 0.93                        | 0.86      | 0.00       |          | 0.00                        | 0.00     | 0.00     |          | 0.00                     | 0.00     | 0.00     |          | 0.00                     | 0.78     | 0.69     |          |

Intersection Peak Hour: 7:15 AM - 8:15 AM

Intersection PHF: 0.89

|                 |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Study Area PHV: | 213  | 636  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 25   | 13   |
| PHF:            | 0.82 | 0.83 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.78 | 0.65 |

Study Peak Hour: 7:45 AM - 8:45 AM

Study Area PHF: 0.84

|                   |                |           |           |            |          |           |          |          |          |           |          |          |          |           |          |           |           |
|-------------------|----------------|-----------|-----------|------------|----------|-----------|----------|----------|----------|-----------|----------|----------|----------|-----------|----------|-----------|-----------|
| <b>4:30 PM</b>    | <b>4:45 PM</b> | <b>18</b> | <b>19</b> | <b>246</b> | <b>-</b> | <b>24</b> | <b>-</b> | <b>-</b> | <b>-</b> | <b>17</b> | <b>-</b> | <b>-</b> | <b>-</b> | <b>28</b> | <b>-</b> | <b>23</b> | <b>11</b> |
| <b>4:45 PM</b>    | <b>5:00 PM</b> | <b>14</b> | <b>16</b> | <b>274</b> | <b>-</b> | <b>25</b> | <b>-</b> | <b>-</b> | <b>-</b> | <b>26</b> | <b>-</b> | <b>-</b> | <b>-</b> | <b>24</b> | <b>-</b> | <b>18</b> | <b>11</b> |
| <b>5:00 PM</b>    | <b>5:15 PM</b> | <b>8</b>  | <b>16</b> | <b>279</b> | <b>-</b> | <b>21</b> | <b>-</b> | <b>-</b> | <b>-</b> | <b>22</b> | <b>-</b> | <b>-</b> | <b>-</b> | <b>17</b> | <b>-</b> | <b>24</b> | <b>16</b> |
| <b>5:15 PM</b>    | <b>5:30 PM</b> | <b>7</b>  | <b>18</b> | <b>280</b> | <b>-</b> | <b>15</b> | <b>-</b> | <b>-</b> | <b>-</b> | <b>13</b> | <b>-</b> | <b>-</b> | <b>-</b> | <b>23</b> | <b>-</b> | <b>12</b> | <b>10</b> |
| 5:30 PM           | 5:45 PM        | 3         | 18        | 228        | -        | 23        | -        | -        | -        | 28        | -        | -        | -        | 8         | -        | 7         | 3         |
| 5:45 PM           | 6:00 PM        | 8         | 21        | 217        | -        | 9         | -        | -        | -        | 13        | -        | -        | -        | 17        | -        | 9         | 6         |
| 6:00 PM           | 6:15 PM        | 15        | 12        | 200        | -        | 13        | -        | -        | -        | 14        | -        | -        | -        | 27        | -        | 5         | 4         |
| 6:15 PM           | 6:30 PM        | 7         | 20        | 182        | -        | 7         | -        | -        | -        | 15        | -        | -        | -        | 13        | -        | 10        | 2         |
| Intersection PHV: |                | 69        | 1,079     | 0          |          | 0         | 0        | 0        |          | 0         | 0        | 0        |          | 0         | 77       | 48        |           |
| PHF:              |                | 0.91      | 0.96      | 0.00       |          | 0.00      | 0.00     | 0.00     |          | 0.00      | 0.00     | 0.00     |          | 0.00      | 0.80     | 0.75      |           |

Intersection Peak Hour: 4:30 PM - 5:30 PM

Intersection PHF: 0.95

|                 |      |       |      |      |      |      |      |      |      |      |      |      |
|-----------------|------|-------|------|------|------|------|------|------|------|------|------|------|
| Study Area PHV: | 69   | 1,079 | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 77   | 48   |
| PHF:            | 0.91 | 0.96  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.80 | 0.75 |


Study Peak Hour: 4:30 PM - 5:30 PM

Study Area PHF: 0.95


Observations:




File: C2X3HRS - 4L&amp;12Mv\_Peds.XLS

| Intersection Traffic Movements  |                |                               |           |           |          |                               |          |            |           |                          |          |          |          | DeShazo Group, Inc.      |          |           |          |
|---|----------------|-------------------------------|-----------|-----------|----------|-------------------------------|----------|------------|-----------|--------------------------|----------|----------|----------|--------------------------|----------|-----------|----------|
| <div style="display: flex; justify-content: space-between;"> <div> Location: <b>Colorado Street at 16th Street</b><br/> City/State: <b>Austin, Texas</b><br/> Day/Date: <b>Tuesday, March 22, 2016</b><br/> Project-ID #: <b>15206-10</b><br/> Data Source: <b>CJ Hensch</b> </div> <div> Data Collector(s): <b>Camera</b><br/> Weather Conditions: <b>Mild/Normal Conditions</b><br/> Traffic Control: <b>Unsignalized</b><br/> Description: <b>Minor-Street STOP Controlled</b> </div> </div> |                |                               |           |           |          |                               |          |            |           |                          |          |          |          |                          |          |           |          |
| Time of Count   |                | Northbound on Colorado Street |           |           |          | Southbound on Colorado Street |          |            |           | Eastbound on 16th Street |          |          |          | Westbound on 16th Street |          |           |          |
| Begin   | End            | Peds                          | L         | T         | R        | Peds                          | L        | T          | R         | Peds                     | L        | T        | R        | Peds                     | L        | T         | R        |
| 7:00 AM   | 7:15 AM        | 0                             | 3         | 72        | -        | 3                             | -        | 5          | 4         | 10                       | -        | -        | -        | 3                        | 3        | 2         | 5        |
| 7:15 AM   | 7:30 AM        | 3                             | 4         | 57        | -        | 1                             | -        | 7          | 6         | 6                        | -        | -        | -        | 3                        | 1        | 2         | 3        |
| 7:30 AM   | 7:45 AM        | 3                             | 4         | 64        | -        | 1                             | -        | 10         | 6         | 17                       | -        | -        | -        | 3                        | 1        | 1         | 6        |
| <b>7:45 AM</b>  | <b>8:00 AM</b> | <b>3</b>                      | <b>10</b> | <b>90</b> | <b>-</b> | <b>3</b>                      | <b>-</b> | <b>14</b>  | <b>6</b>  | <b>13</b>                | <b>-</b> | <b>-</b> | <b>-</b> | <b>4</b>                 | <b>0</b> | <b>2</b>  | <b>2</b> |
| <b>8:00 AM</b>  | <b>8:15 AM</b> | <b>1</b>                      | <b>5</b>  | <b>64</b> | <b>-</b> | <b>6</b>                      | <b>-</b> | <b>8</b>   | <b>7</b>  | <b>18</b>                | <b>-</b> | <b>-</b> | <b>-</b> | <b>4</b>                 | <b>1</b> | <b>2</b>  | <b>6</b> |
| <b>8:15 AM</b>  | <b>8:30 AM</b> | <b>1</b>                      | <b>6</b>  | <b>59</b> | <b>-</b> | <b>1</b>                      | <b>-</b> | <b>14</b>  | <b>5</b>  | <b>17</b>                | <b>-</b> | <b>-</b> | <b>-</b> | <b>1</b>                 | <b>4</b> | <b>4</b>  | <b>0</b> |
| <b>8:30 AM</b>  | <b>8:45 AM</b> | <b>1</b>                      | <b>9</b>  | <b>48</b> | <b>-</b> | <b>5</b>                      | <b>-</b> | <b>8</b>   | <b>8</b>  | <b>14</b>                | <b>-</b> | <b>-</b> | <b>-</b> | <b>3</b>                 | <b>2</b> | <b>3</b>  | <b>4</b> |
| 8:45 AM   | 9:00 AM        | 1                             | 7         | 60        | -        | 1                             | -        | 9          | 4         | 14                       | -        | -        | -        | 2                        | 1        | 4         | 0        |
| Intersection PHV:   |                | 25 277 0                      |           |           |          | 0 46 24                       |          |            |           | 0 0 0                    |          |          |          | 6 9 14                   |          |           |          |
| PHF:  |                | 0.63 0.77 0.00                |           |           |          | 0.00 0.82 0.86                |          |            |           | 0.00 0.00 0.00           |          |          |          | 0.38 0.56 0.58           |          |           |          |
| Intersection Peak Hour: 7:30 AM - 8:30 AM   |                |                               |           |           |          |                               |          |            |           |                          |          |          |          |                          |          |           |          |
| Study Area PHV:   |                | 30 261 0                      |           |           |          | 0 44 26                       |          |            |           | 0 0 0                    |          |          |          | 7 11 12                  |          |           |          |
| PHF:  |                | 0.75 0.73 0.00                |           |           |          | 0.00 0.79 0.81                |          |            |           | 0.00 0.00 0.00           |          |          |          | 0.44 0.69 0.50           |          |           |          |
| Study Peak Hour: 7:45 AM - 8:45 AM  |                |                               |           |           |          |                               |          |            |           |                          |          |          |          |                          |          |           |          |
| Study Area PHF: 0.79  |                |                               |           |           |          |                               |          |            |           |                          |          |          |          |                          |          |           |          |
| <b>4:30 PM</b>  | <b>4:45 PM</b> | <b>1</b>                      | <b>2</b>  | <b>15</b> | <b>-</b> | <b>8</b>                      | <b>-</b> | <b>113</b> | <b>27</b> | <b>15</b>                | <b>-</b> | <b>-</b> | <b>-</b> | <b>3</b>                 | <b>4</b> | <b>5</b>  | <b>2</b> |
| <b>4:45 PM</b>  | <b>5:00 PM</b> | <b>0</b>                      | <b>5</b>  | <b>10</b> | <b>-</b> | <b>4</b>                      | <b>-</b> | <b>82</b>  | <b>14</b> | <b>13</b>                | <b>-</b> | <b>-</b> | <b>-</b> | <b>7</b>                 | <b>3</b> | <b>11</b> | <b>0</b> |
| <b>5:00 PM</b>  | <b>5:15 PM</b> | <b>3</b>                      | <b>4</b>  | <b>19</b> | <b>-</b> | <b>4</b>                      | <b>-</b> | <b>105</b> | <b>34</b> | <b>36</b>                | <b>-</b> | <b>-</b> | <b>-</b> | <b>4</b>                 | <b>3</b> | <b>12</b> | <b>3</b> |
| <b>5:15 PM</b>  | <b>5:30 PM</b> | <b>2</b>                      | <b>2</b>  | <b>19</b> | <b>-</b> | <b>2</b>                      | <b>-</b> | <b>46</b>  | <b>18</b> | <b>6</b>                 | <b>-</b> | <b>-</b> | <b>-</b> | <b>2</b>                 | <b>1</b> | <b>5</b>  | <b>1</b> |
| 5:30 PM   | 5:45 PM        | 1                             | 6         | 13        | -        | 6                             | -        | 61         | 16        | 14                       | -        | -        | -        | 2                        | 0        | 7         | 0        |
| 5:45 PM   | 6:00 PM        | 1                             | 3         | 8         | -        | 3                             | -        | 56         | 11        | 8                        | -        | -        | -        | 0                        | 0        | 2         | 3        |
| 6:00 PM   | 6:15 PM        | 1                             | 1         | 9         | -        | 3                             | -        | 54         | 6         | 19                       | -        | -        | -        | 0                        | 2        | 3         | 1        |
| 6:15 PM   | 6:30 PM        | 0                             | 1         | 3         | -        | 1                             | -        | 58         | 6         | 7                        | -        | -        | -        | 2                        | 2        | 4         | 0        |
| Intersection PHV:   |                | 13 63 0                       |           |           |          | 0 346 93                      |          |            |           | 0 0 0                    |          |          |          | 11 33 6                  |          |           |          |
| PHF:  |                | 0.65 0.83 0.00                |           |           |          | 0.00 0.77 0.68                |          |            |           | 0.00 0.00 0.00           |          |          |          | 0.69 0.69 0.50           |          |           |          |
| Intersection Peak Hour: 4:30 PM - 5:30 PM   |                |                               |           |           |          |                               |          |            |           |                          |          |          |          |                          |          |           |          |
| Study Area PHV:   |                | 13 63 0                       |           |           |          | 0 346 93                      |          |            |           | 0 0 0                    |          |          |          | 11 33 6                  |          |           |          |
| PHF:  |                | 0.65 0.83 0.00                |           |           |          | 0.00 0.77 0.68                |          |            |           | 0.00 0.00 0.00           |          |          |          | 0.69 0.69 0.50           |          |           |          |
| Study Peak Hour: 4:30 PM - 5:30 PM  |                |                               |           |           |          |                               |          |            |           |                          |          |          |          |                          |          |           |          |
| Study Area PHF: 0.78  |                |                               |           |           |          |                               |          |            |           |                          |          |          |          |                          |          |           |          |
| Observations: <div style="text-align: right; margin-top: 50px;">  </div>   |                |                               |           |           |          |                               |          |            |           |                          |          |          |          |                          |          |           |          |
| File: C2X3HRS - 4L&12Mv_Peds.XLS  |                |                               |           |           |          |                               |          |            |           |                          |          |          |          |                          |          |           |          |

| Intersection Traffic Movements  |                |   |          |           |          |   |          |           |          |                                    |          |          |          | DeShazo Group, Inc.                |          |          |          |                        |  |
|---|----------------|---|----------|-----------|----------|---|----------|-----------|----------|------------------------------------|----------|----------|----------|------------------------------------|----------|----------|----------|------------------------|--|
| <div style="display: flex; justify-content: space-between;"> <div>           Location: <b>Congress Avenue at 16th Street</b><br/>           City/State: <b>Austin, Texas</b><br/>           Day/Date: <b>Tuesday, March 22, 2016</b><br/>           Project-ID #: <b>15206-11</b><br/>           Data Source: <b>CJ Hensch</b> </div> <div>           Data Collector(s): <b>Camera</b><br/>           Weather Conditions: <b>Mild/Normal Conditions</b><br/>           Traffic Control: <b>Unsignalized</b><br/>           Description: <b>Minor-Street STOP Controlled</b> </div> </div> |                |   |          |           |          |   |          |           |          |                                    |          |          |          |                                    |          |          |          |                        |  |
| Time of Count   |                | Northbound on<br><i>Congress Avenue</i> |          |           |          | Southbound on<br><i>Congress Avenue</i> |          |           |          | Eastbound on<br><i>16th Street</i> |          |          |          | Westbound on<br><i>16th Street</i> |          |          |          |                        |  |
| Begin   | End            | Peds                                    | L        | T         | R        | Peds                                    | L        | T         | R        | Peds                               | L        | T        | R        | Peds                               | L        | T        | R        |                        |  |
| 7:00 AM   | 7:15 AM        | 0                                       | 4        | 79        | -        | 0                                       | -        | 4         | 4        | 5                                  | -        | -        | -        | 1                                  | 0        | 1        | 1        |                        |  |
| 7:15 AM   | 7:30 AM        | 2                                       | 2        | 70        | -        | 2                                       | -        | 6         | 7        | 5                                  | -        | -        | -        | 8                                  | 2        | 3        | 0        |                        |  |
| 7:30 AM   | 7:45 AM        | 1                                       | 4        | 67        | -        | 1                                       | -        | 11        | 1        | 5                                  | -        | -        | -        | 7                                  | 1        | 1        | 3        |                        |  |
| <b>7:45 AM</b>  | <b>8:00 AM</b> | <b>1</b>                                | <b>6</b> | <b>66</b> | <b>-</b> | <b>1</b>                                | <b>-</b> | <b>11</b> | <b>7</b> | <b>5</b>                           | <b>-</b> | <b>-</b> | <b>-</b> | <b>7</b>                           | <b>1</b> | <b>1</b> | <b>1</b> |                        |  |
| <b>8:00 AM</b>  | <b>8:15 AM</b> | <b>0</b>                                | <b>4</b> | <b>63</b> | <b>-</b> | <b>1</b>                                | <b>-</b> | <b>7</b>  | <b>4</b> | <b>9</b>                           | <b>-</b> | <b>-</b> | <b>-</b> | <b>2</b>                           | <b>0</b> | <b>3</b> | <b>1</b> |                        |  |
| <b>8:15 AM</b>  | <b>8:30 AM</b> | <b>2</b>                                | <b>3</b> | <b>62</b> | <b>-</b> | <b>2</b>                                | <b>-</b> | <b>14</b> | <b>2</b> | <b>5</b>                           | <b>-</b> | <b>-</b> | <b>-</b> | <b>3</b>                           | <b>1</b> | <b>2</b> | <b>2</b> |                        |  |
| <b>8:30 AM</b>  | <b>8:45 AM</b> | <b>0</b>                                | <b>2</b> | <b>62</b> | <b>-</b> | <b>0</b>                                | <b>-</b> | <b>13</b> | <b>3</b> | <b>2</b>                           | <b>-</b> | <b>-</b> | <b>-</b> | <b>5</b>                           | <b>0</b> | <b>1</b> | <b>2</b> |                        |  |
| 8:45 AM   | 9:00 AM        | 1                                       | 0        | 51        | -        | 0                                       | -        | 10        | 2        | 5                                  | -        | -        | -        | 3                                  | 0        | 0        | 3        |                        |  |
| Intersection PHV:   |                | 16    282    0                          |          |           |          | 0    32    19                           |          |           |          | 0    0    0                        |          |          |          | 4    6    5                        |          |          |          |                        |  |
| PHF:  |                | 0.67    0.89    0.00                    |          |           |          | 0.00    0.73    0.68                    |          |           |          | 0.00    0.00    0.00               |          |          |          | 0.50    0.50    0.42               |          |          |          |                        |  |
| Intersection Peak Hour: 7:00 AM - 8:00 AM   |                |   |          |           |          |   |          |           |          |                                    |          |          |          |                                    |          |          |          | Intersection PHF: 0.98 |  |
| Study Area PHV:   |                | 15    253    0                          |          |           |          | 0    45    16                           |          |           |          | 0    0    0                        |          |          |          | 2    7    6                        |          |          |          |                        |  |
| PHF:  |                | 0.63    0.96    0.00                    |          |           |          | 0.00    0.80    0.57                    |          |           |          | 0.00    0.00    0.00               |          |          |          | 0.50    0.58    0.75               |          |          |          |                        |  |
| Study Peak Hour: 7:45 AM - 8:45 AM  |                |   |          |           |          |   |          |           |          |                                    |          |          |          |                                    |          |          |          | Study Area PHF: 0.92   |  |
| 4:30 PM   | 4:45 PM        | 8                                       | 0        | 21        | -        | 0                                       | -        | 65        | 2        | 24                                 | -        | -        | -        | 15                                 | 10       | 6        | 18       |                        |  |
| 4:45 PM   | 5:00 PM        | 1                                       | 0        | 29        | -        | 0                                       | -        | 49        | 3        | 7                                  | -        | -        | -        | 11                                 | 11       | 8        | 12       |                        |  |
| 5:00 PM   | 5:15 PM        | 2                                       | 2        | 21        | -        | 1                                       | -        | 88        | 2        | 19                                 | -        | -        | -        | 7                                  | 13       | 10       | 9        |                        |  |
| 5:15 PM   | 5:30 PM        | 1                                       | 1        | 21        | -        | 1                                       | -        | 46        | 2        | 20                                 | -        | -        | -        | 2                                  | 9        | 3        | 9        |                        |  |
| 5:30 PM   | 5:45 PM        | 2                                       | 0        | 28        | -        | 0                                       | -        | 39        | 2        | 12                                 | -        | -        | -        | 8                                  | 5        | 3        | 14       |                        |  |
| 5:45 PM   | 6:00 PM        | 0                                       | 1        | 31        | -        | 2                                       | -        | 33        | 1        | 5                                  | -        | -        | -        | 7                                  | 7        | 2        | 8        |                        |  |
| 6:00 PM   | 6:15 PM        | 1                                       | 1        | 18        | -        | 0                                       | -        | 32        | 0        | 17                                 | -        | -        | -        | 1                                  | 4        | 2        | 7        |                        |  |
| 6:15 PM   | 6:30 PM        | 0                                       | 0        | 15        | -        | 0                                       | -        | 22        | 1        | 8                                  | -        | -        | -        | 7                                  | 8        | 2        | 4        |                        |  |
| Intersection PHV:   |                | 3    92    0                            |          |           |          | 0    248    9                           |          |           |          | 0    0    0                        |          |          |          | 43    27    48                     |          |          |          |                        |  |
| PHF:  |                | 0.38    0.79    0.00                    |          |           |          | 0.00    0.70    0.75                    |          |           |          | 0.00    0.00    0.00               |          |          |          | 0.83    0.68    0.67               |          |          |          |                        |  |
| Intersection Peak Hour: 4:30 PM - 5:30 PM   |                |   |          |           |          |   |          |           |          |                                    |          |          |          |                                    |          |          |          | Intersection PHF: 0.81 |  |
| Study Area PHV:   |                | 3    92    0                            |          |           |          | 0    248    9                           |          |           |          | 0    0    0                        |          |          |          | 43    27    48                     |          |          |          |                        |  |
| PHF:  |                | 0.38    0.79    0.00                    |          |           |          | 0.00    0.70    0.75                    |          |           |          | 0.00    0.00    0.00               |          |          |          | 0.83    0.68    0.67               |          |          |          |                        |  |
| Study Peak Hour: 4:30 PM - 5:30 PM  |                |   |          |           |          |   |          |           |          |                                    |          |          |          |                                    |          |          |          | Study Area PHF: 0.81   |  |
| Observations:   |                |   |          |           |          |   |          |           |          |                                    |          |          |          |                                    |          |          |          |                        |  |



File: C2X3HRS - 4L&12Mv\_Peds.XLS

| <b>Intersection Traffic Movements</b>   |                |                             |           |   |   |                             |   |   |   |                          |   |   |   | <i>DeShazo Group, Inc.</i> |          |           |   |                        |  |  |  |
|---|----------------|-----------------------------|-----------|---|---|-----------------------------|---|---|---|--------------------------|---|---|---|----------------------------|----------|-----------|---|------------------------|--|--|--|
| <div style="display: flex; justify-content: space-between;"> <div> Location: <b>Brazos Street at 16th Street</b><br/> City/State: <b>Austin, Texas</b><br/> Day/Date: <b>Wednesday, March 30, 2016</b><br/> Project-ID #: <b>15206-12</b><br/> Data Source: <b>CJ Hensch</b> </div> <div> Data Collector(s): <b>Camera</b><br/> Weather Conditions: <b>Mild/Normal Conditions</b><br/> Traffic Control: <b>Unsignalized</b><br/> Description: <b>Minor-Street STOP Controlled</b> </div> </div> |                |                             |           |   |   |                             |   |   |   |                          |   |   |   |                            |          |           |   |                        |  |  |  |
| Time of Count   |                | Northbound on Brazos Street |           |   |   | Southbound on Brazos Street |   |   |   | Eastbound on 16th Street |   |   |   | Westbound on 16th Street   |          |           |   |                        |  |  |  |
| Begin   | End            | Peds                        | L         | T | R | Peds                        | L | T | R | Peds                     | L | T | R | Peds                       | L        | T         | R |                        |  |  |  |
| 7:00 AM   | 7:15 AM        | 1                           | 1         | - | - | -                           | - | - | - | 0                        | - | - | - | 1                          | 0        | 6         | - |                        |  |  |  |
| 7:15 AM   | 7:30 AM        | 3                           | 1         | - | - | -                           | - | - | - | 0                        | - | - | - | 7                          | 1        | 6         | - |                        |  |  |  |
| 7:30 AM   | 7:45 AM        | 3                           | 4         | - | - | -                           | - | - | - | 3                        | - | - | - | 3                          | 1        | 7         | - |                        |  |  |  |
| <b>7:45 AM</b>  | <b>8:00 AM</b> | <b>4</b>                    | <b>3</b>  | - | - | -                           | - | - | - | <b>2</b>                 | - | - | - | <b>3</b>                   | <b>0</b> | <b>3</b>  | - |                        |  |  |  |
| <b>8:00 AM</b>  | <b>8:15 AM</b> | <b>3</b>                    | <b>5</b>  | - | - | -                           | - | - | - | <b>3</b>                 | - | - | - | <b>1</b>                   | <b>0</b> | <b>4</b>  | - |                        |  |  |  |
| <b>8:15 AM</b>  | <b>8:30 AM</b> | <b>4</b>                    | <b>2</b>  | - | - | -                           | - | - | - | <b>3</b>                 | - | - | - | <b>4</b>                   | <b>2</b> | <b>6</b>  | - |                        |  |  |  |
| <b>8:30 AM</b>  | <b>8:45 AM</b> | <b>1</b>                    | <b>3</b>  | - | - | -                           | - | - | - | <b>6</b>                 | - | - | - | <b>1</b>                   | <b>1</b> | <b>4</b>  | - |                        |  |  |  |
| 8:45 AM   | 9:00 AM        | 2                           | 2         | - | - | -                           | - | - | - | 3                        | - | - | - | 3                          | 0        | 5         | - |                        |  |  |  |
| Intersection PHV:   |                | 14    0    0                |           |   |   | 0    0    0                 |   |   |   | 0    0    0              |   |   |   | 3    20    0               |          |           |   |                        |  |  |  |
| PHF:  |                | 0.70    0.00    0.00        |           |   |   | 0.00    0.00    0.00        |   |   |   | 0.00    0.00    0.00     |   |   |   | 0.38    0.71    0.00       |          |           |   |                        |  |  |  |
| Intersection Peak Hour: 7:30 AM - 8:30 AM   |                |                             |           |   |   |                             |   |   |   |                          |   |   |   |                            |          |           |   | Intersection PHF: 0.77 |  |  |  |
| Study Area PHV:   |                | 13    0    0                |           |   |   | 0    0    0                 |   |   |   | 0    0    0              |   |   |   | 3    17    0               |          |           |   |                        |  |  |  |
| PHF:  |                | 0.65    0.00    0.00        |           |   |   | 0.00    0.00    0.00        |   |   |   | 0.00    0.00    0.00     |   |   |   | 0.38    0.71    0.00       |          |           |   |                        |  |  |  |
| Study Peak Hour: 7:45 AM - 8:45 AM  |                |                             |           |   |   |                             |   |   |   |                          |   |   |   |                            |          |           |   | Study Area PHF: 0.83   |  |  |  |
| <b>4:30 PM</b>  | <b>4:45 PM</b> | <b>0</b>                    | <b>8</b>  | - | - | -                           | - | - | - | <b>6</b>                 | - | - | - | <b>6</b>                   | <b>4</b> | <b>26</b> | - |                        |  |  |  |
| <b>4:45 PM</b>  | <b>5:00 PM</b> | <b>0</b>                    | <b>11</b> | - | - | -                           | - | - | - | <b>6</b>                 | - | - | - | <b>5</b>                   | <b>1</b> | <b>12</b> | - |                        |  |  |  |
| <b>5:00 PM</b>  | <b>5:15 PM</b> | <b>0</b>                    | <b>11</b> | - | - | -                           | - | - | - | <b>6</b>                 | - | - | - | <b>4</b>                   | <b>7</b> | <b>42</b> | - |                        |  |  |  |
| <b>5:15 PM</b>  | <b>5:30 PM</b> | <b>0</b>                    | <b>5</b>  | - | - | -                           | - | - | - | <b>3</b>                 | - | - | - | <b>5</b>                   | <b>2</b> | <b>10</b> | - |                        |  |  |  |
| 5:30 PM   | 5:45 PM        | 0                           | 9         | - | - | -                           | - | - | - | 1                        | - | - | - | 0                          | 1        | 12        | - |                        |  |  |  |
| 5:45 PM   | 6:00 PM        | 1                           | 4         | - | - | -                           | - | - | - | 1                        | - | - | - | 1                          | 1        | 7         | - |                        |  |  |  |
| 6:00 PM   | 6:15 PM        | 1                           | 2         | - | - | -                           | - | - | - | 1                        | - | - | - | 1                          | 1        | 7         | - |                        |  |  |  |
| 6:15 PM   | 6:30 PM        | 3                           | 3         | - | - | -                           | - | - | - | 1                        | - | - | - | 3                          | 0        | 4         | - |                        |  |  |  |
| Intersection PHV:   |                | 35    0    0                |           |   |   | 0    0    0                 |   |   |   | 0    0    0              |   |   |   | 14    90    0              |          |           |   |                        |  |  |  |
| PHF:  |                | 0.80    0.00    0.00        |           |   |   | 0.00    0.00    0.00        |   |   |   | 0.00    0.00    0.00     |   |   |   | 0.50    0.54    0.00       |          |           |   |                        |  |  |  |
| Intersection Peak Hour: 4:30 PM - 5:30 PM   |                |                             |           |   |   |                             |   |   |   |                          |   |   |   |                            |          |           |   | Intersection PHF: 0.58 |  |  |  |
| Study Area PHV:   |                | 35    0    0                |           |   |   | 0    0    0                 |   |   |   | 0    0    0              |   |   |   | 14    90    0              |          |           |   |                        |  |  |  |
| PHF:  |                | 0.80    0.00    0.00        |           |   |   | 0.00    0.00    0.00        |   |   |   | 0.00    0.00    0.00     |   |   |   | 0.50    0.54    0.00       |          |           |   |                        |  |  |  |
| Study Peak Hour: 4:30 PM - 5:30 PM  |                |                             |           |   |   |                             |   |   |   |                          |   |   |   |                            |          |           |   | Study Area PHF: 0.58   |  |  |  |
| Observations: <div style="text-align: right; margin-top: 50px;">  </div>   |                |                             |           |   |   |                             |   |   |   |                          |   |   |   |                            |          |           |   |                        |  |  |  |
| File: C2X3HRS - 4L&12Mv_Peds.XLS  |                |                             |           |   |   |                             |   |   |   |                          |   |   |   |                            |          |           |   |                        |  |  |  |

**Intersection Traffic Movements****DeShazo Group, Inc.**Location: **San Jacinto Boulevard at 16th Street**City/State: **Austin, Texas**Day/Date: **Thursday, March 24, 2016**Project-ID #: **15206-13**Data Source: **CJ Hensch**Data Collector(s): **Camera**Weather Conditions: **Mild/Normal Conditions**Traffic Control: **Unsignalized**Description: **Free**

| Time of Count     |                | Northbound on San Jacinto Blvd. |   |   |   | Southbound on San Jacinto Blvd. |   |            |           | Eastbound on 16th Street |   |   |   | Westbound on 16th Street |   |   |   |
|-------------------|----------------|---------------------------------|---|---|---|---------------------------------|---|------------|-----------|--------------------------|---|---|---|--------------------------|---|---|---|
| Begin             | End            | Peds                            | L | T | R | Peds                            | L | T          | R         | Peds                     | L | T | R | Peds                     | L | T | R |
| 7:00 AM           | 7:15 AM        | 0                               | - | - | - | 19                              | - | 56         | 11        | 2                        | - | - | - | -                        | - | - | - |
| 7:15 AM           | 7:30 AM        | 2                               | - | - | - | 21                              | - | 69         | 13        | 1                        | - | - | - | -                        | - | - | - |
| 7:30 AM           | 7:45 AM        | 4                               | - | - | - | 23                              | - | 78         | 5         | 4                        | - | - | - | -                        | - | - | - |
| <b>7:45 AM</b>    | <b>8:00 AM</b> | <b>5</b>                        | - | - | - | <b>32</b>                       | - | <b>101</b> | <b>7</b>  | <b>7</b>                 | - | - | - | -                        | - | - | - |
| <b>8:00 AM</b>    | <b>8:15 AM</b> | <b>3</b>                        | - | - | - | <b>26</b>                       | - | <b>86</b>  | <b>7</b>  | <b>1</b>                 | - | - | - | -                        | - | - | - |
| <b>8:15 AM</b>    | <b>8:30 AM</b> | <b>6</b>                        | - | - | - | <b>18</b>                       | - | <b>74</b>  | <b>11</b> | <b>6</b>                 | - | - | - | -                        | - | - | - |
| <b>8:30 AM</b>    | <b>8:45 AM</b> | <b>6</b>                        | - | - | - | <b>24</b>                       | - | <b>67</b>  | <b>7</b>  | <b>7</b>                 | - | - | - | -                        | - | - | - |
| 8:45 AM           | 9:00 AM        | 5                               | - | - | - | 26                              | - | 114        | 7         | 1                        | - | - | - | -                        | - | - | - |
| Intersection PHV: |                | 0                               |   |   |   | 0                               |   |            |           | 0                        |   |   |   | 0                        |   |   |   |
| PHF:              |                | 0.00                            |   |   |   | 0.00                            |   |            |           | 0.00                     |   |   |   | 0.00                     |   |   |   |

Intersection Peak Hour: 8:00 AM - 9:00 AM

Intersection PHF: 0.77

|                 |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Study Area PHV: | 0    | 0    | 0    | 0    | 328  | 32   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PHF:            | 0.00 | 0.00 | 0.00 | 0.00 | 0.81 | 0.73 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Study Peak Hour: 7:45 AM - 8:45 AM

Study Area PHF: 0.83

|                   |                |          |   |   |   |           |   |            |          |          |   |   |   |      |   |   |   |
|-------------------|----------------|----------|---|---|---|-----------|---|------------|----------|----------|---|---|---|------|---|---|---|
| <b>4:30 PM</b>    | <b>4:45 PM</b> | <b>2</b> | - | - | - | <b>17</b> | - | <b>291</b> | <b>8</b> | <b>8</b> | - | - | - | -    | - | - | - |
| <b>4:45 PM</b>    | <b>5:00 PM</b> | <b>3</b> | - | - | - | <b>25</b> | - | <b>240</b> | <b>4</b> | <b>2</b> | - | - | - | -    | - | - | - |
| <b>5:00 PM</b>    | <b>5:15 PM</b> | <b>3</b> | - | - | - | <b>37</b> | - | <b>284</b> | <b>8</b> | <b>4</b> | - | - | - | -    | - | - | - |
| <b>5:15 PM</b>    | <b>5:30 PM</b> | <b>5</b> | - | - | - | <b>8</b>  | - | <b>218</b> | <b>9</b> | <b>6</b> | - | - | - | -    | - | - | - |
| 5:30 PM           | 5:45 PM        | 1        | - | - | - | 6         | - | 233        | 5        | 9        | - | - | - | -    | - | - | - |
| 5:45 PM           | 6:00 PM        | 2        | - | - | - | 15        | - | 173        | 1        | 1        | - | - | - | -    | - | - | - |
| 6:00 PM           | 6:15 PM        | 1        | - | - | - | 24        | - | 171        | 12       | 3        | - | - | - | -    | - | - | - |
| 6:15 PM           | 6:30 PM        | 0        | - | - | - | 7         | - | 126        | 2        | 5        | - | - | - | -    | - | - | - |
| Intersection PHV: |                | 0        |   |   |   | 0         |   |            |          | 0        |   |   |   | 0    |   |   |   |
| PHF:              |                | 0.00     |   |   |   | 0.00      |   |            |          | 0.00     |   |   |   | 0.00 |   |   |   |

Intersection Peak Hour: 4:30 PM - 5:30 PM

Intersection PHF: 0.89

|                 |      |      |      |      |       |      |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|-------|------|------|------|------|------|------|------|------|
| Study Area PHV: | 0    | 0    | 0    | 0    | 1,033 | 29   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PHF:            | 0.00 | 0.00 | 0.00 | 0.00 | 0.89  | 0.81 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Study Peak Hour: 4:30 PM - 5:30 PM

Study Area PHF: 0.89

Observations:



File: C2X3HRS - 4L&amp;12Mv\_Peds.XLS

### Intersection Traffic Movements

DeShazo Group, Inc.


Location: **Guadalupe Street at 17th Street**

City/State: **Austin, Texas**Day/Date: **Tuesday, March 22, 2016**Project-ID #: **15206-14**

Data Source: **CJ Hensch**

Data Collector(s): **Camera**Weather Conditions: **Mild/Normal Conditions**

Traffic Control: **Signalized**

| Time of Count  |         | Northbound on<br><i>Guadalupe Street</i> |   |   |   | Southbound on<br><i>Guadalupe Street</i> |    |     |   | Eastbound on<br><i>17th Street</i> |   |    |    | Westbound on<br><i>17th Street</i> |   |   |   |
|--|---------|--|---|---|---|--|----|-----|---|------------------------------------|---|----|----|------------------------------------|---|---|---|
| Begin  | End     | Peds                                     | L | T | R | Peds                                     | L  | T   | R | Peds                               | L | T  | R  | Peds                               | L | T | R |
| 7:00 AM  | 7:15 AM | 5  | - | - | - | 3  | 4  | 85  | - | 3                                  | - | 1  | 22 | 4                                  | - | - | - |
| 7:15 AM  | 7:30 AM | 10                                       | - | - | - | 4  | 10 | 137 | - | 7                                  | - | 5  | 21 | 5                                  | - | - | - |
| 7:30 AM  | 7:45 AM | 8  | - | - | - | 2  | 8  | 149 | - | 3                                  | - | 6  | 27 | 4                                  | - | - | - |
| 7:45 AM  | 8:00 AM | 12                                       | - | - | - | 6  | 7  | 190 | - | 3                                  | - | 13 | 35 | 4                                  | - | - | - |
| 8:00 AM  | 8:15 AM | 9  | - | - | - | 8  | 15 | 224 | - | 5                                  | - | 8  | 36 | 4                                  | - | - | - |
| 8:15 AM  | 8:30 AM | 9  | - | - | - | 7  | 7  | 247 | - | 3                                  | - | 7  | 27 | 5                                  | - | - | - |
| 8:30 AM  | 8:45 AM | 10                                       | - | - | - | 9  | 8  | 252 | - | 14                                 | - | 9  | 34 | 14                                 | - | - | - |
| 8:45 AM  | 9:00 AM | 9  | - | - | - | 4  | 17 | 249 | - | 10                                 | - | 8  | 26 | 10                                 | - | - | - |
| Intersection PHV:  |         | 0 0 0                                    |   |   |   | 47 972 0                                 |    |     |   | 0 32 123                           |   |    |    | 0 0 0                              |   |   |   |
| PHF:   |         | 0.00 0.00 0.00                           |   |   |   | 0.69 0.96 0.00                           |    |     |   | 0.00 0.89 0.85                     |   |    |    | 0.00 0.00 0.00                     |   |   |   |
| Intersection Peak Hour: 8:00 AM - 9:00 AM  |         |  |   |   |   |  |    |     |   | Intersection PHF: 0.97             |   |    |    |                                    |   |   |   |
| Study Area PHV:  |         | 0 0 0                                    |   |   |   | 37 913 0                                 |    |     |   | 0 37 132                           |   |    |    | 0 0 0                              |   |   |   |
| PHF:   |         | 0.00 0.00 0.00                           |   |   |   | 0.62 0.91 0.00                           |    |     |   | 0.00 0.71 0.92                     |   |    |    | 0.00 0.00 0.00                     |   |   |   |
| Study Peak Hour: 7:45 AM - 8:45 AM   |         |  |   |   |   |  |    |     |   | Study Area PHF: 0.92               |   |    |    |                                    |   |   |   |
| 4:30 PM  | 4:45 PM | 13                                       | - | - | - | 9  | 7  | 265 | - | 29                                 | - | 4  | 12 | 9                                  | - | - | - |
| 4:45 PM  | 5:00 PM | 15                                       | - | - | - | 5  | 16 | 224 | - | 13                                 | - | 10 | 7  | 6                                  | - | - | - |
| 5:00 PM  | 5:15 PM | 22                                       | - | - | - | 9  | 24 | 235 | - | 15                                 | - | 13 | 7  | 11                                 | - | - | - |
| 5:15 PM  | 5:30 PM | 14                                       | - | - | - | 7  | 29 | 220 | - | 9                                  | - | 30 | 7  | 9                                  | - | - | - |
| 5:30 PM  | 5:45 PM | 6  | - | - | - | 7  | 24 | 195 | - | 22                                 | - | 31 | 8  | 7                                  | - | - | - |
| 5:45 PM  | 6:00 PM | 12                                       | - | - | - | 9  | 19 | 274 | - | 27                                 | - | 21 | 6  | 7                                  | - | - | - |
| 6:00 PM  | 6:15 PM | 10                                       | - | - | - | 7  | 14 | 250 | - | 21                                 | - | 2  | 9  | 5                                  | - | - | - |
| 6:15 PM  | 6:30 PM | 4  | - | - | - | 6  | 12 | 219 | - | 15                                 | - | 7  | 10 | 6                                  | - | - | - |
| Intersection PHV:  |         | 0 0 0                                    |   |   |   | 96 924 0                                 |    |     |   | 0 95 28                            |   |    |    | 0 0 0                              |   |   |   |
| PHF:   |         | 0.00 0.00 0.00                           |   |   |   | 0.83 0.84 0.00                           |    |     |   | 0.00 0.77 0.88                     |   |    |    | 0.00 0.00 0.00                     |   |   |   |
| Intersection Peak Hour: 5:00 PM - 6:00 PM  |         |  |   |   |   |  |    |     |   | Intersection PHF: 0.89             |   |    |    |                                    |   |   |   |
| Study Area PHV:  |         | 0 0 0                                    |   |   |   | 76 944 0                                 |    |     |   | 0 57 33                            |   |    |    | 0 0 0                              |   |   |   |
| PHF:   |         | 0.00 0.00 0.00                           |   |   |   | 0.66 0.89 0.00                           |    |     |   | 0.00 0.48 0.69                     |   |    |    | 0.00 0.00 0.00                     |   |   |   |
| Study Peak Hour: 4:30 PM - 5:30 PM   |         |  |   |   |   |  |    |     |   | Study Area PHF: 0.96               |   |    |    |                                    |   |   |   |
| <div> <div>Observations:</div> <div>  </div> </div> |         |  |   |   |   |  |    |     |   |                                    |   |    |    |                                    |   |   |   |

File: C2X3HRS - 4L&12Mv\_Peds.XLS

## Intersection Traffic Movements

DeShazo Group, Inc.

Location: **Lavaca Street at 17th Street**


City/State: **Austin, Texas**Day/Date: **Tuesday, March 22, 2016**

Project-ID #: **15206-15**


Data Source: **CJ Hensch**

Data Collector(s): **Camera**Weather Conditions: **Mild/Normal Conditions**


Traffic Control: **Signalized**

| Time of Count   |         | Northbound on<br><i>Lavaca Street</i> |   |     |    | Southbound on<br><i>Lavaca Street</i> |   |   |   | Eastbound on<br><i>17th Street</i> |    |    |   | Westbound on<br><i>17th Street</i> |   |   |   |
|---|---------|---------------------------------------|---|-----|----|---------------------------------------|---|---|---|------------------------------------|----|----|---|------------------------------------|---|---|---|
| Begin   | End     | Peds                                  | L | T   | R  | Peds                                  | L | T | R | Peds                               | L  | T  | R | Peds                               | L | T | R |
| 7:00 AM   | 7:15 AM | 6                                     | - | 101 | 32 | 5                                     | - | - | - | 2                                  | 0  | 5  | - | 0                                  | - | - | - |
| 7:15 AM   | 7:30 AM | 5                                     | - | 113 | 41 | 7                                     | - | - | - | 1                                  | 3  | 11 | - | 4                                  | - | - | - |
| 7:30 AM   | 7:45 AM | 9                                     | - | 121 | 43 | 10                                    | - | - | - | 6                                  | 3  | 11 | - | 7                                  | - | - | - |
| 7:45 AM   | 8:00 AM | 11                                    | - | 148 | 51 | 2                                     | - | - | - | 4                                  | 4  | 16 | - | 4                                  | - | - | - |
| 8:00 AM   | 8:15 AM | 7                                     | - | 128 | 32 | 9                                     | - | - | - | 1                                  | 3  | 15 | - | 4                                  | - | - | - |
| 8:15 AM   | 8:30 AM | 9                                     | - | 124 | 28 | 8                                     | - | - | - | 10                                 | 2  | 9  | - | 9                                  | - | - | - |
| 8:30 AM   | 8:45 AM | 7                                     | - | 122 | 27 | 16                                    | - | - | - | 8                                  | 3  | 11 | - | 4                                  | - | - | - |
| 8:45 AM   | 9:00 AM | 12                                    | - | 110 | 27 | 5                                     | - | - | - | 4                                  | 8  | 15 | - | 9                                  | - | - | - |
| Intersection PHV:   |         | 0 510 167                             |   |     |    | 0 0 0                                 |   |   |   | 13 53 0                            |    |    |   | 0 0 0                              |   |   |   |
| PHF:  |         | 0.00 0.86 0.82                        |   |     |    | 0.00 0.00 0.00                        |   |   |   | 0.81 0.83 0.00                     |    |    |   | 0.00 0.00 0.00                     |   |   |   |
| Intersection Peak Hour: 7:15 AM - 8:15 AM   |         |                                       |   |     |    |                                       |   |   |   | Intersection PHF: 0.85             |    |    |   |                                    |   |   |   |
| Study Area PHV:   |         | 0 522 138                             |   |     |    | 0 0 0                                 |   |   |   | 12 51 0                            |    |    |   | 0 0 0                              |   |   |   |
| PHF:  |         | 0.00 0.88 0.68                        |   |     |    | 0.00 0.00 0.00                        |   |   |   | 0.75 0.80 0.00                     |    |    |   | 0.00 0.00 0.00                     |   |   |   |
| Study Peak Hour: 7:45 AM - 8:45 AM  |         |                                       |   |     |    |                                       |   |   |   | Study Area PHF: 0.83               |    |    |   |                                    |   |   |   |
| 4:30 PM   | 4:45 PM | 9                                     | - | 230 | 26 | 9                                     | - | - | - | 8                                  | 10 | 13 | - | 13                                 | - | - | - |
| 4:45 PM   | 5:00 PM | 7                                     | - | 250 | 38 | 4                                     | - | - | - | 9                                  | 7  | 18 | - | 5                                  | - | - | - |
| 5:00 PM   | 5:15 PM | 17                                    | - | 257 | 49 | 10                                    | - | - | - | 3                                  | 6  | 33 | - | 17                                 | - | - | - |
| 5:15 PM   | 5:30 PM | 13                                    | - | 223 | 36 | 5                                     | - | - | - | 5                                  | 7  | 61 | - | 12                                 | - | - | - |
| 5:30 PM   | 5:45 PM | 4                                     | - | 194 | 38 | 11                                    | - | - | - | 10                                 | 3  | 55 | - | 8                                  | - | - | - |
| 5:45 PM   | 6:00 PM | 7                                     | - | 213 | 27 | 8                                     | - | - | - | 12                                 | 8  | 32 | - | 8                                  | - | - | - |
| 6:00 PM   | 6:15 PM | 8                                     | - | 187 | 19 | 7                                     | - | - | - | 10                                 | 10 | 9  | - | 15                                 | - | - | - |
| 6:15 PM   | 6:30 PM | 4                                     | - | 187 | 10 | 2                                     | - | - | - | 8                                  | 16 | 7  | - | 5                                  | - | - | - |
| Intersection PHV:   |         | 0 924 161                             |   |     |    | 0 0 0                                 |   |   |   | 23 167 0                           |    |    |   | 0 0 0                              |   |   |   |
| PHF:  |         | 0.00 0.90 0.82                        |   |     |    | 0.00 0.00 0.00                        |   |   |   | 0.82 0.68 0.00                     |    |    |   | 0.00 0.00 0.00                     |   |   |   |
| Intersection Peak Hour: 4:45 PM - 5:45 PM   |         |                                       |   |     |    |                                       |   |   |   | Intersection PHF: 0.92             |    |    |   |                                    |   |   |   |
| Study Area PHV:   |         | 0 960 149                             |   |     |    | 0 0 0                                 |   |   |   | 30 125 0                           |    |    |   | 0 0 0                              |   |   |   |
| PHF:  |         | 0.00 0.93 0.76                        |   |     |    | 0.00 0.00 0.00                        |   |   |   | 0.75 0.51 0.00                     |    |    |   | 0.00 0.00 0.00                     |   |   |   |
| Study Peak Hour: 4:30 PM - 5:30 PM  |         |                                       |   |     |    |                                       |   |   |   | Study Area PHF: 0.92               |    |    |   |                                    |   |   |   |
| <div>Observations:</div> <div>  </div> |         |                                       |   |     |    |                                       |   |   |   |                                    |    |    |   |                                    |   |   |   |


File: C2X3HRS - 4L&12Mv\_Peds.XLS

| Intersection Traffic Movements   |         |                               |   |    |    |                               |   |    |   |                          |    |    |    | DeShazo Group, Inc.      |   |   |   |
|--|---------|-------------------------------|---|----|----|-------------------------------|---|----|---|--------------------------|----|----|----|--------------------------|---|---|---|
| <div style="display: flex; justify-content: space-between;"> <div> Location: <b>Colorado Street at 17th Street</b><br/> City/State: <b>Austin, Texas</b><br/> Day/Date: <b>Tuesday, March 22, 2016</b><br/> Project-ID #: <b>15206-16</b><br/> Data Source: <b>CJ Hensch</b> </div> <div> Data Collector(s): <b>Camera</b><br/> Weather Conditions: <b>Mild/Normal Conditions</b><br/> Traffic Control: <b>Unsignalized</b><br/> Description: <b>All-Way STOP Controlled</b> </div> </div> |         |                               |   |    |    |                               |   |    |   |                          |    |    |    |                          |   |   |   |
| Time of Count  |         | Northbound on Colorado Street |   |    |    | Southbound on Colorado Street |   |    |   | Eastbound on 17th Street |    |    |    | Westbound on 17th Street |   |   |   |
| Begin  | End     | Peds                          | L | T  | R  | Peds                          | L | T  | R | Peds                     | L  | T  | R  | Peds                     | L | T | R |
| 7:00 AM  | 7:15 AM | 47                            | - | 4  | 7  | 30                            | 4 | 38 | - | 27                       | 2  | 20 | 18 | 50                       | - | - | - |
| 7:15 AM  | 7:30 AM | 45                            | - | 4  | 5  | 28                            | 2 | 47 | - | 20                       | 0  | 23 | 28 | 40                       | - | - | - |
| 7:30 AM  | 7:45 AM | 54                            | - | 10 | 6  | 30                            | 6 | 43 | - | 32                       | 0  | 27 | 26 | 50                       | - | - | - |
| 7:45 AM  | 8:00 AM | 54                            | - | 9  | 11 | 31                            | 1 | 46 | - | 26                       | 3  | 27 | 29 | 45                       | - | - | - |
| 8:00 AM  | 8:15 AM | 67                            | - | 6  | 4  | 44                            | 2 | 61 | - | 40                       | 1  | 16 | 29 | 62                       | - | - | - |
| 8:15 AM  | 8:30 AM | 42                            | - | 3  | 6  | 34                            | 2 | 45 | - | 24                       | 1  | 20 | 22 | 42                       | - | - | - |
| 8:30 AM  | 8:45 AM | 36                            | - | 9  | 4  | 31                            | 1 | 50 | - | 21                       | 5  | 11 | 18 | 35                       | - | - | - |
| 8:45 AM  | 9:00 AM | 39                            | - | 1  | 3  | 15                            | 3 | 40 | - | 15                       | 6  | 20 | 20 | 33                       | - | - | - |
| Intersection PHV:  |         | 0 29 26                       |   |    |    | 11 197 0                      |   |    |   | 4 93 112                 |    |    |    | 0 0 0                    |   |   |   |
| PHF:   |         | 0.00 0.73 0.59                |   |    |    | 0.46 0.81 0.00                |   |    |   | 0.33 0.86 0.97           |    |    |    | 0.00 0.00 0.00           |   |   |   |
| Intersection Peak Hour: 7:15 AM - 8:15 AM  |         |                               |   |    |    |                               |   |    |   |                          |    |    |    |                          |   |   |   |
| Intersection PHF: 0.94   |         |                               |   |    |    |                               |   |    |   |                          |    |    |    |                          |   |   |   |
| Study Area PHV:  |         | 0 27 25                       |   |    |    | 6 202 0                       |   |    |   | 10 74 98                 |    |    |    | 0 0 0                    |   |   |   |
| PHF:   |         | 0.00 0.75 0.57                |   |    |    | 0.75 0.83 0.00                |   |    |   | 0.50 0.69 0.84           |    |    |    | 0.00 0.00 0.00           |   |   |   |
| Study Peak Hour: 7:45 AM - 8:45 AM   |         |                               |   |    |    |                               |   |    |   |                          |    |    |    |                          |   |   |   |
| Study Area PHF: 0.88   |         |                               |   |    |    |                               |   |    |   |                          |    |    |    |                          |   |   |   |
| 4:30 PM  | 4:45 PM | 21                            | - | 28 | 16 | 65                            | 3 | 34 | - | 65                       | 4  | 27 | 9  | 23                       | - | - | - |
| 4:45 PM  | 5:00 PM | 19                            | - | 15 | 27 | 66                            | 7 | 15 | - | 66                       | 5  | 35 | 9  | 19                       | - | - | - |
| 5:00 PM  | 5:15 PM | 35                            | - | 28 | 45 | 81                            | 8 | 12 | - | 81                       | 4  | 62 | 11 | 23                       | - | - | - |
| 5:15 PM  | 5:30 PM | 14                            | - | 14 | 29 | 31                            | 8 | 10 | - | 35                       | 6  | 76 | 11 | 8                        | - | - | - |
| 5:30 PM  | 5:45 PM | 9                             | - | 25 | 42 | 32                            | 6 | 19 | - | 32                       | 14 | 72 | 6  | 15                       | - | - | - |
| 5:45 PM  | 6:00 PM | 13                            | - | 10 | 20 | 16                            | 7 | 16 | - | 16                       | 4  | 46 | 11 | 9                        | - | - | - |
| 6:00 PM  | 6:15 PM | 13                            | - | 18 | 13 | 26                            | 2 | 17 | - | 25                       | 2  | 20 | 6  | 14                       | - | - | - |
| 6:15 PM  | 6:30 PM | 5                             | - | 9  | 9  | 16                            | 1 | 10 | - | 17                       | 2  | 10 | 6  | 3                        | - | - | - |
| Intersection PHV:  |         | 0 77 136                      |   |    |    | 29 57 0                       |   |    |   | 28 256 39                |    |    |    | 0 0 0                    |   |   |   |
| PHF:   |         | 0.00 0.69 0.76                |   |    |    | 0.91 0.75 0.00                |   |    |   | 0.50 0.84 0.89           |    |    |    | 0.00 0.00 0.00           |   |   |   |
| Intersection Peak Hour: 5:00 PM - 6:00 PM  |         |                               |   |    |    |                               |   |    |   |                          |    |    |    |                          |   |   |   |
| Intersection PHF: 0.85   |         |                               |   |    |    |                               |   |    |   |                          |    |    |    |                          |   |   |   |
| Study Area PHV:  |         | 0 85 117                      |   |    |    | 26 71 0                       |   |    |   | 19 200 40                |    |    |    | 0 0 0                    |   |   |   |
| PHF:   |         | 0.00 0.76 0.65                |   |    |    | 0.81 0.52 0.00                |   |    |   | 0.79 0.66 0.91           |    |    |    | 0.00 0.00 0.00           |   |   |   |
| Study Peak Hour: 4:30 PM - 5:30 PM   |         |                               |   |    |    |                               |   |    |   |                          |    |    |    |                          |   |   |   |
| Study Area PHF: 0.82   |         |                               |   |    |    |                               |   |    |   |                          |    |    |    |                          |   |   |   |
| Observations: <div style="text-align: right; margin-top: 50px;">  </div>  |         |                               |   |    |    |                               |   |    |   |                          |    |    |    |                          |   |   |   |
| File: C2X3HRS - 4L&12Mv_Peds.XLS   |         |                               |   |    |    |                               |   |    |   |                          |    |    |    |                          |   |   |   |


| <b>Intersection Traffic Movements</b>  |                |   |   |           |           |   |          |           |   |                                    |          |           |          | <i>DeShazo Group, Inc.</i>         |   |   |   |                        |  |
|--|----------------|---|---|-----------|-----------|---|----------|-----------|---|------------------------------------|----------|-----------|----------|------------------------------------|---|---|---|------------------------|--|
| <div style="display: flex; justify-content: space-between;"> <div>           Location: <b>Congress Avenue at 17th Street</b><br/>           City/State: <b>Austin, Texas</b><br/>           Day/Date: <b>Tuesday, March 22, 2016</b><br/>           Project-ID #: <b>15206-17</b><br/>           Data Source: <b>CJ Hensch</b> </div> <div>           Data Collector(s): <b>Camera</b><br/>           Weather Conditions: <b>Mild/Normal Conditions</b><br/>           Traffic Control: <b>Unsignalized</b><br/>           Description: <b>All-Way STOP Controlled</b> </div> </div> |                |   |   |           |           |   |          |           |   |                                    |          |           |          |                                    |   |   |   |                        |  |
| Time of Count  |                | Northbound on<br><i>Congress Avenue</i> |   |           |           | Southbound on<br><i>Congress Avenue</i> |          |           |   | Eastbound on<br><i>17th Street</i> |          |           |          | Westbound on<br><i>17th Street</i> |   |   |   |                        |  |
| Begin  | End            | Peds                                    | L | T         | R         | Peds                                    | L        | T         | R | Peds                               | L        | T         | R        | Peds                               | L | T | R |                        |  |
| 7:00 AM  | 7:15 AM        | 0                                       | - | 15        | 56        | 13                                      | 6        | 7         | - | 4                                  | 2        | 26        | 2        | 6                                  | - | - | - |                        |  |
| 7:15 AM  | 7:30 AM        | 3                                       | - | 22        | 54        | 17                                      | 7        | 16        | - | 9                                  | 6        | 21        | 2        | 8                                  | - | - | - |                        |  |
| 7:30 AM  | 7:45 AM        | 8                                       | - | 25        | 39        | 5                                       | 5        | 14        | - | 6                                  | 11       | 20        | 3        | 6                                  | - | - | - |                        |  |
| <b>7:45 AM</b>   | <b>8:00 AM</b> | <b>2</b>                                | - | <b>22</b> | <b>49</b> | <b>11</b>                               | <b>3</b> | <b>19</b> | - | <b>6</b>                           | <b>4</b> | <b>26</b> | <b>4</b> | <b>10</b>                          | - | - | - |                        |  |
| 8:00 AM  | 8:15 AM        | 3                                       | - | 15        | 43        | 10                                      | 3        | 15        | - | 11                                 | 2        | 21        | 3        | 4                                  | - | - | - |                        |  |
| 8:15 AM  | 8:30 AM        | 1                                       | - | 20        | 42        | 13                                      | 6        | 17        | - | 7                                  | 5        | 21        | 5        | 1                                  | - | - | - |                        |  |
| 8:30 AM  | 8:45 AM        | 6                                       | - | 22        | 25        | 10                                      | 5        | 19        | - | 4                                  | 3        | 12        | 2        | 6                                  | - | - | - |                        |  |
| 8:45 AM  | 9:00 AM        | 9                                       | - | 17        | 34        | 16                                      | 2        | 19        | - | 6                                  | 7        | 15        | 3        | 18                                 | - | - | - |                        |  |
| Intersection PHV:  |                | 0    84    198                          |   |           |           | 21    56    0                           |          |           |   | 23    93    11                     |          |           |          | 0    0    0                        |   |   |   |                        |  |
| PHF:   |                | 0.00    0.84    0.88                    |   |           |           | 0.75    0.74    0.00                    |          |           |   | 0.52    0.89    0.69               |          |           |          | 0.00    0.00    0.00               |   |   |   |                        |  |
| Intersection Peak Hour: 7:00 AM - 8:00 AM  |                |   |   |           |           |   |          |           |   |                                    |          |           |          |                                    |   |   |   | Intersection PHF: 0.95 |  |
| Study Area PHV:  |                | 0    79    159                          |   |           |           | 17    70    0                           |          |           |   | 14    80    14                     |          |           |          | 0    0    0                        |   |   |   |                        |  |
| PHF:   |                | 0.00    0.90    0.81                    |   |           |           | 0.71    0.92    0.00                    |          |           |   | 0.70    0.77    0.70               |          |           |          | 0.00    0.00    0.00               |   |   |   |                        |  |
| Study Peak Hour: 7:45 AM - 8:45 AM   |                |   |   |           |           |   |          |           |   |                                    |          |           |          |                                    |   |   |   | Study Area PHF: 0.85   |  |
| 4:30 PM  | 4:45 PM        | 2                                       | - | 32        | 8         | 12                                      | 8        | 44        | - | 41                                 | 13       | 24        | 17       | 10                                 | - | - | - |                        |  |
| 4:45 PM  | 5:00 PM        | 2                                       | - | 27        | 13        | 13                                      | 10       | 37        | - | 25                                 | 21       | 38        | 11       | 8                                  | - | - | - |                        |  |
| 5:00 PM  | 5:15 PM        | 7                                       | - | 23        | 7         | 12                                      | 8        | 46        | - | 37                                 | 28       | 61        | 29       | 6                                  | - | - | - |                        |  |
| 5:15 PM  | 5:30 PM        | 1                                       | - | 22        | 11        | 5                                       | 9        | 27        | - | 16                                 | 24       | 67        | 16       | 2                                  | - | - | - |                        |  |
| 5:30 PM  | 5:45 PM        | 2                                       | - | 29        | 9         | 1                                       | 3        | 33        | - | 11                                 | 25       | 93        | 10       | 9                                  | - | - | - |                        |  |
| 5:45 PM  | 6:00 PM        | 0                                       | - | 21        | 17        | 5                                       | 3        | 25        | - | 12                                 | 14       | 40        | 8        | 1                                  | - | - | - |                        |  |
| 6:00 PM  | 6:15 PM        | 3                                       | - | 12        | 8         | 6                                       | 6        | 30        | - | 19                                 | 10       | 16        | 5        | 5                                  | - | - | - |                        |  |
| 6:15 PM  | 6:30 PM        | 2                                       | - | 16        | 4         | 1                                       | 0        | 23        | - | 12                                 | 8        | 10        | 2        | 1                                  | - | - | - |                        |  |
| Intersection PHV:  |                | 0    101    40                          |   |           |           | 30    143    0                          |          |           |   | 98    259    66                    |          |           |          | 0    0    0                        |   |   |   |                        |  |
| PHF:   |                | 0.00    0.87    0.77                    |   |           |           | 0.75    0.78    0.00                    |          |           |   | 0.88    0.70    0.57               |          |           |          | 0.00    0.00    0.00               |   |   |   |                        |  |
| Intersection Peak Hour: 4:45 PM - 5:45 PM  |                |   |   |           |           |   |          |           |   |                                    |          |           |          |                                    |   |   |   | Intersection PHF: 0.91 |  |
| Study Area PHV:  |                | 0    104    39                          |   |           |           | 35    154    0                          |          |           |   | 86    190    73                    |          |           |          | 0    0    0                        |   |   |   |                        |  |
| PHF:   |                | 0.00    0.81    0.75                    |   |           |           | 0.88    0.84    0.00                    |          |           |   | 0.77    0.71    0.63               |          |           |          | 0.00    0.00    0.00               |   |   |   |                        |  |
| Study Peak Hour: 4:30 PM - 5:30 PM   |                |   |   |           |           |   |          |           |   |                                    |          |           |          |                                    |   |   |   | Study Area PHF: 0.84   |  |
| Observations:  |                |   |   |           |           |   |          |           |   |                                    |          |           |          |                                    |   |   |   |                        |  |



File: C2X3HRS - 4L&12Mv\_Peds.XLS

| <b>Intersection Traffic Movements</b>   |                |                             |   |   |   |                             |          |   |   |                          |           |           |   | <i>DeShazo Group, Inc.</i> |   |   |   |
|---|----------------|-----------------------------|---|---|---|-----------------------------|----------|---|---|--------------------------|-----------|-----------|---|----------------------------|---|---|---|
| <div style="display: flex; justify-content: space-between;"> <div> Location: <b>Brazos Street at 17th Street</b><br/> City/State: <b>Austin, Texas</b><br/> Day/Date: <b>Tuesday, March 22, 2016</b><br/> Project-ID #: <b>15206-18</b><br/> Data Source: <b>CJ Hensch</b> </div> <div> Data Collector(s): <b>Camera</b><br/> Weather Conditions: <b>Mild/Normal Conditions</b><br/> Traffic Control: <b>Unsignalized</b><br/> Description: <b>Minor-Street STOP Controlled</b> </div> </div> |                |                             |   |   |   |                             |          |   |   |                          |           |           |   |                            |   |   |   |
| Time of Count   |                | Northbound on Brazos Street |   |   |   | Southbound on Brazos Street |          |   |   | Eastbound on 17th Street |           |           |   | Westbound on 17th Street   |   |   |   |
| Begin   | End            | Peds                        | L | T | R | Peds                        | L        | T | R | Peds                     | L         | T         | R | Peds                       | L | T | R |
| 7:00 AM   | 7:15 AM        | -                           | - | - | - | 67                          | 4        | - | - | 0                        | 50        | 41        | - | 8                          | - | - | - |
| 7:15 AM   | 7:30 AM        | -                           | - | - | - | 79                          | 3        | - | - | 0                        | 40        | 29        | - | 12                         | - | - | - |
| 7:30 AM   | 7:45 AM        | -                           | - | - | - | 98                          | 2        | - | - | 0                        | 43        | 25        | - | 7                          | - | - | - |
| <b>7:45 AM</b>  | <b>8:00 AM</b> | -                           | - | - | - | <b>113</b>                  | <b>4</b> | - | - | <b>0</b>                 | <b>39</b> | <b>29</b> | - | <b>10</b>                  | - | - | - |
| 8:00 AM   | 8:15 AM        | -                           | - | - | - | 117                         | 5        | - | - | 0                        | 29        | 32        | - | 13                         | - | - | - |
| 8:15 AM   | 8:30 AM        | -                           | - | - | - | 96                          | 8        | - | - | 0                        | 39        | 27        | - | 12                         | - | - | - |
| 8:30 AM   | 8:45 AM        | -                           | - | - | - | 79                          | 6        | - | - | 0                        | 20        | 23        | - | 6                          | - | - | - |
| 8:45 AM   | 9:00 AM        | -                           | - | - | - | 77                          | 2        | - | - | 0                        | 25        | 23        | - | 3                          | - | - | - |
| Intersection PHV:   |                | 0    0    0                 |   |   |   | 13    0    0                |          |   |   | 172    124    0          |           |           |   | 0    0    0                |   |   |   |
| PHF:  |                | 0.00    0.00    0.00        |   |   |   | 0.81    0.00    0.00        |          |   |   | 0.86    0.76    0.00     |           |           |   | 0.00    0.00    0.00       |   |   |   |
| Intersection Peak Hour: 7:00 AM - 8:00 AM   |                |                             |   |   |   |                             |          |   |   |                          |           |           |   |                            |   |   |   |
| Study Area PHV:   |                | 0    0    0                 |   |   |   | 23    0    0                |          |   |   | 127    111    0          |           |           |   | 0    0    0                |   |   |   |
| PHF:  |                | 0.00    0.00    0.00        |   |   |   | 0.72    0.00    0.00        |          |   |   | 0.81    0.87    0.00     |           |           |   | 0.00    0.00    0.00       |   |   |   |
| Study Peak Hour: 7:45 AM - 8:45 AM  |                |                             |   |   |   |                             |          |   |   |                          |           |           |   |                            |   |   |   |
| Study Area PHF: 0.88  |                |                             |   |   |   |                             |          |   |   |                          |           |           |   |                            |   |   |   |
| 4:30 PM   | 4:45 PM        | -                           | - | - | - | 112                         | 18       | - | - | 0                        | 5         | 33        | - | 19                         | - | - | - |
| 4:45 PM   | 5:00 PM        | -                           | - | - | - | 74                          | 18       | - | - | 0                        | 10        | 51        | - | 5                          | - | - | - |
| 5:00 PM   | 5:15 PM        | -                           | - | - | - | 126                         | 20       | - | - | 0                        | 13        | 76        | - | 6                          | - | - | - |
| 5:15 PM   | 5:30 PM        | -                           | - | - | - | 58                          | 10       | - | - | 0                        | 28        | 69        | - | 12                         | - | - | - |
| 5:30 PM   | 5:45 PM        | -                           | - | - | - | 57                          | 5        | - | - | 0                        | 37        | 66        | - | 7                          | - | - | - |
| 5:45 PM   | 6:00 PM        | -                           | - | - | - | 39                          | 7        | - | - | 0                        | 22        | 51        | - | 5                          | - | - | - |
| 6:00 PM   | 6:15 PM        | -                           | - | - | - | 25                          | 5        | - | - | 0                        | 9         | 31        | - | 9                          | - | - | - |
| 6:15 PM   | 6:30 PM        | -                           | - | - | - | 18                          | 2        | - | - | 0                        | 10        | 14        | - | 3                          | - | - | - |
| Intersection PHV:   |                | 0    0    0                 |   |   |   | 42    0    0                |          |   |   | 100    262    0          |           |           |   | 0    0    0                |   |   |   |
| PHF:  |                | 0.00    0.00    0.00        |   |   |   | 0.53    0.00    0.00        |          |   |   | 0.68    0.86    0.00     |           |           |   | 0.00    0.00    0.00       |   |   |   |
| Intersection Peak Hour: 5:00 PM - 6:00 PM   |                |                             |   |   |   |                             |          |   |   |                          |           |           |   |                            |   |   |   |
| Study Area PHV:   |                | 0    0    0                 |   |   |   | 66    0    0                |          |   |   | 56    229    0           |           |           |   | 0    0    0                |   |   |   |
| PHF:  |                | 0.00    0.00    0.00        |   |   |   | 0.83    0.00    0.00        |          |   |   | 0.50    0.75    0.00     |           |           |   | 0.00    0.00    0.00       |   |   |   |
| Study Peak Hour: 4:30 PM - 5:30 PM  |                |                             |   |   |   |                             |          |   |   |                          |           |           |   |                            |   |   |   |
| Study Area PHF: 0.81  |                |                             |   |   |   |                             |          |   |   |                          |           |           |   |                            |   |   |   |
| Observations: <div style="text-align: right; margin-top: 50px;">  </div>   |                |                             |   |   |   |                             |          |   |   |                          |           |           |   |                            |   |   |   |
| File: C2X3HRS - 4L&12Mv_Peds.XLS  |                |                             |   |   |   |                             |          |   |   |                          |           |           |   |                            |   |   |   |

| <b>Intersection Traffic Movements</b>   |                |   |      |      |   |   |           |            |   |                                    |      |          |           | <i>DeShazo Group, Inc.</i>         |      |      |   |
|---|----------------|---|------|------|---|---|-----------|------------|---|------------------------------------|------|----------|-----------|------------------------------------|------|------|---|
| <div style="display: flex; justify-content: space-between;"> <div>           Location: <b>San Jacinto Boulevard at 17th Street</b><br/>           City/State: <b>Austin, Texas</b><br/>           Day/Date: <b>Tuesday, March 22, 2016</b><br/>           Project-ID #: <b>15206-19</b><br/>           Data Source: <b>CJ Hensch</b> </div> <div>           Data Collector(s): <b>Camera</b><br/>           Weather Conditions: <b>Mild/Normal Conditions</b><br/>           Traffic Control: <b>Unsignalized</b><br/>           Description: <b>Minor-Street STOP Controlled</b> </div> </div> |                |   |      |      |   |   |           |            |   |                                    |      |          |           |                                    |      |      |   |
| Time of Count   |                | Northbound on<br><i>San Jacinto Blvd.</i> |      |      |   | Southbound on<br><i>San Jacinto Blvd.</i> |           |            |   | Eastbound on<br><i>17th Street</i> |      |          |           | Westbound on<br><i>17th Street</i> |      |      |   |
| Begin   | End            | Peds                                      | L    | T    | R | Peds                                      | L         | T          | R | Peds                               | L    | T        | R         | Peds                               | L    | T    | R |
| 7:00 AM   | 7:15 AM        | 3   | -    | -    | - | 0   | 13        | 76         | - | 13                                 | -    | 4        | 41        | 3                                  | -    | -    | - |
| 7:15 AM   | 7:30 AM        | 6   | -    | -    | - | 2   | 12        | 111        | - | 5                                  | -    | 8        | 25        | 7                                  | -    | -    | - |
| 7:30 AM   | 7:45 AM        | 6   | -    | -    | - | 6   | 8         | 99         | - | 6                                  | -    | 5        | 20        | 11                                 | -    | -    | - |
| <b>7:45 AM</b>  | <b>8:00 AM</b> | <b>7</b>                                  | -    | -    | - | <b>6</b>                                  | <b>12</b> | <b>111</b> | - | <b>4</b>                           | -    | <b>8</b> | <b>28</b> | <b>3</b>                           | -    | -    | - |
| <b>8:00 AM</b>  | <b>8:15 AM</b> | <b>3</b>                                  | -    | -    | - | <b>7</b>                                  | <b>12</b> | <b>124</b> | - | <b>0</b>                           | -    | <b>3</b> | <b>40</b> | <b>2</b>                           | -    | -    | - |
| <b>8:15 AM</b>  | <b>8:30 AM</b> | <b>1</b>                                  | -    | -    | - | <b>4</b>                                  | <b>9</b>  | <b>122</b> | - | <b>5</b>                           | -    | <b>1</b> | <b>30</b> | <b>4</b>                           | -    | -    | - |
| <b>8:30 AM</b>  | <b>8:45 AM</b> | <b>5</b>                                  | -    | -    | - | <b>3</b>                                  | <b>11</b> | <b>111</b> | - | <b>0</b>                           | -    | <b>5</b> | <b>29</b> | <b>4</b>                           | -    | -    | - |
| 8:45 AM   | 9:00 AM        | 3   | -    | -    | - | 2   | 8         | 124        | - | 14                                 | -    | 7        | 18        | 5                                  | -    | -    | - |
| Intersection PHV:   |                | 0   | 0    | 0    |   | 44  | 468       | 0          |   | 0                                  | 17   | 127      |           | 0                                  | 0    | 0    |   |
| PHF:  |                | 0.00                                      | 0.00 | 0.00 |   | 0.92                                      | 0.94      | 0.00       |   | 0.00                               | 0.53 | 0.79     |           | 0.00                               | 0.00 | 0.00 |   |
| Intersection Peak Hour: 7:45 AM - 8:45 AM   |                |   |      |      |   |   |           |            |   |                                    |      |          |           |                                    |      |      |   |
| Intersection PHF: 0.92  |                |   |      |      |   |   |           |            |   |                                    |      |          |           |                                    |      |      |   |
| Study Area PHV:   |                | 0   | 0    | 0    |   | 44  | 468       | 0          |   | 0                                  | 17   | 127      |           | 0                                  | 0    | 0    |   |
| PHF:  |                | 0.00                                      | 0.00 | 0.00 |   | 0.92                                      | 0.94      | 0.00       |   | 0.00                               | 0.53 | 0.79     |           | 0.00                               | 0.00 | 0.00 |   |
| Study Peak Hour: 7:45 AM - 8:45 AM  |                |   |      |      |   |   |           |            |   |                                    |      |          |           |                                    |      |      |   |
| Study Area PHF: 0.92  |                |   |      |      |   |   |           |            |   |                                    |      |          |           |                                    |      |      |   |
| 4:30 PM   | 4:45 PM        | 12  | -    | -    | - | 4   | 30        | 194        | - | 3                                  | -    | 23       | 37        | 13                                 | -    | -    | - |
| 4:45 PM   | 5:00 PM        | 11  | -    | -    | - | 8   | 22        | 165        | - | 15                                 | -    | 31       | 44        | 13                                 | -    | -    | - |
| 5:00 PM   | 5:15 PM        | 19  | -    | -    | - | 13  | 30        | 204        | - | 0                                  | -    | 48       | 52        | 20                                 | -    | -    | - |
| 5:15 PM   | 5:30 PM        | 9   | -    | -    | - | 3   | 18        | 164        | - | 2                                  | -    | 38       | 42        | 7                                  | -    | -    | - |
| 5:30 PM   | 5:45 PM        | 5   | -    | -    | - | 9   | 15        | 163        | - | 1                                  | -    | 51       | 26        | 20                                 | -    | -    | - |
| 5:45 PM   | 6:00 PM        | 14  | -    | -    | - | 4   | 11        | 135        | - | 6                                  | -    | 34       | 25        | 15                                 | -    | -    | - |
| 6:00 PM   | 6:15 PM        | 10  | -    | -    | - | 5   | 13        | 122        | - | 2                                  | -    | 12       | 24        | 9                                  | -    | -    | - |
| 6:15 PM   | 6:30 PM        | 4   | -    | -    | - | 2   | 4         | 122        | - | 2                                  | -    | 11       | 7         | 8                                  | -    | -    | - |
| Intersection PHV:   |                | 0   | 0    | 0    |   | 100                                       | 727       | 0          |   | 0                                  | 140  | 175      |           | 0                                  | 0    | 0    |   |
| PHF:  |                | 0.00                                      | 0.00 | 0.00 |   | 0.83                                      | 0.89      | 0.00       |   | 0.00                               | 0.73 | 0.84     |           | 0.00                               | 0.00 | 0.00 |   |
| Intersection Peak Hour: 4:30 PM - 5:30 PM   |                |   |      |      |   |   |           |            |   |                                    |      |          |           |                                    |      |      |   |
| Intersection PHF: 0.85  |                |   |      |      |   |   |           |            |   |                                    |      |          |           |                                    |      |      |   |
| Study Area PHV:   |                | 0   | 0    | 0    |   | 100                                       | 727       | 0          |   | 0                                  | 140  | 175      |           | 0                                  | 0    | 0    |   |
| PHF:  |                | 0.00                                      | 0.00 | 0.00 |   | 0.83                                      | 0.89      | 0.00       |   | 0.00                               | 0.73 | 0.84     |           | 0.00                               | 0.00 | 0.00 |   |
| Study Peak Hour: 4:30 PM - 5:30 PM  |                |   |      |      |   |   |           |            |   |                                    |      |          |           |                                    |      |      |   |
| Study Area PHF: 0.85  |                |   |      |      |   |   |           |            |   |                                    |      |          |           |                                    |      |      |   |
| Observations:   |                |   |      |      |   |   |           |            |   |                                    |      |          |           |                                    |      |      |   |



File: C2X3HRS - 4L&12Mv\_Peds.XLS

**Intersection Traffic Movements****DeShazo Group, Inc.**Location: **Trinity Street at 17th Street**City/State: **Austin, Texas**Day/Date: **Tuesday, March 22, 2016**Project-ID #: **15206-20**Data Source: **CJ Hensch**Data Collector(s): **Camera**Weather Conditions: **Mild/Normal Conditions**Traffic Control: **Unsignalized**Description: **Minor-Street STOP Controlled**

| Time of Count     |         | Northbound on Trinity Street |   |     |   | Southbound on Trinity Street |   |   |   | Eastbound on 18th Street |    |   |   | Westbound on 18th Street |   |   |   |
|-------------------|---------|------------------------------|---|-----|---|------------------------------|---|---|---|--------------------------|----|---|---|--------------------------|---|---|---|
| Begin             | End     | Peds                         | L | T   | R | Peds                         | L | T | R | Peds                     | L  | T | R | Peds                     | L | T | R |
| 7:00 AM           | 7:15 AM | 0                            | - | 69  | - | 0                            | - | - | - | 1                        | 10 | - | - | -                        | - | - | - |
| 7:15 AM           | 7:30 AM | 0                            | - | 96  | - | 0                            | - | - | - | 1                        | 15 | - | - | -                        | - | - | - |
| 7:30 AM           | 7:45 AM | 0                            | - | 98  | - | 0                            | - | - | - | 1                        | 8  | - | - | -                        | - | - | - |
| 7:45 AM           | 8:00 AM | 0                            | - | 102 | - | 0                            | - | - | - | 2                        | 12 | - | - | -                        | - | - | - |
| 8:00 AM           | 8:15 AM | 0                            | - | 104 | - | 0                            | - | - | - | 2                        | 8  | - | - | -                        | - | - | - |
| 8:15 AM           | 8:30 AM | 0                            | - | 80  | - | 2                            | - | - | - | 1                        | 6  | - | - | -                        | - | - | - |
| 8:30 AM           | 8:45 AM | 0                            | - | 72  | - | 2                            | - | - | - | 0                        | 13 | - | - | -                        | - | - | - |
| 8:45 AM           | 9:00 AM | 0                            | - | 95  | - | 8                            | - | - | - | 2                        | 13 | - | - | -                        | - | - | - |
| Intersection PHV: |         | 0 400 0                      |   |     |   | 0 0 0                        |   |   |   | 43 0 0                   |    |   |   | 0 0 0                    |   |   |   |
| PHF:              |         | 0.00 0.96 0.00               |   |     |   | 0.00 0.00 0.00               |   |   |   | 0.72 0.00 0.00           |    |   |   | 0.00 0.00 0.00           |   |   |   |

Intersection Peak Hour: 7:15 AM - 8:15 AM

Intersection PHF: 0.97

|                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Study Area PHV: | 0    | 358  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 39   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PHF:            | 0.00 | 0.86 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Study Peak Hour: 7:45 AM - 8:45 AM

Study Area PHF: 0.87

|                   |         |                |   |     |   |                |   |   |   |                |    |   |   |                |   |   |   |
|-------------------|---------|----------------|---|-----|---|----------------|---|---|---|----------------|----|---|---|----------------|---|---|---|
| 4:30 PM           | 4:45 PM | 1              | - | 101 | - | 0              | - | - | - | 5              | 57 | - | - | -              | - | - | - |
| 4:45 PM           | 5:00 PM | 0              | - | 104 | - | 0              | - | - | - | 2              | 50 | - | - | -              | - | - | - |
| 5:00 PM           | 5:15 PM | 0              | - | 141 | - | 0              | - | - | - | 7              | 78 | - | - | -              | - | - | - |
| 5:15 PM           | 5:30 PM | 0              | - | 135 | - | 0              | - | - | - | 2              | 63 | - | - | -              | - | - | - |
| 5:30 PM           | 5:45 PM | 0              | - | 108 | - | 0              | - | - | - | 0              | 66 | - | - | -              | - | - | - |
| 5:45 PM           | 6:00 PM | 0              | - | 106 | - | 0              | - | - | - | 1              | 45 | - | - | -              | - | - | - |
| 6:00 PM           | 6:15 PM | 0              | - | 70  | - | 0              | - | - | - | 2              | 29 | - | - | -              | - | - | - |
| 6:15 PM           | 6:30 PM | 0              | - | 47  | - | 0              | - | - | - | 1              | 16 | - | - | -              | - | - | - |
| Intersection PHV: |         | 0 488 0        |   |     |   | 0 0 0          |   |   |   | 257 0 0        |    |   |   | 0 0 0          |   |   |   |
| PHF:              |         | 0.00 0.87 0.00 |   |     |   | 0.00 0.00 0.00 |   |   |   | 0.82 0.00 0.00 |    |   |   | 0.00 0.00 0.00 |   |   |   |

Intersection Peak Hour: 4:45 PM - 5:45 PM

Intersection PHF: 0.85

|                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Study Area PHV: | 0    | 481  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 248  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PHF:            | 0.00 | 0.85 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.79 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |


Study Peak Hour: 4:30 PM - 5:30 PM

Study Area PHF: 0.83

Observations:



File: C2X3HRS - 4L&amp;12Mv\_Peds.XLS

| <b>Intersection Traffic Movements</b>   |                |  |   |   |   |  |   |            |           |                                    |   |   |   | <i>DeShazo Group, Inc.</i>         |           |          |   |                        |  |
|---|----------------|--|---|---|---|--|---|------------|-----------|------------------------------------|---|---|---|------------------------------------|-----------|----------|---|------------------------|--|
| <div style="display: flex; justify-content: space-between;"> <div>           Location: <b>Guadalupe Street at 18th Street</b><br/>           City/State: <b>Austin, Texas</b><br/>           Day/Date: <b>Tuesday, March 22, 2016</b><br/>           Project-ID #: <b>15206-21</b><br/>           Data Source: <b>CJ Hensch</b> </div> <div>           Data Collector(s): <b>Camera</b><br/>           Weather Conditions: <b>Mild/Normal Conditions</b><br/>           Traffic Control: <b>Unsignalized</b><br/>           Description: <b>All-Way STOP Controlled</b> </div> </div> |                |  |   |   |   |  |   |            |           |                                    |   |   |   |                                    |           |          |   |                        |  |
| Time of Count   |                | Northbound on<br><i>Guadalupe Street</i> |   |   |   | Southbound on<br><i>Guadalupe Street</i> |   |            |           | Eastbound on<br><i>18th Street</i> |   |   |   | Westbound on<br><i>18th Street</i> |           |          |   |                        |  |
| Begin   | End            | Peds                                     | L | T | R | Peds                                     | L | T          | R         | Peds                               | L | T | R | Peds                               | L         | T        | R |                        |  |
| 7:00 AM   | 7:15 AM        | 0  | - | - | - | 0  | - | 87         | 5         | 1                                  | - | - | - | 0                                  | 4         | 2        | - |                        |  |
| 7:15 AM   | 7:30 AM        | 3  | - | - | - | 0  | - | 147        | 4         | 14                                 | - | - | - | 2                                  | 6         | 5        | - |                        |  |
| 7:30 AM   | 7:45 AM        | 1  | - | - | - | 1  | - | 160        | 5         | 7                                  | - | - | - | 3                                  | 5         | 3        | - |                        |  |
| <b>7:45 AM</b>  | <b>8:00 AM</b> | <b>2</b>                                 | - | - | - | <b>2</b>                                 | - | <b>214</b> | <b>5</b>  | <b>9</b>                           | - | - | - | <b>2</b>                           | <b>9</b>  | <b>5</b> | - |                        |  |
| <b>8:00 AM</b>  | <b>8:15 AM</b> | <b>2</b>                                 | - | - | - | <b>3</b>                                 | - | <b>231</b> | <b>10</b> | <b>12</b>                          | - | - | - | <b>4</b>                           | <b>12</b> | <b>4</b> | - |                        |  |
| <b>8:15 AM</b>  | <b>8:30 AM</b> | <b>1</b>                                 | - | - | - | <b>3</b>                                 | - | <b>247</b> | <b>8</b>  | <b>7</b>                           | - | - | - | <b>2</b>                           | <b>11</b> | <b>4</b> | - |                        |  |
| <b>8:30 AM</b>  | <b>8:45 AM</b> | <b>1</b>                                 | - | - | - | <b>3</b>                                 | - | <b>250</b> | <b>7</b>  | <b>11</b>                          | - | - | - | <b>5</b>                           | <b>9</b>  | <b>5</b> | - |                        |  |
| 8:45 AM   | 9:00 AM        | 4  | - | - | - | 3  | - | 257        | 3         | 9                                  | - | - | - | 8                                  | 10        | 1        | - |                        |  |
| Intersection PHV:   |                | 0    0    0                              |   |   |   | 0    985    28                           |   |            |           | 0    0    0                        |   |   |   | 42    14    0                      |           |          |   |                        |  |
| PHF:  |                | 0.00    0.00    0.00                     |   |   |   | 0.00    0.96    0.70                     |   |            |           | 0.00    0.00    0.00               |   |   |   | 0.88    0.70    0.00               |           |          |   |                        |  |
| Intersection Peak Hour: 8:00 AM - 9:00 AM   |                |  |   |   |   |  |   |            |           |                                    |   |   |   |                                    |           |          |   | Intersection PHF: 0.99 |  |
| Study Area PHV:   |                | 0    0    0                              |   |   |   | 0    942    30                           |   |            |           | 0    0    0                        |   |   |   | 41    18    0                      |           |          |   |                        |  |
| PHF:  |                | 0.00    0.00    0.00                     |   |   |   | 0.00    0.94    0.75                     |   |            |           | 0.00    0.00    0.00               |   |   |   | 0.85    0.90    0.00               |           |          |   |                        |  |
| Study Peak Hour: 7:45 AM - 8:45 AM  |                |  |   |   |   |  |   |            |           |                                    |   |   |   |                                    |           |          |   | Study Area PHF: 0.95   |  |
| 4:30 PM   | 4:45 PM        | 3  | - | - | - | 4  | - | 255        | 6         | 30                                 | - | - | - | 7                                  | 12        | 25       | - |                        |  |
| 4:45 PM   | 5:00 PM        | 2  | - | - | - | 1  | - | 228        | 7         | 18                                 | - | - | - | 7                                  | 15        | 25       | - |                        |  |
| 5:00 PM   | 5:15 PM        | 5  | - | - | - | 3  | - | 233        | 12        | 24                                 | - | - | - | 9                                  | 14        | 41       | - |                        |  |
| 5:15 PM   | 5:30 PM        | 5  | - | - | - | 3  | - | 217        | 14        | 9                                  | - | - | - | 9                                  | 16        | 46       | - |                        |  |
| 5:30 PM   | 5:45 PM        | 5  | - | - | - | 3  | - | 195        | 8         | 20                                 | - | - | - | 1                                  | 17        | 42       | - |                        |  |
| 5:45 PM   | 6:00 PM        | 2  | - | - | - | 5  | - | 274        | 11        | 24                                 | - | - | - | 4                                  | 12        | 26       | - |                        |  |
| 6:00 PM   | 6:15 PM        | 4  | - | - | - | 6  | - | 244        | 6         | 20                                 | - | - | - | 7                                  | 12        | 13       | - |                        |  |
| 6:15 PM   | 6:30 PM        | 7  | - | - | - | 0  | - | 204        | 9         | 17                                 | - | - | - | 6                                  | 17        | 14       | - |                        |  |
| Intersection PHV:   |                | 0    0    0                              |   |   |   | 0    919    45                           |   |            |           | 0    0    0                        |   |   |   | 59    155    0                     |           |          |   |                        |  |
| PHF:  |                | 0.00    0.00    0.00                     |   |   |   | 0.00    0.84    0.80                     |   |            |           | 0.00    0.00    0.00               |   |   |   | 0.87    0.84    0.00               |           |          |   |                        |  |
| Intersection Peak Hour: 5:00 PM - 6:00 PM   |                |  |   |   |   |  |   |            |           |                                    |   |   |   |                                    |           |          |   | Intersection PHF: 0.91 |  |
| Study Area PHV:   |                | 0    0    0                              |   |   |   | 0    933    39                           |   |            |           | 0    0    0                        |   |   |   | 57    137    0                     |           |          |   |                        |  |
| PHF:  |                | 0.00    0.00    0.00                     |   |   |   | 0.00    0.91    0.70                     |   |            |           | 0.00    0.00    0.00               |   |   |   | 0.89    0.74    0.00               |           |          |   |                        |  |
| Study Peak Hour: 4:30 PM - 5:30 PM  |                |  |   |   |   |  |   |            |           |                                    |   |   |   |                                    |           |          |   | Study Area PHF: 0.97   |  |
| Observations: <div style="text-align: right; margin-top: 100px;">  </div>  |                |  |   |   |   |  |   |            |           |                                    |   |   |   |                                    |           |          |   |                        |  |
| File: C2X3HRS - 4L&12Mv_Peds.XLS  |                |  |   |   |   |  |   |            |           |                                    |   |   |   |                                    |           |          |   |                        |  |

**Intersection Traffic Movements****DeShazo Group, Inc.**Location: **Lavaca Street at 18th Street**City/State: **Austin, Texas**Day/Date: **Tuesday, March 22, 2016**Project-ID #: **15206-22**Data Source: **CJ Hensch**Data Collector(s): **Camera**Weather Conditions: **Mild/Normal Conditions**Traffic Control: **Unsignalized**Description: **Minor-Street STOP Controlled**

| Time of Count     |                | Northbound on Lavaca Street |           |            |          | Southbound on Lavaca Street |          |          |          | Eastbound on 18th Street |          |          |          | Westbound on 18th Street |          |          |          |
|-------------------|----------------|-----------------------------|-----------|------------|----------|-----------------------------|----------|----------|----------|--------------------------|----------|----------|----------|--------------------------|----------|----------|----------|
| Begin             | End            | Peds                        | L         | T          | R        | Peds                        | L        | T        | R        | Peds                     | L        | T        | R        | Peds                     | L        | T        | R        |
| 7:00 AM           | 7:15 AM        | 2                           | 1         | 100        | -        | 0                           | -        | -        | -        | 0                        | -        | -        | -        | 3                        | -        | 5        | 3        |
| 7:15 AM           | 7:30 AM        | 3                           | 5         | 116        | -        | 0                           | -        | -        | -        | 2                        | -        | -        | -        | 6                        | -        | 5        | 5        |
| 7:30 AM           | 7:45 AM        | 4                           | 4         | 120        | -        | 5                           | -        | -        | -        | 2                        | -        | -        | -        | 9                        | -        | 4        | 2        |
| <b>7:45 AM</b>    | <b>8:00 AM</b> | <b>4</b>                    | <b>8</b>  | <b>140</b> | <b>-</b> | <b>2</b>                    | <b>-</b> | <b>-</b> | <b>-</b> | <b>8</b>                 | <b>-</b> | <b>-</b> | <b>-</b> | <b>3</b>                 | <b>-</b> | <b>4</b> | <b>4</b> |
| <b>8:00 AM</b>    | <b>8:15 AM</b> | <b>1</b>                    | <b>8</b>  | <b>128</b> | <b>-</b> | <b>3</b>                    | <b>-</b> | <b>-</b> | <b>-</b> | <b>3</b>                 | <b>-</b> | <b>-</b> | <b>-</b> | <b>4</b>                 | <b>-</b> | <b>8</b> | <b>5</b> |
| <b>8:15 AM</b>    | <b>8:30 AM</b> | <b>4</b>                    | <b>12</b> | <b>117</b> | <b>-</b> | <b>4</b>                    | <b>-</b> | <b>-</b> | <b>-</b> | <b>4</b>                 | <b>-</b> | <b>-</b> | <b>-</b> | <b>10</b>                | <b>-</b> | <b>3</b> | <b>5</b> |
| <b>8:30 AM</b>    | <b>8:45 AM</b> | <b>0</b>                    | <b>4</b>  | <b>126</b> | <b>-</b> | <b>9</b>                    | <b>-</b> | <b>-</b> | <b>-</b> | <b>10</b>                | <b>-</b> | <b>-</b> | <b>-</b> | <b>4</b>                 | <b>-</b> | <b>7</b> | <b>8</b> |
| 8:45 AM           | 9:00 AM        | 2                           | 7         | 106        | -        | 3                           | -        | -        | -        | 4                        | -        | -        | -        | 13                       | -        | 8        | 8        |
| Intersection PHV: |                | 32 511 0                    |           |            |          | 0 0 0                       |          |          |          | 0 0 0                    |          |          |          | 0 22 22                  |          |          |          |
| PHF:              |                | 0.67 0.91 0.00              |           |            |          | 0.00 0.00 0.00              |          |          |          | 0.00 0.00 0.00           |          |          |          | 0.00 0.69 0.69           |          |          |          |

Intersection Peak Hour: 7:45 AM - 8:45 AM

Intersection PHF: 0.94

|                 |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|
| Study Area PHV: | 32   | 511  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 22   | 22   |
| PHF:            | 0.67 | 0.91 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.69 | 0.69 |

Study Peak Hour: 7:45 AM - 8:45 AM

Study Area PHF: 0.94

|                   |                |                |           |            |          |                |          |          |          |                |          |          |          |                |          |           |           |
|-------------------|----------------|----------------|-----------|------------|----------|----------------|----------|----------|----------|----------------|----------|----------|----------|----------------|----------|-----------|-----------|
| <b>4:30 PM</b>    | <b>4:45 PM</b> | <b>7</b>       | <b>16</b> | <b>247</b> | <b>-</b> | <b>0</b>       | <b>-</b> | <b>-</b> | <b>-</b> | <b>9</b>       | <b>-</b> | <b>-</b> | <b>-</b> | <b>12</b>      | <b>-</b> | <b>18</b> | <b>8</b>  |
| <b>4:45 PM</b>    | <b>5:00 PM</b> | <b>7</b>       | <b>20</b> | <b>247</b> | <b>-</b> | <b>3</b>       | <b>-</b> | <b>-</b> | <b>-</b> | <b>11</b>      | <b>-</b> | <b>-</b> | <b>-</b> | <b>6</b>       | <b>-</b> | <b>19</b> | <b>8</b>  |
| <b>5:00 PM</b>    | <b>5:15 PM</b> | <b>3</b>       | <b>33</b> | <b>203</b> | <b>-</b> | <b>1</b>       | <b>-</b> | <b>-</b> | <b>-</b> | <b>10</b>      | <b>-</b> | <b>-</b> | <b>-</b> | <b>8</b>       | <b>-</b> | <b>24</b> | <b>11</b> |
| <b>5:15 PM</b>    | <b>5:30 PM</b> | <b>4</b>       | <b>44</b> | <b>203</b> | <b>-</b> | <b>2</b>       | <b>-</b> | <b>-</b> | <b>-</b> | <b>6</b>       | <b>-</b> | <b>-</b> | <b>-</b> | <b>9</b>       | <b>-</b> | <b>18</b> | <b>1</b>  |
| 5:30 PM           | 5:45 PM        | 0              | 37        | 164        | -        | 4              | -        | -        | -        | 7              | -        | -        | -        | 9              | -        | 20        | 3         |
| 5:45 PM           | 6:00 PM        | 1              | 23        | 215        | -        | 2              | -        | -        | -        | 11             | -        | -        | -        | 15             | -        | 17        | 8         |
| 6:00 PM           | 6:15 PM        | 10             | 15        | 212        | -        | 6              | -        | -        | -        | 13             | -        | -        | -        | 17             | -        | 11        | 8         |
| 6:15 PM           | 6:30 PM        | 3              | 18        | 190        | -        | 0              | -        | -        | -        | 4              | -        | -        | -        | 11             | -        | 12        | 8         |
| Intersection PHV: |                | 113 900 0      |           |            |          | 0 0 0          |          |          |          | 0 0 0          |          |          |          | 0 79 28        |          |           |           |
| PHF:              |                | 0.64 0.91 0.00 |           |            |          | 0.00 0.00 0.00 |          |          |          | 0.00 0.00 0.00 |          |          |          | 0.00 0.82 0.64 |          |           |           |

Intersection Peak Hour: 4:30 PM - 5:30 PM

Intersection PHF: 0.95

|                 |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|
| Study Area PHV: | 113  | 900  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 79   | 28   |
| PHF:            | 0.64 | 0.91 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.82 | 0.64 |


Study Peak Hour: 4:30 PM - 5:30 PM

Study Area PHF: 0.95


Observations:




File: C2X3HRS - 4L&amp;12Mv\_Peds.XLS


| Intersection Traffic Movements   |                |                               |          |          |          |                               |          |           |          |                          |          |          |          | DeShazo Group, Inc.      |          |          |          |
|--|----------------|-------------------------------|----------|----------|----------|-------------------------------|----------|-----------|----------|--------------------------|----------|----------|----------|--------------------------|----------|----------|----------|
| <div style="display: flex; justify-content: space-between;"> <div> Location: <b>Colorado Street at 18th Street</b><br/> City/State: <b>Austin, Texas</b><br/> Day/Date: <b>Tuesday, March 22, 2016</b><br/> Project-ID #: <b>15206-23</b><br/> Data Source: <b>CJ Hensch</b> </div> <div> Data Collector(s): <b>Camera</b><br/> Weather Conditions: <b>Mild/Normal Conditions</b><br/> Traffic Control: <b>Unsignalized</b><br/> Description: <b>All-Way STOP Controlled</b> </div> </div> |                |                               |          |          |          |                               |          |           |          |                          |          |          |          |                          |          |          |          |
| Time of Count  |                | Northbound on Colorado Street |          |          |          | Southbound on Colorado Street |          |           |          | Eastbound on 18th Street |          |          |          | Westbound on 18th Street |          |          |          |
| Begin  | End            | Peds                          | L        | T        | R        | Peds                          | L        | T         | R        | Peds                     | L        | T        | R        | Peds                     | L        | T        | R        |
| 7:00 AM  | 7:15 AM        | 5                             | 3        | 3        | -        | 6                             | -        | 42        | 2        | 5                        | -        | -        | -        | 8                        | 2        | 3        | 1        |
| 7:15 AM  | 7:30 AM        | 7                             | 2        | 3        | -        | 3                             | -        | 43        | 3        | 5                        | -        | -        | -        | 6                        | 6        | 1        | 3        |
| 7:30 AM  | 7:45 AM        | 8                             | 2        | 5        | -        | 11                            | -        | 47        | 3        | 12                       | -        | -        | -        | 6                        | 5        | 2        | 5        |
| <b>7:45 AM</b>   | <b>8:00 AM</b> | <b>5</b>                      | <b>2</b> | <b>8</b> | <b>-</b> | <b>13</b>                     | <b>-</b> | <b>46</b> | <b>5</b> | <b>4</b>                 | <b>-</b> | <b>-</b> | <b>-</b> | <b>14</b>                | <b>3</b> | <b>3</b> | <b>0</b> |
| <b>8:00 AM</b>   | <b>8:15 AM</b> | <b>2</b>                      | <b>3</b> | <b>6</b> | <b>-</b> | <b>2</b>                      | <b>-</b> | <b>58</b> | <b>3</b> | <b>0</b>                 | <b>-</b> | <b>-</b> | <b>-</b> | <b>1</b>                 | <b>6</b> | <b>3</b> | <b>1</b> |
| <b>8:15 AM</b>   | <b>8:30 AM</b> | <b>4</b>                      | <b>0</b> | <b>2</b> | <b>-</b> | <b>7</b>                      | <b>-</b> | <b>45</b> | <b>7</b> | <b>3</b>                 | <b>-</b> | <b>-</b> | <b>-</b> | <b>3</b>                 | <b>6</b> | <b>0</b> | <b>0</b> |
| <b>8:30 AM</b>   | <b>8:45 AM</b> | <b>1</b>                      | <b>7</b> | <b>7</b> | <b>-</b> | <b>10</b>                     | <b>-</b> | <b>46</b> | <b>4</b> | <b>2</b>                 | <b>-</b> | <b>-</b> | <b>-</b> | <b>2</b>                 | <b>5</b> | <b>4</b> | <b>2</b> |
| 8:45 AM  | 9:00 AM        | 4                             | 2        | 4        | -        | 5                             | -        | 40        | 7        | 1                        | -        | -        | -        | 2                        | 1        | 4        | 0        |
| Intersection PHV:  |                | 12 23 0                       |          |          |          | 0 195 19                      |          |           |          | 0 0 0                    |          |          |          | 20 10 3                  |          |          |          |
| PHF:   |                | 0.43 0.72 0.00                |          |          |          | 0.00 0.84 0.68                |          |           |          | 0.00 0.00 0.00           |          |          |          | 0.83 0.63 0.38           |          |          |          |
| Intersection Peak Hour: 7:45 AM - 8:45 AM  |                |                               |          |          |          |                               |          |           |          |                          |          |          |          |                          |          |          |          |
| Intersection PHF: 0.88   |                |                               |          |          |          |                               |          |           |          |                          |          |          |          |                          |          |          |          |
| Study Area PHV:  |                | 12 23 0                       |          |          |          | 0 195 19                      |          |           |          | 0 0 0                    |          |          |          | 20 10 3                  |          |          |          |
| PHF:   |                | 0.43 0.72 0.00                |          |          |          | 0.00 0.84 0.68                |          |           |          | 0.00 0.00 0.00           |          |          |          | 0.83 0.63 0.38           |          |          |          |
| Study Peak Hour: 7:45 AM - 8:45 AM   |                |                               |          |          |          |                               |          |           |          |                          |          |          |          |                          |          |          |          |
| Study Area PHF: 0.88   |                |                               |          |          |          |                               |          |           |          |                          |          |          |          |                          |          |          |          |
| 4:30 PM  | 4:45 PM        | 7                             | 7        | 30       | -        | 10                            | -        | 23        | 10       | 5                        | -        | -        | -        | 10                       | 14       | 16       | 6        |
| 4:45 PM  | 5:00 PM        | 1                             | 4        | 16       | -        | 10                            | -        | 11        | 4        | 3                        | -        | -        | -        | 9                        | 10       | 20       | 6        |
| 5:00 PM  | 5:15 PM        | 7                             | 11       | 21       | -        | 7                             | -        | 14        | 5        | 1                        | -        | -        | -        | 8                        | 8        | 22       | 4        |
| 5:15 PM  | 5:30 PM        | 1                             | 7        | 19       | -        | 4                             | -        | 15        | 5        | 3                        | -        | -        | -        | 2                        | 7        | 12       | 4        |
| 5:30 PM  | 5:45 PM        | 2                             | 11       | 27       | -        | 3                             | -        | 20        | 7        | 1                        | -        | -        | -        | 2                        | 8        | 12       | 5        |
| 5:45 PM  | 6:00 PM        | 0                             | 6        | 11       | -        | 3                             | -        | 11        | 8        | 3                        | -        | -        | -        | 1                        | 10       | 7        | 1        |
| 6:00 PM  | 6:15 PM        | 4                             | 5        | 14       | -        | 9                             | -        | 12        | 5        | 2                        | -        | -        | -        | 9                        | 5        | 8        | 8        |
| 6:15 PM  | 6:30 PM        | 1                             | 3        | 9        | -        | 3                             | -        | 8         | 9        | 2                        | -        | -        | -        | 3                        | 3        | 7        | 14       |
| Intersection PHV:  |                | 29 86 0                       |          |          |          | 0 63 24                       |          |           |          | 0 0 0                    |          |          |          | 39 70 20                 |          |          |          |
| PHF:   |                | 0.66 0.72 0.00                |          |          |          | 0.00 0.68 0.60                |          |           |          | 0.00 0.00 0.00           |          |          |          | 0.70 0.80 0.83           |          |          |          |
| Intersection Peak Hour: 4:30 PM - 5:30 PM  |                |                               |          |          |          |                               |          |           |          |                          |          |          |          |                          |          |          |          |
| Intersection PHF: 0.78   |                |                               |          |          |          |                               |          |           |          |                          |          |          |          |                          |          |          |          |
| Study Area PHV:  |                | 29 86 0                       |          |          |          | 0 63 24                       |          |           |          | 0 0 0                    |          |          |          | 39 70 20                 |          |          |          |
| PHF:   |                | 0.66 0.72 0.00                |          |          |          | 0.00 0.68 0.60                |          |           |          | 0.00 0.00 0.00           |          |          |          | 0.70 0.80 0.83           |          |          |          |
| Study Peak Hour: 4:30 PM - 5:30 PM   |                |                               |          |          |          |                               |          |           |          |                          |          |          |          |                          |          |          |          |
| Study Area PHF: 0.78   |                |                               |          |          |          |                               |          |           |          |                          |          |          |          |                          |          |          |          |
| Observations: <div style="text-align: right; margin-top: 50px;">  </div>  |                |                               |          |          |          |                               |          |           |          |                          |          |          |          |                          |          |          |          |
| File: C2X3HRS - 4L&12Mv_Peds.XLS   |                |                               |          |          |          |                               |          |           |          |                          |          |          |          |                          |          |          |          |

| Intersection Traffic Movements   |                |   |           |           |          |   |          |           |           |                                    |          |          |          | DeShazo Group, Inc.                |          |           |          |                        |  |  |  |
|--|----------------|---|-----------|-----------|----------|---|----------|-----------|-----------|------------------------------------|----------|----------|----------|------------------------------------|----------|-----------|----------|------------------------|--|--|--|
| <div style="display: flex; justify-content: space-between;"> <div>           Location: <b>Congress Avenue at 18th Street</b><br/>           City/State: <b>Austin, Texas</b><br/>           Day/Date: <b>Tuesday, March 22, 2016</b><br/>           Project-ID #: <b>15206-24</b><br/>           Data Source: <b>CJ Hensch</b> </div> <div>           Data Collector(s): <b>Camera</b><br/>           Weather Conditions: <b>Mild/Normal Conditions</b><br/>           Traffic Control: <b>Unsignalized</b><br/>           Description: <b>All-Way STOP Controlled</b> </div> </div> |                |   |           |           |          |   |          |           |           |                                    |          |          |          |                                    |          |           |          |                        |  |  |  |
| Time of Count  |                | Northbound on<br><i>Congress Avenue</i> |           |           |          | Southbound on<br><i>Congress Avenue</i> |          |           |           | Eastbound on<br><i>18th Street</i> |          |          |          | Westbound on<br><i>18th Street</i> |          |           |          |                        |  |  |  |
| Begin  | End            | Peds                                    | L         | T         | R        | Peds                                    | L        | T         | R         | Peds                               | L        | T        | R        | Peds                               | L        | T         | R        |                        |  |  |  |
| 7:00 AM  | 7:15 AM        | 1                                       | 4         | 13        | -        | 0                                       | -        | 14        | 7         | 4                                  | -        | -        | -        | 2                                  | 0        | 5         | 3        |                        |  |  |  |
| 7:15 AM  | 7:30 AM        | 12                                      | 8         | 17        | -        | 1                                       | -        | 13        | 13        | 7                                  | -        | -        | -        | 9                                  | 4        | 4         | 0        |                        |  |  |  |
| 7:30 AM  | 7:45 AM        | 2                                       | 17        | 18        | -        | 3                                       | -        | 19        | 17        | 9                                  | -        | -        | -        | 4                                  | 2        | 5         | 0        |                        |  |  |  |
| <b>7:45 AM</b>   | <b>8:00 AM</b> | <b>8</b>                                | <b>9</b>  | <b>16</b> | <b>-</b> | <b>1</b>                                | <b>-</b> | <b>19</b> | <b>23</b> | <b>10</b>                          | <b>-</b> | <b>-</b> | <b>-</b> | <b>1</b>                           | <b>1</b> | <b>6</b>  | <b>1</b> |                        |  |  |  |
| <b>8:00 AM</b>   | <b>8:15 AM</b> | <b>0</b>                                | <b>3</b>  | <b>16</b> | <b>-</b> | <b>0</b>                                | <b>-</b> | <b>13</b> | <b>12</b> | <b>9</b>                           | <b>-</b> | <b>-</b> | <b>-</b> | <b>1</b>                           | <b>0</b> | <b>3</b>  | <b>1</b> |                        |  |  |  |
| <b>8:15 AM</b>   | <b>8:30 AM</b> | <b>4</b>                                | <b>15</b> | <b>10</b> | <b>-</b> | <b>2</b>                                | <b>-</b> | <b>19</b> | <b>12</b> | <b>8</b>                           | <b>-</b> | <b>-</b> | <b>-</b> | <b>0</b>                           | <b>5</b> | <b>4</b>  | <b>2</b> |                        |  |  |  |
| <b>8:30 AM</b>   | <b>8:45 AM</b> | <b>1</b>                                | <b>16</b> | <b>11</b> | <b>-</b> | <b>3</b>                                | <b>-</b> | <b>19</b> | <b>16</b> | <b>4</b>                           | <b>-</b> | <b>-</b> | <b>-</b> | <b>1</b>                           | <b>4</b> | <b>10</b> | <b>1</b> |                        |  |  |  |
| 8:45 AM  | 9:00 AM        | 12                                      | 9         | 10        | -        | 1                                       | -        | 9         | 9         | 9                                  | -        | -        | -        | 2                                  | 3        | 4         | 1        |                        |  |  |  |
| Intersection PHV:  |                | 44 60 0                                 |           |           |          | 0 70 64                                 |          |           |           | 0 0 0                              |          |          |          | 8 18 4                             |          |           |          |                        |  |  |  |
| PHF:   |                | 0.65 0.83 0.00                          |           |           |          | 0.00 0.92 0.70                          |          |           |           | 0.00 0.00 0.00                     |          |          |          | 0.40 0.75 0.50                     |          |           |          |                        |  |  |  |
| Intersection Peak Hour: 7:30 AM - 8:30 AM  |                |   |           |           |          |   |          |           |           |                                    |          |          |          |                                    |          |           |          | Intersection PHF: 0.86 |  |  |  |
| Study Area PHV:  |                | 43 53 0                                 |           |           |          | 0 70 63                                 |          |           |           | 0 0 0                              |          |          |          | 10 23 5                            |          |           |          |                        |  |  |  |
| PHF:   |                | 0.67 0.83 0.00                          |           |           |          | 0.00 0.92 0.68                          |          |           |           | 0.00 0.00 0.00                     |          |          |          | 0.50 0.58 0.63                     |          |           |          |                        |  |  |  |
| Study Peak Hour: 7:45 AM - 8:45 AM   |                |   |           |           |          |   |          |           |           |                                    |          |          |          |                                    |          |           |          | Study Area PHF: 0.87   |  |  |  |
| 4:30 PM  | 4:45 PM        | 12                                      | 5         | 43        | -        | 4                                       | -        | 21        | 7         | 16                                 | -        | -        | -        | 13                                 | 32       | 13        | 30       |                        |  |  |  |
| 4:45 PM  | 5:00 PM        | 6                                       | 3         | 52        | -        | 2                                       | -        | 28        | 4         | 17                                 | -        | -        | -        | 5                                  | 13       | 13        | 16       |                        |  |  |  |
| 5:00 PM  | 5:15 PM        | 12                                      | 3         | 54        | -        | 1                                       | -        | 31        | 2         | 21                                 | -        | -        | -        | 10                                 | 25       | 14        | 36       |                        |  |  |  |
| 5:15 PM  | 5:30 PM        | 1                                       | 2         | 47        | -        | 3                                       | -        | 27        | 2         | 11                                 | -        | -        | -        | 2                                  | 7        | 10        | 26       |                        |  |  |  |
| 5:30 PM  | 5:45 PM        | 3                                       | 1         | 60        | -        | 3                                       | -        | 24        | 5         | 18                                 | -        | -        | -        | 8                                  | 8        | 11        | 17       |                        |  |  |  |
| 5:45 PM  | 6:00 PM        | 1                                       | 5         | 29        | -        | 2                                       | -        | 15        | 6         | 8                                  | -        | -        | -        | 5                                  | 9        | 4         | 2        |                        |  |  |  |
| 6:00 PM  | 6:15 PM        | 1                                       | 1         | 32        | -        | 5                                       | -        | 19        | 3         | 17                                 | -        | -        | -        | 3                                  | 6        | 4         | 6        |                        |  |  |  |
| 6:15 PM  | 6:30 PM        | 1                                       | 0         | 24        | -        | 1                                       | -        | 15        | 1         | 10                                 | -        | -        | -        | 1                                  | 8        | 2         | 7        |                        |  |  |  |
| Intersection PHV:  |                | 13 196 0                                |           |           |          | 0 107 15                                |          |           |           | 0 0 0                              |          |          |          | 77 50 108                          |          |           |          |                        |  |  |  |
| PHF:   |                | 0.65 0.91 0.00                          |           |           |          | 0.00 0.86 0.54                          |          |           |           | 0.00 0.00 0.00                     |          |          |          | 0.60 0.89 0.75                     |          |           |          |                        |  |  |  |
| Intersection Peak Hour: 4:30 PM - 5:30 PM  |                |   |           |           |          |   |          |           |           |                                    |          |          |          |                                    |          |           |          | Intersection PHF: 0.86 |  |  |  |
| Study Area PHV:  |                | 13 196 0                                |           |           |          | 0 107 15                                |          |           |           | 0 0 0                              |          |          |          | 77 50 108                          |          |           |          |                        |  |  |  |
| PHF:   |                | 0.65 0.91 0.00                          |           |           |          | 0.00 0.86 0.54                          |          |           |           | 0.00 0.00 0.00                     |          |          |          | 0.60 0.89 0.75                     |          |           |          |                        |  |  |  |
| Study Peak Hour: 4:30 PM - 5:30 PM   |                |   |           |           |          |   |          |           |           |                                    |          |          |          |                                    |          |           |          | Study Area PHF: 0.86   |  |  |  |
| Observations:  |                |   |           |           |          |   |          |           |           |                                    |          |          |          |                                    |          |           |          |                        |  |  |  |



File: C2X3HRS - 4L&12Mv\_Peds.XLS

| Intersection Traffic Movements   |                |                             |           |           |          |                             |          |           |           |                          |          |          |          | DeShazo Group, Inc.      |          |           |          |
|--|----------------|-----------------------------|-----------|-----------|----------|-----------------------------|----------|-----------|-----------|--------------------------|----------|----------|----------|--------------------------|----------|-----------|----------|
| <div style="display: flex; justify-content: space-between;"> <div>           Location: <b>Brazos Street at 18th Street</b><br/>           City/State: <b>Austin, Texas</b><br/>           Day/Date: <b>Tuesday, March 22, 2016</b><br/>           Project-ID #: <b>15206-25</b><br/>           Data Source: <b>CJ Hensch</b> </div> <div>           Data Collector(s): <b>Camera</b><br/>           Weather Conditions: <b>Mild/Normal Conditions</b><br/>           Traffic Control: <b>Unsignalized</b><br/>           Description: <b>All-Way STOP Controlled</b> </div> </div> |                |                             |           |           |          |                             |          |           |           |                          |          |          |          |                          |          |           |          |
| Time of Count  |                | Northbound on Brazos Street |           |           |          | Southbound on Brazos Street |          |           |           | Eastbound on 18th Street |          |          |          | Westbound on 18th Street |          |           |          |
| Begin  | End            | Peds                        | L         | T         | R        | Peds                        | L        | T         | R         | Peds                     | L        | T        | R        | Peds                     | L        | T         | R        |
| 7:00 AM  | 7:15 AM        | 7                           | 0         | 9         | -        | 1                           | -        | 31        | 6         | 7                        | -        | -        | -        | 5                        | 3        | 4         | 8        |
| 7:15 AM  | 7:30 AM        | 12                          | 1         | 9         | -        | 5                           | -        | 36        | 3         | 20                       | -        | -        | -        | 7                        | 3        | 5         | 5        |
| 7:30 AM  | 7:45 AM        | 4                           | 1         | 9         | -        | 2                           | -        | 25        | 3         | 16                       | -        | -        | -        | 4                        | 4        | 6         | 5        |
| <b>7:45 AM</b>   | <b>8:00 AM</b> | <b>7</b>                    | <b>1</b>  | <b>2</b>  | <b>-</b> | <b>1</b>                    | <b>-</b> | <b>76</b> | <b>4</b>  | <b>7</b>                 | <b>-</b> | <b>-</b> | <b>-</b> | <b>3</b>                 | <b>3</b> | <b>4</b>  | <b>3</b> |
| <b>8:00 AM</b>   | <b>8:15 AM</b> | <b>7</b>                    | <b>1</b>  | <b>6</b>  | <b>-</b> | <b>2</b>                    | <b>-</b> | <b>51</b> | <b>3</b>  | <b>1</b>                 | <b>-</b> | <b>-</b> | <b>-</b> | <b>2</b>                 | <b>6</b> | <b>4</b>  | <b>2</b> |
| <b>8:15 AM</b>   | <b>8:30 AM</b> | <b>14</b>                   | <b>4</b>  | <b>3</b>  | <b>-</b> | <b>3</b>                    | <b>-</b> | <b>49</b> | <b>6</b>  | <b>1</b>                 | <b>-</b> | <b>-</b> | <b>-</b> | <b>10</b>                | <b>3</b> | <b>2</b>  | <b>1</b> |
| <b>8:30 AM</b>   | <b>8:45 AM</b> | <b>10</b>                   | <b>2</b>  | <b>4</b>  | <b>-</b> | <b>0</b>                    | <b>-</b> | <b>39</b> | <b>3</b>  | <b>4</b>                 | <b>-</b> | <b>-</b> | <b>-</b> | <b>7</b>                 | <b>4</b> | <b>8</b>  | <b>1</b> |
| 8:45 AM  | 9:00 AM        | 8                           | 4         | 8         | -        | 0                           | -        | 30        | 2         | 5                        | -        | -        | -        | 5                        | 0        | 3         | 1        |
| Intersection PHV:  |                | 8    15    0                |           |           |          | 0    215    16              |          |           |           | 0    0    0              |          |          |          | 16    18    7            |          |           |          |
| PHF:   |                | 0.50    0.63    0.00        |           |           |          | 0.00    0.71    0.67        |          |           |           | 0.00    0.00    0.00     |          |          |          | 0.67    0.56    0.58     |          |           |          |
| Intersection Peak Hour: 7:45 AM - 8:45 AM  |                |                             |           |           |          |                             |          |           |           |                          |          |          |          |                          |          |           |          |
| Intersection PHF: 0.79   |                |                             |           |           |          |                             |          |           |           |                          |          |          |          |                          |          |           |          |
| Study Area PHV:  |                | 8    15    0                |           |           |          | 0    215    16              |          |           |           | 0    0    0              |          |          |          | 16    18    7            |          |           |          |
| PHF:   |                | 0.50    0.63    0.00        |           |           |          | 0.00    0.71    0.67        |          |           |           | 0.00    0.00    0.00     |          |          |          | 0.67    0.56    0.58     |          |           |          |
| Study Peak Hour: 7:45 AM - 8:45 AM   |                |                             |           |           |          |                             |          |           |           |                          |          |          |          |                          |          |           |          |
| Study Area PHF: 0.79   |                |                             |           |           |          |                             |          |           |           |                          |          |          |          |                          |          |           |          |
| <b>4:30 PM</b>   | <b>4:45 PM</b> | <b>8</b>                    | <b>41</b> | <b>38</b> | <b>-</b> | <b>1</b>                    | <b>-</b> | <b>16</b> | <b>27</b> | <b>6</b>                 | <b>-</b> | <b>-</b> | <b>-</b> | <b>5</b>                 | <b>1</b> | <b>10</b> | <b>3</b> |
| <b>4:45 PM</b>   | <b>5:00 PM</b> | <b>4</b>                    | <b>19</b> | <b>30</b> | <b>-</b> | <b>2</b>                    | <b>-</b> | <b>15</b> | <b>11</b> | <b>9</b>                 | <b>-</b> | <b>-</b> | <b>-</b> | <b>2</b>                 | <b>4</b> | <b>10</b> | <b>4</b> |
| <b>5:00 PM</b>   | <b>5:15 PM</b> | <b>8</b>                    | <b>50</b> | <b>40</b> | <b>-</b> | <b>3</b>                    | <b>-</b> | <b>14</b> | <b>19</b> | <b>8</b>                 | <b>-</b> | <b>-</b> | <b>-</b> | <b>7</b>                 | <b>3</b> | <b>7</b>  | <b>0</b> |
| <b>5:15 PM</b>   | <b>5:30 PM</b> | <b>3</b>                    | <b>23</b> | <b>46</b> | <b>-</b> | <b>2</b>                    | <b>-</b> | <b>9</b>  | <b>7</b>  | <b>1</b>                 | <b>-</b> | <b>-</b> | <b>-</b> | <b>0</b>                 | <b>2</b> | <b>10</b> | <b>8</b> |
| 5:30 PM  | 5:45 PM        | 4                           | 21        | 49        | -        | 1                           | -        | 3         | 8         | 2                        | -        | -        | -        | 1                        | 0        | 7         | 2        |
| 5:45 PM  | 6:00 PM        | 1                           | 12        | 32        | -        | 0                           | -        | 6         | 3         | 1                        | -        | -        | -        | 0                        | 1        | 3         | 3        |
| 6:00 PM  | 6:15 PM        | 1                           | 11        | 22        | -        | 1                           | -        | 2         | 4         | 2                        | -        | -        | -        | 0                        | 3        | 0         | 0        |
| 6:15 PM  | 6:30 PM        | 0                           | 6         | 19        | -        | 0                           | -        | 0         | 4         | 0                        | -        | -        | -        | 0                        | 0        | 2         | 1        |
| Intersection PHV:  |                | 133    154    0             |           |           |          | 0    54    64               |          |           |           | 0    0    0              |          |          |          | 10    37    15           |          |           |          |
| PHF:   |                | 0.67    0.84    0.00        |           |           |          | 0.00    0.84    0.59        |          |           |           | 0.00    0.00    0.00     |          |          |          | 0.63    0.93    0.47     |          |           |          |
| Intersection Peak Hour: 4:30 PM - 5:30 PM  |                |                             |           |           |          |                             |          |           |           |                          |          |          |          |                          |          |           |          |
| Intersection PHF: 0.86   |                |                             |           |           |          |                             |          |           |           |                          |          |          |          |                          |          |           |          |
| Study Area PHV:  |                | 133    154    0             |           |           |          | 0    54    64               |          |           |           | 0    0    0              |          |          |          | 10    37    15           |          |           |          |
| PHF:   |                | 0.67    0.84    0.00        |           |           |          | 0.00    0.84    0.59        |          |           |           | 0.00    0.00    0.00     |          |          |          | 0.63    0.93    0.47     |          |           |          |
| Study Peak Hour: 4:30 PM - 5:30 PM   |                |                             |           |           |          |                             |          |           |           |                          |          |          |          |                          |          |           |          |
| Study Area PHF: 0.86   |                |                             |           |           |          |                             |          |           |           |                          |          |          |          |                          |          |           |          |
| Observations: <div style="text-align: right; margin-top: 50px;">  </div>  |                |                             |           |           |          |                             |          |           |           |                          |          |          |          |                          |          |           |          |
| File: C2X3HRS - 4L&12Mv_Peds.XLS   |                |                             |           |           |          |                             |          |           |           |                          |          |          |          |                          |          |           |          |

| Intersection Traffic Movements   |         |   |   |   |   |   |   |     |   |                                    |   |   |   | DeShazo Group, Inc.                |    |    |   |
|--|---------|---|---|---|---|---|---|-----|---|------------------------------------|---|---|---|------------------------------------|----|----|---|
| <div style="display: flex; justify-content: space-between;"> <div> Location: <b>San Jacinto Boulevard at 18th Street</b><br/> City/State: <b>Austin, Texas</b><br/> Day/Date: <b>Tuesday, March 22, 2016</b><br/> Project-ID #: <b>15206-26</b><br/> Data Source: <b>CJ Hensch</b> </div> <div> Data Collector(s): <b>Camera</b><br/> Weather Conditions: <b>Mild/Normal Conditions</b><br/> Traffic Control: <b>Unsignalized</b><br/> Description: <b>All-Way STOP Controlled</b> </div> </div> |         |   |   |   |   |   |   |     |   |                                    |   |   |   |                                    |    |    |   |
| Time of Count  |         | Northbound on<br><i>San Jacinto Blvd.</i> |   |   |   | Southbound on<br><i>San Jacinto Blvd.</i> |   |     |   | Eastbound on<br><i>18th Street</i> |   |   |   | Westbound on<br><i>18th Street</i> |    |    |   |
| Begin  | End     | Peds                                      | L | T | R | Peds                                      | L | T   | R | Peds                               | L | T | R | Peds                               | L  | T  | R |
| 7:00 AM  | 7:15 AM | 3   | - | - | - | 1   | - | 104 | 6 | 12                                 | - | - | - | 1                                  | 24 | 9  | - |
| 7:15 AM  | 7:30 AM | 19  | - | - | - | 7   | - | 114 | 2 | 9                                  | - | - | - | 6                                  | 41 | 12 | - |
| 7:30 AM  | 7:45 AM | 4   | - | - | - | 1   | - | 122 | 5 | 4                                  | - | - | - | 3                                  | 28 | 12 | - |
| 7:45 AM  | 8:00 AM | 12  | - | - | - | 3   | - | 126 | 2 | 9                                  | - | - | - | 0                                  | 41 | 7  | - |
| 8:00 AM  | 8:15 AM | 8   | - | - | - | 12  | - | 137 | 5 | 4                                  | - | - | - | 2                                  | 36 | 8  | - |
| 8:15 AM  | 8:30 AM | 21  | - | - | - | 7   | - | 134 | 4 | 3                                  | - | - | - | 4                                  | 37 | 6  | - |
| 8:30 AM  | 8:45 AM | 16  | - | - | - | 3   | - | 114 | 5 | 8                                  | - | - | - | 0                                  | 21 | 13 | - |
| 8:45 AM  | 9:00 AM | 10  | - | - | - | 1   | - | 123 | 1 | 14                                 | - | - | - | 1                                  | 27 | 5  | - |
| Intersection PHV:  |         | 0 0 0                                     |   |   |   | 0 519 16                                  |   |     |   | 0 0 0                              |   |   |   | 142 33 0                           |    |    |   |
| PHF:   |         | 0.00 0.00 0.00                            |   |   |   | 0.00 0.95 0.80                            |   |     |   | 0.00 0.00 0.00                     |   |   |   | 0.87 0.69 0.00                     |    |    |   |
| Intersection Peak Hour: 7:30 AM - 8:30 AM  |         |   |   |   |   |   |   |     |   |                                    |   |   |   |                                    |    |    |   |
| Intersection PHF: 0.95   |         |   |   |   |   |   |   |     |   |                                    |   |   |   |                                    |    |    |   |
| Study Area PHV:  |         | 0 0 0                                     |   |   |   | 0 511 16                                  |   |     |   | 0 0 0                              |   |   |   | 135 34 0                           |    |    |   |
| PHF:   |         | 0.00 0.00 0.00                            |   |   |   | 0.00 0.93 0.80                            |   |     |   | 0.00 0.00 0.00                     |   |   |   | 0.82 0.65 0.00                     |    |    |   |
| Study Peak Hour: 7:45 AM - 8:45 AM   |         |   |   |   |   |   |   |     |   |                                    |   |   |   |                                    |    |    |   |
| Study Area PHF: 0.94   |         |   |   |   |   |   |   |     |   |                                    |   |   |   |                                    |    |    |   |
| 4:30 PM  | 4:45 PM | 11  | - | - | - | 2   | - | 119 | 6 | 4                                  | - | - | - | 6                                  | 16 | 9  | - |
| 4:45 PM  | 5:00 PM | 5   | - | - | - | 6   | - | 127 | 3 | 14                                 | - | - | - | 2                                  | 8  | 14 | - |
| 5:00 PM  | 5:15 PM | 10  | - | - | - | 9   | - | 115 | 0 | 9                                  | - | - | - | 10                                 | 27 | 7  | - |
| 5:15 PM  | 5:30 PM | 1   | - | - | - | 0   | - | 126 | 3 | 5                                  | - | - | - | 2                                  | 17 | 14 | - |
| 5:30 PM  | 5:45 PM | 3   | - | - | - | 2   | - | 120 | 1 | 9                                  | - | - | - | 7                                  | 15 | 8  | - |
| 5:45 PM  | 6:00 PM | 3   | - | - | - | 4   | - | 113 | 3 | 9                                  | - | - | - | 2                                  | 10 | 6  | - |
| 6:00 PM  | 6:15 PM | 1   | - | - | - | 0   | - | 94  | 0 | 4                                  | - | - | - | 7                                  | 9  | 1  | - |
| 6:15 PM  | 6:30 PM | 2   | - | - | - | 1   | - | 106 | 3 | 6                                  | - | - | - | 3                                  | 11 | 2  | - |
| Intersection PHV:  |         | 0 0 0                                     |   |   |   | 0 487 12                                  |   |     |   | 0 0 0                              |   |   |   | 68 44 0                            |    |    |   |
| PHF:   |         | 0.00 0.00 0.00                            |   |   |   | 0.00 0.96 0.50                            |   |     |   | 0.00 0.00 0.00                     |   |   |   | 0.63 0.79 0.00                     |    |    |   |
| Intersection Peak Hour: 4:30 PM - 5:30 PM  |         |   |   |   |   |   |   |     |   |                                    |   |   |   |                                    |    |    |   |
| Intersection PHF: 0.95   |         |   |   |   |   |   |   |     |   |                                    |   |   |   |                                    |    |    |   |
| Study Area PHV:  |         | 0 0 0                                     |   |   |   | 0 487 12                                  |   |     |   | 0 0 0                              |   |   |   | 68 44 0                            |    |    |   |
| PHF:   |         | 0.00 0.00 0.00                            |   |   |   | 0.00 0.96 0.50                            |   |     |   | 0.00 0.00 0.00                     |   |   |   | 0.63 0.79 0.00                     |    |    |   |
| Study Peak Hour: 4:30 PM - 5:30 PM   |         |   |   |   |   |   |   |     |   |                                    |   |   |   |                                    |    |    |   |
| Study Area PHF: 0.95   |         |   |   |   |   |   |   |     |   |                                    |   |   |   |                                    |    |    |   |
| Observations: <div style="text-align: right; margin-top: 50px;">  </div>  |         |   |   |   |   |   |   |     |   |                                    |   |   |   |                                    |    |    |   |
| File: C2X3HRS - 4L&12Mv_Peds.XLS   |         |   |   |   |   |   |   |     |   |                                    |   |   |   |                                    |    |    |   |

**Intersection Traffic Movements****DeShazo Group, Inc.**Location: **Trinity Street at 18th Street**City/State: **Austin, Texas**Day/Date: **Tuesday, March 22, 2016**Project-ID #: **15206-27**Data Source: **CJ Hensch**Data Collector(s): **Camera**Weather Conditions: **Mild/Normal Conditions**Traffic Control: **Unsignalized**Description: **Minor-Street STOP Controlled**

| Time of Count     |                | Northbound on Trinity Street |           |           |          | Southbound on Trinity Street |          |          |          | Eastbound on 18th Street |          |          |          | Westbound on 18th Street |          |          |          |
|-------------------|----------------|------------------------------|-----------|-----------|----------|------------------------------|----------|----------|----------|--------------------------|----------|----------|----------|--------------------------|----------|----------|----------|
| Begin             | End            | Peds                         | L         | T         | R        | Peds                         | L        | T        | R        | Peds                     | L        | T        | R        | Peds                     | L        | T        | R        |
| 7:00 AM           | 7:15 AM        | 0                            | 31        | 43        | -        | 0                            | -        | -        | -        | 2                        | -        | -        | -        | -                        | -        | -        | -        |
| 7:15 AM           | 7:30 AM        | 1                            | 55        | 50        | -        | 0                            | -        | -        | -        | 0                        | -        | -        | -        | -                        | -        | -        | -        |
| 7:30 AM           | 7:45 AM        | 0                            | 43        | 62        | -        | 4                            | -        | -        | -        | 1                        | -        | -        | -        | -                        | -        | -        | -        |
| <b>7:45 AM</b>    | <b>8:00 AM</b> | <b>0</b>                     | <b>54</b> | <b>58</b> | <b>-</b> | <b>0</b>                     | <b>-</b> | <b>-</b> | <b>-</b> | <b>2</b>                 | <b>-</b> | <b>-</b> | <b>-</b> | <b>-</b>                 | <b>-</b> | <b>-</b> | <b>-</b> |
| <b>8:00 AM</b>    | <b>8:15 AM</b> | <b>0</b>                     | <b>44</b> | <b>64</b> | <b>-</b> | <b>0</b>                     | <b>-</b> | <b>-</b> | <b>-</b> | <b>3</b>                 | <b>-</b> | <b>-</b> | <b>-</b> | <b>-</b>                 | <b>-</b> | <b>-</b> | <b>-</b> |
| <b>8:15 AM</b>    | <b>8:30 AM</b> | <b>0</b>                     | <b>44</b> | <b>45</b> | <b>-</b> | <b>2</b>                     | <b>-</b> | <b>-</b> | <b>-</b> | <b>0</b>                 | <b>-</b> | <b>-</b> | <b>-</b> | <b>-</b>                 | <b>-</b> | <b>-</b> | <b>-</b> |
| <b>8:30 AM</b>    | <b>8:45 AM</b> | <b>0</b>                     | <b>34</b> | <b>49</b> | <b>-</b> | <b>5</b>                     | <b>-</b> | <b>-</b> | <b>-</b> | <b>4</b>                 | <b>-</b> | <b>-</b> | <b>-</b> | <b>-</b>                 | <b>-</b> | <b>-</b> | <b>-</b> |
| 8:45 AM           | 9:00 AM        | 1                            | 29        | 73        | -        | 9                            | -        | -        | -        | 7                        | -        | -        | -        | -                        | -        | -        | -        |
| Intersection PHV: |                | 196 234 0                    |           |           |          | 0 0 0                        |          |          |          | 0 0 0                    |          |          |          | 0 0 0                    |          |          |          |
| PHF:              |                | 0.89 0.91 0.00               |           |           |          | 0.00 0.00 0.00               |          |          |          | 0.00 0.00 0.00           |          |          |          | 0.00 0.00 0.00           |          |          |          |

Intersection Peak Hour: 7:15 AM - 8:15 AM

Intersection PHF: 0.96

|                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Study Area PHV: | 176  | 216  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PHF:            | 0.81 | 0.84 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Study Peak Hour: 7:45 AM - 8:45 AM

Study Area PHF: 0.88

|                   |                |                |           |            |          |                |          |          |          |                |          |          |          |                |          |          |          |
|-------------------|----------------|----------------|-----------|------------|----------|----------------|----------|----------|----------|----------------|----------|----------|----------|----------------|----------|----------|----------|
| <b>4:30 PM</b>    | <b>4:45 PM</b> | <b>1</b>       | <b>25</b> | <b>132</b> | <b>-</b> | <b>6</b>       | <b>-</b> | <b>-</b> | <b>-</b> | <b>8</b>       | <b>-</b> | <b>-</b> | <b>-</b> | <b>-</b>       | <b>-</b> | <b>-</b> | <b>-</b> |
| <b>4:45 PM</b>    | <b>5:00 PM</b> | <b>0</b>       | <b>25</b> | <b>138</b> | <b>-</b> | <b>2</b>       | <b>-</b> | <b>-</b> | <b>-</b> | <b>5</b>       | <b>-</b> | <b>-</b> | <b>-</b> | <b>-</b>       | <b>-</b> | <b>-</b> | <b>-</b> |
| <b>5:00 PM</b>    | <b>5:15 PM</b> | <b>0</b>       | <b>39</b> | <b>156</b> | <b>-</b> | <b>0</b>       | <b>-</b> | <b>-</b> | <b>-</b> | <b>10</b>      | <b>-</b> | <b>-</b> | <b>-</b> | <b>-</b>       | <b>-</b> | <b>-</b> | <b>-</b> |
| <b>5:15 PM</b>    | <b>5:30 PM</b> | <b>1</b>       | <b>46</b> | <b>167</b> | <b>-</b> | <b>2</b>       | <b>-</b> | <b>-</b> | <b>-</b> | <b>4</b>       | <b>-</b> | <b>-</b> | <b>-</b> | <b>-</b>       | <b>-</b> | <b>-</b> | <b>-</b> |
| 5:30 PM           | 5:45 PM        | 0              | 25        | 155        | -        | 2              | -        | -        | -        | 3              | -        | -        | -        | -              | -        | -        | -        |
| 5:45 PM           | 6:00 PM        | 1              | 21        | 126        | -        | 2              | -        | -        | -        | 2              | -        | -        | -        | -              | -        | -        | -        |
| 6:00 PM           | 6:15 PM        | 0              | 11        | 98         | -        | 0              | -        | -        | -        | 3              | -        | -        | -        | -              | -        | -        | -        |
| 6:15 PM           | 6:30 PM        | 0              | 9         | 55         | -        | 3              | -        | -        | -        | 4              | -        | -        | -        | -              | -        | -        | -        |
| Intersection PHV: |                | 135 616 0      |           |            |          | 0 0 0          |          |          |          | 0 0 0          |          |          |          | 0 0 0          |          |          |          |
| PHF:              |                | 0.73 0.92 0.00 |           |            |          | 0.00 0.00 0.00 |          |          |          | 0.00 0.00 0.00 |          |          |          | 0.00 0.00 0.00 |          |          |          |

Intersection Peak Hour: 4:45 PM - 5:45 PM

Intersection PHF: 0.88

|                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Study Area PHV: | 135  | 593  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| PHF:            | 0.73 | 0.89 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Study Peak Hour: 4:30 PM - 5:30 PM

Study Area PHF: 0.85

Observations:



File: C2X3HRS - 4L&amp;12Mv\_Peds.XLS

### Intersection Traffic Movements

*DeShazo Group, Inc.*

Location: ***Guadalupe Street at Martin Luther King Jr Boulevard***

City/State: **Austin, Texas**Data Collector(s): **Camera**Day/Date: **Tuesday, March 22, 2016**Weather Conditions: **Mild/Normal Conditions**Project-ID #: **15206-28**

Traffic Control: **Signalized**

Data Source: **CJ Hensch**

| Time of Count     |         | Northbound on<br><i>Guadalupe Street</i> |   |   |   | Southbound on<br><i>Guadalupe Street</i> |    |     |    | Eastbound on<br><i>MLK Jr Blvd.</i> |    |     |    | Westbound on<br><i>MLK Jr Blvd.</i> |   |     |    |
|-------------------|---------|--|---|---|---|--|----|-----|----|-------------------------------------|----|-----|----|-------------------------------------|---|-----|----|
| Begin             | End     | Peds                                     | L | T | R | Peds                                     | L  | T   | R  | Peds                                | L  | T   | R  | Peds                                | L | T   | R  |
| 7:00 AM           | 7:15 AM | 0  | - | - | - | 1  | 43 | 48  | 7  | 0                                   | 10 | 154 | 17 | 1                                   | 0 | 94  | 44 |
| 7:15 AM           | 7:30 AM | 4  | - | - | - | 6  | 44 | 81  | 13 | 4                                   | 10 | 178 | 36 | 10                                  | 0 | 112 | 55 |
| 7:30 AM           | 7:45 AM | 4  | - | - | - | 2  | 57 | 104 | 18 | 7                                   | 14 | 160 | 22 | 9                                   | 0 | 130 | 54 |
| 7:45 AM           | 8:00 AM | 4  | - | - | - | 2  | 56 | 123 | 29 | 5                                   | 13 | 239 | 40 | 8                                   | 0 | 134 | 73 |
| 8:00 AM           | 8:15 AM | 6  | - | - | - | 0  | 60 | 161 | 31 | 11                                  | 17 | 148 | 37 | 8                                   | 0 | 106 | 76 |
| 8:15 AM           | 8:30 AM | 4  | - | - | - | 0  | 52 | 176 | 31 | 5                                   | 21 | 146 | 37 | 5                                   | 1 | 107 | 63 |
| 8:30 AM           | 8:45 AM | 7  | - | - | - | 0  | 56 | 194 | 33 | 12                                  | 12 | 137 | 38 | 14                                  | 0 | 132 | 87 |
| 8:45 AM           | 9:00 AM | 7  | - | - | - | 0  | 51 | 171 | 30 | 7                                   | 15 | 138 | 43 | 9                                   | 1 | 162 | 77 |
| Intersection PHV: |         | 00                                       |   |   |   | 224                                      |    |     |    | 63                                  |    |     |    | 1                                   |   |     |    |
| PHF:              |         | 0.00                                     |   |   |   | 0.93                                     |    |     |    | 0.75                                |    |     |    | 0.25                                |   |     |    |

Intersection Peak Hour: 7:45 AM - 8:45 AM

Intersection PHF: 0.94

|                        |      |      |      |      |      |      |      |      |      |      |      |      |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| <b>Study Area PHV:</b> | 0    | 0    | 0    | 224  | 654  | 124  | 63   | 670  | 152  | 1    | 479  | 299  |
| <b>PHF:</b>            | 0.00 | 0.00 | 0.00 | 0.93 | 0.84 | 0.94 | 0.75 | 0.70 | 0.95 | 0.25 | 0.89 | 0.86 |

**Study Peak Hour: 7:45 AM - 8:45 AM**

Study Area PHF: 0.94

|                   |                |           |          |          |          |           |           |            |           |           |           |            |           |           |          |            |            |
|-------------------|----------------|-----------|----------|----------|----------|-----------|-----------|------------|-----------|-----------|-----------|------------|-----------|-----------|----------|------------|------------|
| <b>4:30 PM</b>    | <b>4:45 PM</b> | <b>5</b>  | <b>-</b> | <b>-</b> | <b>-</b> | <b>12</b> | <b>48</b> | <b>147</b> | <b>62</b> | <b>26</b> | <b>34</b> | <b>75</b>  | <b>24</b> | <b>8</b>  | <b>0</b> | <b>206</b> | <b>168</b> |
| <b>4:45 PM</b>    | <b>5:00 PM</b> | <b>3</b>  | <b>-</b> | <b>-</b> | <b>-</b> | <b>13</b> | <b>41</b> | <b>150</b> | <b>54</b> | <b>21</b> | <b>37</b> | <b>115</b> | <b>15</b> | <b>12</b> | <b>0</b> | <b>231</b> | <b>173</b> |
| <b>5:00 PM</b>    | <b>5:15 PM</b> | <b>3</b>  | <b>-</b> | <b>-</b> | <b>-</b> | <b>5</b>  | <b>51</b> | <b>162</b> | <b>60</b> | <b>31</b> | <b>39</b> | <b>90</b>  | <b>26</b> | <b>10</b> | <b>3</b> | <b>257</b> | <b>137</b> |
| <b>5:15 PM</b>    | <b>5:30 PM</b> | <b>11</b> | <b>-</b> | <b>-</b> | <b>-</b> | <b>10</b> | <b>30</b> | <b>136</b> | <b>43</b> | <b>18</b> | <b>33</b> | <b>58</b>  | <b>30</b> | <b>14</b> | <b>1</b> | <b>238</b> | <b>118</b> |
| 5:30 PM           | 5:45 PM        | 10        | -        | -        | -        | 9         | 39        | 116        | 37        | 24        | 31        | 119        | 26        | 9         | 2        | 244        | 135        |
| 5:45 PM           | 6:00 PM        | 11        | -        | -        | -        | 10        | 78        | 162        | 46        | 40        | 46        | 101        | 36        | 16        | 0        | 197        | 148        |
| 6:00 PM           | 6:15 PM        | 7         | -        | -        | -        | 3         | 83        | 151        | 47        | 33        | 34        | 111        | 36        | 12        | 1        | 176        | 122        |
| 6:15 PM           | 6:30 PM        | 14        | -        | -        | -        | 9         | 65        | 123        | 34        | 27        | 21        | 117        | 34        | 10        | 0        | 180        | 116        |
| Intersection PHV: |                | 0         |          |          |          | 170       |           |            |           | 143       |           |            |           | 4         |          |            |            |
| PHF:              |                | 0.00      |          |          |          | 0.83      |           |            |           | 0.92      |           |            |           | 0.33      |          |            |            |
|                   |                | 0.00      |          |          |          | 0.92      |           |            |           | 0.73      |           |            |           | 0.91      |          |            |            |

Intersection Peak Hour: 4:30 PM - 5:30 PM

Intersection PHF: 0.94

|                 |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Study Area PHV: | 0    | 0    | 0    | 170  | 595  | 219  | 143  | 338  | 95   | 4    | 932  | 596  |
| PHF:            | 0.00 | 0.00 | 0.00 | 0.83 | 0.92 | 0.88 | 0.92 | 0.73 | 0.79 | 0.33 | 0.91 | 0.86 |

**Study Peak Hour: 4:30 PM - 5:30 PM**

Study Area PHF: 0.94

Observations:



## Intersection Traffic Movements

DeShazo Group, Inc.

Location: **Lavaca Street at Marting Luther King Jr Boulevard**City/State: **Austin, Texas**Day/Date: **Tuesday, March 22, 2016**Project-ID #: **15206-29**Data Source: **CJ Hensch**Data Collector(s): **Camera**Weather Conditions: **Mild/Normal Conditions**Traffic Control: **Signalized**

| Time of Count     |         | Northbound on Lavaca Street |    |   |    | Southbound on Lavaca Street |   |   |   | Eastbound on MLK Jr Blvd. |   |     |   | Westbound on MLK Jr Blvd. |   |     |   |
|-------------------|---------|-----------------------------|----|---|----|-----------------------------|---|---|---|---------------------------|---|-----|---|---------------------------|---|-----|---|
| Begin             | End     | Peds                        | L  | T | R  | Peds                        | L | T | R | Peds                      | L | T   | R | Peds                      | L | T   | R |
| 7:00 AM           | 7:15 AM | 2                           | 58 | - | 47 | -                           | - | - | - | -                         | - | 191 | - | 5                         | - | 108 | - |
| 7:15 AM           | 7:30 AM | 1                           | 63 | - | 52 | -                           | - | - | - | -                         | - | 217 | - | 9                         | - | 135 | - |
| 7:30 AM           | 7:45 AM | 1                           | 75 | - | 52 | -                           | - | - | - | -                         | - | 224 | - | 13                        | - | 156 | - |
| 7:45 AM           | 8:00 AM | 6                           | 73 | - | 65 | -                           | - | - | - | -                         | - | 289 | - | 14                        | - | 175 | - |
| 8:00 AM           | 8:15 AM | 1                           | 80 | - | 66 | -                           | - | - | - | -                         | - | 217 | - | 12                        | - | 166 | - |
| 8:15 AM           | 8:30 AM | 1                           | 61 | - | 41 | -                           | - | - | - | -                         | - | 198 | - | 12                        | - | 154 | - |
| 8:30 AM           | 8:45 AM | 3                           | 95 | - | 38 | -                           | - | - | - | -                         | - | 193 | - | 9                         | - | 170 | - |
| 8:45 AM           | 9:00 AM | 5                           | 72 | - | 38 | -                           | - | - | - | -                         | - | 191 | - | 19                        | - | 193 | - |
| Intersection PHV: |         | 291 0 235                   |    |   |    | 0 0 0                       |   |   |   | 0 947 0                   |   |     |   | 0 632 0                   |   |     |   |
| PHF:              |         | 0.91 0.00 0.89              |    |   |    | 0.00 0.00 0.00              |   |   |   | 0.00 0.82 0.00            |   |     |   | 0.00 0.90 0.00            |   |     |   |

Intersection Peak Hour: 7:15 AM - 8:15 AM

Intersection PHF: 0.87

|                 |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Study Area PHV: | 309  | 0    | 210  | 0    | 0    | 0    | 0    | 897  | 0    | 0    | 665  | 0    |
| PHF:            | 0.81 | 0.00 | 0.80 | 0.00 | 0.00 | 0.00 | 0.00 | 0.78 | 0.00 | 0.00 | 0.95 | 0.00 |

Study Peak Hour: 7:45 AM - 8:45 AM

Study Area PHF: 0.86

|                   |         |                |     |   |    |                |   |   |   |                |   |     |   |                |   |     |   |
|-------------------|---------|----------------|-----|---|----|----------------|---|---|---|----------------|---|-----|---|----------------|---|-----|---|
| 4:30 PM           | 4:45 PM | 7              | 179 | - | 50 | -              | - | - | - | -              | - | 121 | - | 24             | - | 285 | - |
| 4:45 PM           | 5:00 PM | 8              | 181 | - | 87 | -              | - | - | - | -              | - | 148 | - | 23             | - | 287 | - |
| 5:00 PM           | 5:15 PM | 14             | 161 | - | 49 | -              | - | - | - | -              | - | 131 | - | 32             | - | 309 | - |
| 5:15 PM           | 5:30 PM | 9              | 163 | - | 43 | -              | - | - | - | -              | - | 88  | - | 17             | - | 272 | - |
| 5:30 PM           | 5:45 PM | 13             | 131 | - | 42 | -              | - | - | - | -              | - | 151 | - | 16             | - | 268 | - |
| 5:45 PM           | 6:00 PM | 20             | 193 | - | 74 | -              | - | - | - | -              | - | 192 | - | 32             | - | 237 | - |
| 6:00 PM           | 6:15 PM | 16             | 142 | - | 66 | -              | - | - | - | -              | - | 210 | - | 24             | - | 205 | - |
| 6:15 PM           | 6:30 PM | 12             | 135 | - | 65 | -              | - | - | - | -              | - | 187 | - | 19             | - | 227 | - |
| Intersection PHV: |         | 684 0 229      |     |   |    | 0 0 0          |   |   |   | 0 488 0        |   |     |   | 0 1,153 0      |   |     |   |
| PHF:              |         | 0.94 0.00 0.66 |     |   |    | 0.00 0.00 0.00 |   |   |   | 0.00 0.82 0.00 |   |     |   | 0.00 0.93 0.00 |   |     |   |

Intersection Peak Hour: 4:30 PM - 5:30 PM

Intersection PHF: 0.91

|                 |      |      |      |      |      |      |      |      |      |      |       |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|-------|------|
| Study Area PHV: | 684  | 0    | 229  | 0    | 0    | 0    | 0    | 488  | 0    | 0    | 1,153 | 0    |
| PHF:            | 0.94 | 0.00 | 0.66 | 0.00 | 0.00 | 0.00 | 0.00 | 0.82 | 0.00 | 0.00 | 0.93  | 0.00 |

Study Peak Hour: 4:30 PM - 5:30 PM

Study Area PHF: 0.91

Observations:



File: C2X3HRS - 4L&amp;12Mv\_Peds.XLS

## Intersection Traffic Movements

DeShazo Group, Inc.

Location: **Colorado Street at Martin Luther King Jr Boulevard**City/State: **Austin, Texas**Day/Date: **Tuesday, March 22, 2016**Project-ID #: **15206-30**Data Source: **CJ Hensch**Data Collector(s): **Camera**Weather Conditions: **Mild/Normal Conditions**Traffic Control: **Unsignalized**Description: **Minor-Street STOP Controlled**

| Time of Count     |         | Northbound on Colorado Street |   |   |   | Southbound on Colorado Street |   |   |   | Eastbound on MLK Jr Blvd. |   |     |    | Westbound on MLK Jr Blvd. |    |     |   |
|-------------------|---------|-------------------------------|---|---|---|-------------------------------|---|---|---|---------------------------|---|-----|----|---------------------------|----|-----|---|
| Begin             | End     | Peds                          | L | T | R | Peds                          | L | T | R | Peds                      | L | T   | R  | Peds                      | L  | T   | R |
| 7:00 AM           | 7:15 AM | 2                             | 0 | - | 5 | -                             | - | - | - | 1                         | - | 212 | 23 | 0                         | 36 | 124 | - |
| 7:15 AM           | 7:30 AM | 1                             | 0 | - | 4 | -                             | - | - | - | 0                         | - | 235 | 21 | 0                         | 35 | 147 | - |
| 7:30 AM           | 7:45 AM | 1                             | 0 | - | 2 | -                             | - | - | - | 0                         | - | 242 | 15 | 2                         | 44 | 189 | - |
| 7:45 AM           | 8:00 AM | 3                             | 0 | - | 4 | -                             | - | - | - | 0                         | - | 300 | 26 | 0                         | 35 | 182 | - |
| 8:00 AM           | 8:15 AM | 0                             | 0 | - | 6 | -                             | - | - | - | 0                         | - | 239 | 21 | 0                         | 40 | 190 | - |
| 8:15 AM           | 8:30 AM | 1                             | 0 | - | 3 | -                             | - | - | - | 0                         | - | 204 | 22 | 0                         | 32 | 155 | - |
| 8:30 AM           | 8:45 AM | 2                             | 0 | - | 7 | -                             | - | - | - | 0                         | - | 197 | 19 | 0                         | 31 | 191 | - |
| 8:45 AM           | 9:00 AM | 1                             | 0 | - | 3 | -                             | - | - | - | 1                         | - | 195 | 18 | 0                         | 27 | 207 | - |
| Intersection PHV: |         | 0 0 16                        |   |   |   | 0 0 0                         |   |   |   | 0 1,016 83                |   |     |    | 154 708 0                 |    |     |   |
| PHF:              |         | 0.00 0.00 0.67                |   |   |   | 0.00 0.00 0.00                |   |   |   | 0.00 0.85 0.80            |   |     |    | 0.88 0.93 0.00            |    |     |   |

Intersection Peak Hour: 7:15 AM - 8:15 AM

Intersection PHF: 0.90

|                 |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Study Area PHV: | 0    | 0    | 20   | 0    | 0    | 0    | 0    | 940  | 88   | 138  | 718  | 0    |
| PHF:            | 0.00 | 0.00 | 0.71 | 0.00 | 0.00 | 0.00 | 0.00 | 0.78 | 0.85 | 0.86 | 0.94 | 0.00 |

Study Peak Hour: 7:45 AM - 8:45 AM

Study Area PHF: 0.87

|                   |         |                |   |   |    |                |   |   |   |                |   |     |    |                |    |     |   |
|-------------------|---------|----------------|---|---|----|----------------|---|---|---|----------------|---|-----|----|----------------|----|-----|---|
| 4:30 PM           | 4:45 PM | 2              | 2 | - | 35 | -              | - | - | - | 0              | - | 149 | 4  | 0              | 16 | 291 | - |
| 4:45 PM           | 5:00 PM | 6              | 0 | - | 26 | -              | - | - | - | 1              | - | 197 | 7  | 5              | 4  | 285 | - |
| 5:00 PM           | 5:15 PM | 8              | 0 | - | 23 | -              | - | - | - | 0              | - | 153 | 9  | 0              | 3  | 304 | - |
| 5:15 PM           | 5:30 PM | 1              | 0 | - | 27 | -              | - | - | - | 0              | - | 103 | 12 | 0              | 8  | 291 | - |
| 5:30 PM           | 5:45 PM | 3              | 0 | - | 21 | -              | - | - | - | 0              | - | 154 | 14 | 0              | 11 | 254 | - |
| 5:45 PM           | 6:00 PM | 6              | 0 | - | 19 | -              | - | - | - | 1              | - | 255 | 10 | 0              | 7  | 228 | - |
| 6:00 PM           | 6:15 PM | 13             | 1 | - | 20 | -              | - | - | - | 6              | - | 249 | 5  | 0              | 10 | 196 | - |
| 6:15 PM           | 6:30 PM | 8              | 0 | - | 24 | -              | - | - | - | 4              | - | 233 | 7  | 1              | 9  | 210 | - |
| Intersection PHV: |         | 2 0 111        |   |   |    | 0 0 0          |   |   |   | 0 602 32       |   |     |    | 31 1,171 0     |    |     |   |
| PHF:              |         | 0.25 0.00 0.79 |   |   |    | 0.00 0.00 0.00 |   |   |   | 0.00 0.76 0.67 |   |     |    | 0.48 0.96 0.00 |    |     |   |

Intersection Peak Hour: 4:30 PM - 5:30 PM

Intersection PHF: 0.94

|                 |      |      |      |      |      |      |      |      |      |      |       |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|-------|------|
| Study Area PHV: | 2    | 0    | 111  | 0    | 0    | 0    | 0    | 602  | 32   | 31   | 1,171 | 0    |
| PHF:            | 0.25 | 0.00 | 0.79 | 0.00 | 0.00 | 0.00 | 0.00 | 0.76 | 0.67 | 0.48 | 0.96  | 0.00 |

Study Peak Hour: 4:30 PM - 5:30 PM

Study Area PHF: 0.94

Observations:



File: C2X3HRS - 4L&amp;12Mv\_Peds.XLS

### Intersection Traffic Movements

DeShazo Group, Inc.

Location: **Congress Avenue at Martin Luther King Jr Boulevard**

City/State: **Austin, Texas**Data Collector(s): **Camera**Day/Date: **Tuesday, March 22, 2016**Weather Conditions: **Mild/Normal Conditions**Project-ID #: **15206-26**

Traffic Control: **Signalized**

Data Source: **CJ Hensch**

| Time of Count     |         | Northbound on<br><i>Congress Avenue</i> |   |   |    | Southbound on<br><i>Congress Avenue</i> |   |   |   | Eastbound on<br><i>MLK Jr Blvd.</i> |   |     |    | Westbound on<br><i>MLK Jr Blvd.</i> |    |     |   |
|-------------------|---------|---|---|---|----|---|---|---|---|-------------------------------------|---|-----|----|-------------------------------------|----|-----|---|
| Begin             | End     | Peds                                    | L | T | R  | Peds                                    | L | T | R | Peds                                | L | T   | R  | Peds                                | L  | T   | R |
| 7:00 AM           | 7:15 AM | 2                                       | 3 | - | 13 | -                                       | - | - | - | 0                                   | - | 212 | 6  | 8                                   | 15 | 156 | - |
| 7:15 AM           | 7:30 AM | 1                                       | 0 | - | 17 | -                                       | - | - | - | 1                                   | - | 220 | 7  | 7                                   | 21 | 178 | - |
| 7:30 AM           | 7:45 AM | 2                                       | 2 | - | 16 | -                                       | - | - | - | 3                                   | - | 236 | 13 | 14                                  | 24 | 230 | - |
| 7:45 AM           | 8:00 AM | 7                                       | 2 | - | 14 | -                                       | - | - | - | 5                                   | - | 273 | 17 | 12                                  | 21 | 221 | - |
| 8:00 AM           | 8:15 AM | 1                                       | 3 | - | 11 | -                                       | - | - | - | 2                                   | - | 255 | 6  | 6                                   | 21 | 225 | - |
| 8:15 AM           | 8:30 AM | 3                                       | 5 | - | 8  | -                                       | - | - | - | 0                                   | - | 194 | 12 | 5                                   | 18 | 180 | - |
| 8:30 AM           | 8:45 AM | 3                                       | 2 | - | 10 | -                                       | - | - | - | 5                                   | - | 188 | 15 | 5                                   | 20 | 219 | - |
| 8:45 AM           | 9:00 AM | 2                                       | 1 | - | 9  | -                                       | - | - | - | 8                                   | - | 193 | 9  | 7                                   | 11 | 229 | - |
| Intersection PHV: |         | 7      0      58                        |   |   |    | 0      0      0                         |   |   |   | 0      984      43                  |   |     |    | 87      854      0                  |    |     |   |
| PHF:              |         | 0.58      0.00      0.85                |   |   |    | 0.00      0.00      0.00                |   |   |   | 0.00      0.90      0.63            |   |     |    | 0.91      0.93      0.00            |    |     |   |

Intersection Peak Hour: 7:15 AM - 8:15 AM

Intersection PHF: 0.93

|                        |             |             |             |             |             |             |             |             |             |             |             |             |
|------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Study Area PHV:</b> | <b>12</b>   | <b>0</b>    | <b>43</b>   | <b>0</b>    | <b>0</b>    | <b>0</b>    | <b>0</b>    | <b>910</b>  | <b>50</b>   | <b>80</b>   | <b>845</b>  | <b>0</b>    |
| <b>PHF:</b>            | <b>0.60</b> | <b>0.00</b> | <b>0.77</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.00</b> | <b>0.83</b> | <b>0.74</b> | <b>0.95</b> | <b>0.94</b> | <b>0.00</b> |

**Study Peak Hour: 7:45 AM - 8:45 AM**

Study Area PHF: 0.89

|                   |                |                          |           |          |           |                          |          |          |          |                          |          |            |           |                          |           |            |          |
|-------------------|----------------|--------------------------|-----------|----------|-----------|--------------------------|----------|----------|----------|--------------------------|----------|------------|-----------|--------------------------|-----------|------------|----------|
| <b>4:30 PM</b>    | <b>4:45 PM</b> | <b>5</b>                 | <b>33</b> | <b>-</b> | <b>34</b> | <b>-</b>                 | <b>-</b> | <b>-</b> | <b>-</b> | <b>14</b>                | <b>-</b> | <b>188</b> | <b>8</b>  | <b>24</b>                | <b>23</b> | <b>272</b> | <b>-</b> |
| <b>4:45 PM</b>    | <b>5:00 PM</b> | <b>3</b>                 | <b>34</b> | <b>-</b> | <b>34</b> | <b>-</b>                 | <b>-</b> | <b>-</b> | <b>-</b> | <b>22</b>                | <b>-</b> | <b>182</b> | <b>10</b> | <b>19</b>                | <b>23</b> | <b>245</b> | <b>-</b> |
| <b>5:00 PM</b>    | <b>5:15 PM</b> | <b>9</b>                 | <b>45</b> | <b>-</b> | <b>39</b> | <b>-</b>                 | <b>-</b> | <b>-</b> | <b>-</b> | <b>15</b>                | <b>-</b> | <b>164</b> | <b>12</b> | <b>21</b>                | <b>19</b> | <b>254</b> | <b>-</b> |
| <b>5:15 PM</b>    | <b>5:30 PM</b> | <b>6</b>                 | <b>33</b> | <b>-</b> | <b>33</b> | <b>-</b>                 | <b>-</b> | <b>-</b> | <b>-</b> | <b>19</b>                | <b>-</b> | <b>129</b> | <b>6</b>  | <b>6</b>                 | <b>22</b> | <b>265</b> | <b>-</b> |
| 5:30 PM           | 5:45 PM        | 6                        | 35        | -        | 43        | -                        | -        | -        | -        | 20                       | -        | 168        | 4         | 25                       | 25        | 222        | -        |
| 5:45 PM           | 6:00 PM        | 7                        | 12        | -        | 27        | -                        | -        | -        | -        | 7                        | -        | 290        | 6         | 16                       | 15        | 219        | -        |
| 6:00 PM           | 6:15 PM        | 12                       | 13        | -        | 26        | -                        | -        | -        | -        | 6                        | -        | 262        | 15        | 30                       | 9         | 192        | -        |
| 6:15 PM           | 6:30 PM        | 5                        | 13        | -        | 17        | -                        | -        | -        | -        | 3                        | -        | 248        | 3         | 18                       | 11        | 202        | -        |
| Intersection PHV: |                | 145      0      140      |           |          |           | 0      0      0          |          |          |          | 0      663      36       |          |            |           | 87      1,036      0     |           |            |          |
| PHF:              |                | 0.81      0.00      0.90 |           |          |           | 0.00      0.00      0.00 |          |          |          | 0.00      0.88      0.75 |          |            |           | 0.95      0.95      0.00 |           |            |          |

Intersection Peak Hour: 4:30 PM - 5:30 PM

Intersection PHF: 0.94

|                 |      |      |      |      |      |      |      |      |      |      |       |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|-------|------|
| Study Area PHV: | 145  | 0    | 140  | 0    | 0    | 0    | 0    | 663  | 36   | 87   | 1,036 | 0    |
| PHF:            | 0.81 | 0.00 | 0.90 | 0.00 | 0.00 | 0.00 | 0.00 | 0.88 | 0.75 | 0.95 | 0.95  | 0.00 |

**Study Peak Hour: 4:30 PM - 5:30 PM**

Study Area PHF: 0.94

Observations:



File: C2X3HRS - 4L&12Mv\_Peds.XLS

### Intersection Traffic Movements

*DeShazo Group, Inc.*

Location: **Brazos Street at Martin Luther King Jr Boulevard**

City/State: **Austin, Texas**Data Collector(s): **Camera**Day/Date: **Tuesday, March 22, 2016**Weather Conditions: **Mild/Normal Conditions**Project-ID #: **15206-27**

Traffic Control: **Signalized**

Data Source: **CJ Hensch**

| Time of Count     |         | Northbound on<br><i>Brazos Street</i> |   |   |   | Southbound on<br><i>Brazos Street</i> |    |   |   | Eastbound on<br><i>MLK Jr Blvd.</i> |    |     |    | Westbound on<br><i>MLK Jr Blvd.</i> |    |     |    |
|-------------------|---------|---------------------------------------|---|---|---|---------------------------------------|----|---|---|-------------------------------------|----|-----|----|-------------------------------------|----|-----|----|
| Begin             | End     | Peds                                  | L | T | R | Peds                                  | L  | T | R | Peds                                | L  | T   | R  | Peds                                | L  | T   | R  |
| 7:00 AM           | 7:15 AM | 6                                     | 2 | 0 | 1 | 6                                     | 9  | 0 | 7 | 0                                   | 32 | 149 | 44 | 4                                   | 32 | 150 | 28 |
| 7:15 AM           | 7:30 AM | 1                                     | 1 | 0 | 3 | 8                                     | 6  | 0 | 8 | 0                                   | 19 | 179 | 48 | 4                                   | 35 | 208 | 31 |
| 7:30 AM           | 7:45 AM | 6                                     | 3 | 0 | 6 | 8                                     | 0  | 0 | 9 | 0                                   | 46 | 154 | 42 | 7                                   | 30 | 227 | 25 |
| 7:45 AM           | 8:00 AM | 7                                     | 1 | 0 | 4 | 7                                     | 10 | 0 | 2 | 0                                   | 43 | 215 | 51 | 1                                   | 41 | 251 | 33 |
| 8:00 AM           | 8:15 AM | 2                                     | 1 | 0 | 5 | 12                                    | 12 | 1 | 2 | 1                                   | 35 | 190 | 23 | 3                                   | 34 | 230 | 37 |
| 8:15 AM           | 8:30 AM | 4                                     | 1 | 0 | 2 | 5                                     | 8  | 0 | 3 | 0                                   | 25 | 155 | 25 | 2                                   | 28 | 214 | 31 |
| 8:30 AM           | 8:45 AM | 2                                     | 2 | 0 | 2 | 3                                     | 10 | 0 | 3 | 0                                   | 29 | 145 | 19 | 6                                   | 25 | 216 | 29 |
| 8:45 AM           | 9:00 AM | 6                                     | 5 | 1 | 3 | 5                                     | 5  | 1 | 9 | 1                                   | 34 | 154 | 14 | 6                                   | 17 | 242 | 47 |
| Intersection PHV: |         | 6      0      18                      |   |   |   | 28      1      21                     |    |   |   | 143      738      164               |    |     |    | 140      916      126               |    |     |    |
| PHF:              |         | 0.50      0.00      0.75              |   |   |   | 0.58      0.25      0.58              |    |   |   | 0.78      0.86      0.80            |    |     |    | 0.85      0.91      0.85            |    |     |    |

Intersection Peak Hour: 7:15 AM - 8:15 AM

Intersection PHF: 0.88

|                 |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Study Area PHV: | 5    | 0    | 13   | 40   | 1    | 10   | 132  | 705  | 118  | 128  | 911  | 130  |
| PHF:            | 0.63 | 0.00 | 0.65 | 0.83 | 0.25 | 0.83 | 0.77 | 0.82 | 0.58 | 0.78 | 0.91 | 0.88 |

**Study Peak Hour: 7:45 AM - 8:45 AM**

Study Area PHF: 0.84

|                   |                |                |           |           |           |                |           |          |           |                |           |            |          |                |          |            |           |
|-------------------|----------------|----------------|-----------|-----------|-----------|----------------|-----------|----------|-----------|----------------|-----------|------------|----------|----------------|----------|------------|-----------|
| <b>4:30 PM</b>    | <b>4:45 PM</b> | <b>7</b>       | <b>7</b>  | <b>0</b>  | <b>34</b> | <b>9</b>       | <b>27</b> | <b>5</b> | <b>54</b> | <b>1</b>       | <b>12</b> | <b>215</b> | <b>6</b> | <b>3</b>       | <b>4</b> | <b>224</b> | <b>12</b> |
| <b>4:45 PM</b>    | <b>5:00 PM</b> | <b>2</b>       | <b>5</b>  | <b>1</b>  | <b>40</b> | <b>8</b>       | <b>19</b> | <b>9</b> | <b>58</b> | <b>1</b>       | <b>24</b> | <b>183</b> | <b>4</b> | <b>1</b>       | <b>1</b> | <b>215</b> | <b>15</b> |
| <b>5:00 PM</b>    | <b>5:15 PM</b> | <b>4</b>       | <b>10</b> | <b>6</b>  | <b>38</b> | <b>19</b>      | <b>26</b> | <b>8</b> | <b>58</b> | <b>0</b>       | <b>30</b> | <b>153</b> | <b>1</b> | <b>6</b>       | <b>4</b> | <b>198</b> | <b>54</b> |
| <b>5:15 PM</b>    | <b>5:30 PM</b> | <b>5</b>       | <b>4</b>  | <b>15</b> | <b>37</b> | <b>22</b>      | <b>20</b> | <b>2</b> | <b>64</b> | <b>0</b>       | <b>18</b> | <b>151</b> | <b>0</b> | <b>4</b>       | <b>5</b> | <b>199</b> | <b>45</b> |
| 5:30 PM           | 5:45 PM        | 7              | 3         | 19        | 29        | 13             | 39        | 1        | 41        | 0              | 18        | 191        | 2        | 0              | 1        | 211        | 38        |
| 5:45 PM           | 6:00 PM        | 5              | 4         | 11        | 30        | 4              | 24        | 4        | 43        | 2              | 35        | 253        | 10       | 3              | 7        | 181        | 27        |
| 6:00 PM           | 6:15 PM        | 6              | 3         | 1         | 22        | 15             | 33        | 1        | 30        | 0              | 19        | 279        | 10       | 2              | 7        | 168        | 10        |
| 6:15 PM           | 6:30 PM        | 2              | 4         | 1         | 17        | 8              | 14        | 1        | 27        | 2              | 7         | 238        | 18       | 2              | 8        | 183        | 13        |
| Intersection PHV: |                | 21 51 134      |           |           |           | 109 15 206     |           |          |           | 101 748 13     |           |            |          | 17 789 164     |          |            |           |
| PHF:              |                | 0.53 0.67 0.88 |           |           |           | 0.70 0.47 0.80 |           |          |           | 0.72 0.74 0.33 |           |            |          | 0.61 0.93 0.76 |          |            |           |

Intersection Peak Hour: 5:00 PM - 6:00 PM

Intersection PHF: 0.94

|                 |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Study Area PHV: | 26   | 22   | 149  | 92   | 24   | 234  | 84   | 702  | 11   | 14   | 836  | 126  |
| PHF:            | 0.65 | 0.37 | 0.93 | 0.85 | 0.67 | 0.91 | 0.70 | 0.82 | 0.46 | 0.70 | 0.93 | 0.58 |

**Study Peak Hour: 4:30 PM - 5:30 PM**

Study Area PHF: 0.97

Observations:



File: C2X3HRS - 4L&amp;12Mv\_Peds.XLS

### Intersection Traffic Movements

*DeShazo Group, Inc.*

Location: ***San Jacinto Boulevard at Marting Luther King Jr Boulevard***

City/State: **Austin, Texas**

Data Collector(s): **Camera**

Day/Date: **Thursday, March 24, 2016**Weather Conditions: **Mild/Normal Conditions**Project-ID #: **15206-28**

Traffic Control: **Signalized**

Data Source: **CJ Hensch**

| Time of Count     |         | Northbound on<br><i>San Jacinto Blvd.</i> |   |   |   | Southbound on<br><i>San Jacinto Blvd.</i> |    |    |    | Eastbound on<br><i>MLK Jr Blvd.</i> |   |     |    | Westbound on<br><i>MLK Jr Blvd.</i> |    |     |   |
|-------------------|---------|---|---|---|---|---|----|----|----|-------------------------------------|---|-----|----|-------------------------------------|----|-----|---|
| Begin             | End     | Peds                                      | L | T | R | Peds                                      | L  | T  | R  | Peds                                | L | T   | R  | Peds                                | L  | T   | R |
| 7:00 AM           | 7:15 AM | 9   | - | - | - | 5   | 17 | 10 | 16 | 0                                   | - | 161 | 21 | 12                                  | 73 | 198 | - |
| 7:15 AM           | 7:30 AM | 9   | - | - | - | 10  | 2  | 9  | 19 | 4                                   | - | 120 | 32 | 2                                   | 73 | 241 | - |
| 7:30 AM           | 7:45 AM | 6   | - | - | - | 17  | 2  | 20 | 9  | 2                                   | - | 170 | 33 | 2                                   | 83 | 281 | - |
| 7:45 AM           | 8:00 AM | 11  | - | - | - | 13  | 13 | 18 | 16 | 2                                   | - | 176 | 38 | 4                                   | 87 | 287 | - |
| 8:00 AM           | 8:15 AM | 5   | - | - | - | 10  | 6  | 10 | 16 | 2                                   | - | 151 | 33 | 1                                   | 87 | 302 | - |
| 8:15 AM           | 8:30 AM | 17  | - | - | - | 11  | 4  | 9  | 9  | 3                                   | - | 143 | 43 | 3                                   | 68 | 260 | - |
| 8:30 AM           | 8:45 AM | 15  | - | - | - | 19  | 11 | 11 | 11 | 8                                   | - | 182 | 26 | 8                                   | 70 | 284 | - |
| 8:45 AM           | 9:00 AM | 13  | - | - | - | 14  | 13 | 16 | 19 | 2                                   | - | 169 | 33 | 2                                   | 78 | 310 | - |
| Intersection PHV: |         | 0      0      0                           |   |   |   | 25      57      50                        |    |    |    | 0      640      147                 |   |     |    | 325      1,130      0               |    |     |   |
| PHF:              |         | 0.00      0.00      0.00                  |   |   |   | 0.48      0.71      0.78                  |    |    |    | 0.00      0.91      0.85            |   |     |    | 0.93      0.94      0.00            |    |     |   |

Intersection Peak Hour: 7:30 AM - 8:30 AM

Intersection PHF: 0.93

|                 |      |      |      |      |      |      |      |      |      |      |       |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|-------|------|
| Study Area PHV: | 0    | 0    | 0    | 34   | 48   | 52   | 0    | 652  | 140  | 312  | 1,133 | 0    |
| PHF:            | 0.00 | 0.00 | 0.00 | 0.65 | 0.67 | 0.81 | 0.00 | 0.90 | 0.81 | 0.90 | 0.94  | 0.00 |

**Study Peak Hour: 7:45 AM - 8:45 AM**

Study Area PHF: 0.93

|                   |                |           |   |   |   |           |           |           |           |           |   |            |          |          |           |            |   |
|-------------------|----------------|-----------|---|---|---|-----------|-----------|-----------|-----------|-----------|---|------------|----------|----------|-----------|------------|---|
| <b>4:30 PM</b>    | <b>4:45 PM</b> | <b>20</b> | - | - | - | <b>15</b> | <b>10</b> | <b>49</b> | <b>20</b> | <b>11</b> | - | <b>260</b> | <b>6</b> | <b>5</b> | <b>73</b> | <b>243</b> | - |
| <b>4:45 PM</b>    | <b>5:00 PM</b> | <b>15</b> | - | - | - | <b>8</b>  | <b>8</b>  | <b>49</b> | <b>34</b> | <b>5</b>  | - | <b>237</b> | <b>5</b> | <b>6</b> | <b>74</b> | <b>214</b> | - |
| <b>5:00 PM</b>    | <b>5:15 PM</b> | <b>20</b> | - | - | - | <b>14</b> | <b>12</b> | <b>43</b> | <b>44</b> | <b>7</b>  | - | <b>194</b> | <b>3</b> | <b>3</b> | <b>73</b> | <b>256</b> | - |
| <b>5:15 PM</b>    | <b>5:30 PM</b> | <b>11</b> | - | - | - | <b>15</b> | <b>6</b>  | <b>47</b> | <b>35</b> | <b>10</b> | - | <b>191</b> | <b>7</b> | <b>9</b> | <b>64</b> | <b>212</b> | - |
| 5:30 PM           | 5:45 PM        | 15        | - | - | - | 18        | 8         | 52        | 30        | 11        | - | 255        | 5        | 15       | 87        | 208        | - |
| 5:45 PM           | 6:00 PM        | 8         | - | - | - | 14        | 4         | 36        | 24        | 9         | - | 290        | 11       | 10       | 61        | 208        | - |
| 6:00 PM           | 6:15 PM        | 4         | - | - | - | 10        | 4         | 43        | 22        | 3         | - | 350        | 21       | 2        | 59        | 231        | - |
| 6:15 PM           | 6:30 PM        | 3         | - | - | - | 14        | 10        | 38        | 24        | 9         | - | 285        | 16       | 14       | 56        | 237        | - |
| Intersection PHV: |                | 0         |   |   |   | 26        |           |           |           | 0         |   |            |          | 263      |           |            |   |
| PHF:              |                | 0.00      |   |   |   | 0.65      |           |           |           | 0.00      |   |            |          | 0.76     |           |            |   |

Intersection Peak Hour: 5:30 PM - 6:30 PM

Intersection PHF: 0.92

|                 |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Study Area PHV: | 0    | 0    | 0    | 36   | 188  | 133  | 0    | 882  | 21   | 284  | 925  | 0    |
| PHF:            | 0.00 | 0.00 | 0.00 | 0.75 | 0.96 | 0.76 | 0.00 | 0.85 | 0.75 | 0.96 | 0.90 | 0.00 |

**Study Peak Hour: 4:30 PM - 5:30 PM**

Study Area PHF: 0.93

Observations:



File: C2X3HRS - 4L&amp;12Mv\_Peds.XLS

## Intersection Traffic Movements

DeShazo Group, Inc.

Location: **Trinity Street at Martin Luther King Jr Boulevard**

City/State: **Austin, Texas**Data Collector(s): **Camera**Day/Date: **Tuesday, March 22, 2016**Weather Conditions: **Mild/Normal Conditions**Project-ID #: **15206-29**

Traffic Control: **Signalized**

Data Source: **CJ Hensch**

| Time of Count     |         | Northbound on<br><i>Trinity Street</i> |    |    |    | Southbound on<br><i>Trinity Street</i> |   |   |   | Eastbound on<br><i>MLK Jr Blvd.</i> |    |     |   | Westbound on<br><i>MLK Jr Blvd.</i> |   |     |    |
|-------------------|---------|--|----|----|----|--|---|---|---|-------------------------------------|----|-----|---|-------------------------------------|---|-----|----|
| Begin             | End     | Peds                                   | L  | T  | R  | Peds                                   | L | T | R | Peds                                | L  | T   | R | Peds                                | L | T   | R  |
| 7:00 AM           | 7:15 AM | 8                                      | 8  | 15 | 20 | 7                                      | - | - | - | 2                                   | 35 | 117 | - | 9                                   | - | 277 | 17 |
| 7:15 AM           | 7:30 AM | 8                                      | 7  | 20 | 17 | 3                                      | - | - | - | 0                                   | 32 | 122 | - | 9                                   | - | 348 | 12 |
| 7:30 AM           | 7:45 AM | 16                                     | 11 | 20 | 17 | 3                                      | - | - | - | 0                                   | 34 | 108 | - | 12                                  | - | 323 | 10 |
| 7:45 AM           | 8:00 AM | 13                                     | 8  | 18 | 18 | 8                                      | - | - | - | 1                                   | 36 | 136 | - | 14                                  | - | 398 | 13 |
| 8:00 AM           | 8:15 AM | 10                                     | 15 | 27 | 14 | 11                                     | - | - | - | 1                                   | 45 | 135 | - | 18                                  | - | 333 | 14 |
| 8:15 AM           | 8:30 AM | 12                                     | 4  | 16 | 13 | 6                                      | - | - | - | 0                                   | 24 | 103 | - | 12                                  | - | 356 | 17 |
| 8:30 AM           | 8:45 AM | 7                                      | 8  | 18 | 7  | 14                                     | - | - | - | 1                                   | 38 | 100 | - | 22                                  | - | 312 | 11 |
| 8:45 AM           | 9:00 AM | 21                                     | 19 | 27 | 18 | 10                                     | - | - | - | 0                                   | 28 | 114 | - | 14                                  | - | 378 | 17 |
| Intersection PHV: |         | 41 85 66                               |    |    |    | 0 0 0                                  |   |   |   | 147 501 0                           |    |     |   | 0 1,402 49                          |   |     |    |
| PHF:              |         | 0.68 0.79 0.92                         |    |    |    | 0.00 0.00 0.00                         |   |   |   | 0.82 0.92 0.00                      |    |     |   | 0.00 0.88 0.88                      |   |     |    |

Intersection Peak Hour: 7:15 AM - 8:15 AM

Intersection PHF: 0.91

|                 |      |      |      |      |      |      |      |      |      |      |       |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|-------|------|
| Study Area PHV: | 35   | 79   | 52   | 0    | 0    | 0    | 143  | 474  | 0    | 0    | 1,399 | 55   |
| PHF:            | 0.58 | 0.73 | 0.72 | 0.00 | 0.00 | 0.00 | 0.79 | 0.87 | 0.00 | 0.00 | 0.88  | 0.81 |

**Study Peak Hour: 7:45 AM - 8:45 AM**

Study Area PHF: 0.89

|                   |                |                |           |           |           |                |   |   |   |                |           |            |   |                |   |            |           |
|-------------------|----------------|----------------|-----------|-----------|-----------|----------------|---|---|---|----------------|-----------|------------|---|----------------|---|------------|-----------|
| <b>4:30 PM</b>    | <b>4:45 PM</b> | <b>22</b>      | <b>19</b> | <b>64</b> | <b>47</b> | <b>15</b>      | - | - | - | <b>7</b>       | <b>18</b> | <b>246</b> | - | <b>30</b>      | - | <b>262</b> | <b>18</b> |
| <b>4:45 PM</b>    | <b>5:00 PM</b> | <b>15</b>      | <b>15</b> | <b>66</b> | <b>43</b> | <b>13</b>      | - | - | - | <b>5</b>       | <b>20</b> | <b>211</b> | - | <b>27</b>      | - | <b>271</b> | <b>12</b> |
| <b>5:00 PM</b>    | <b>5:15 PM</b> | <b>20</b>      | <b>28</b> | <b>81</b> | <b>45</b> | <b>21</b>      | - | - | - | <b>8</b>       | <b>20</b> | <b>252</b> | - | <b>37</b>      | - | <b>260</b> | <b>4</b>  |
| <b>5:15 PM</b>    | <b>5:30 PM</b> | <b>17</b>      | <b>26</b> | <b>91</b> | <b>62</b> | <b>8</b>       | - | - | - | <b>9</b>       | <b>22</b> | <b>203</b> | - | <b>23</b>      | - | <b>276</b> | <b>15</b> |
| 5:30 PM           | 5:45 PM        | 10             | 18        | 67        | 50        | 12             | - | - | - | 2              | 33        | 247        | - | 19             | - | 293        | 12        |
| 5:45 PM           | 6:00 PM        | 13             | 15        | 71        | 64        | 11             | - | - | - | 8              | 35        | 285        | - | 12             | - | 247        | 10        |
| 6:00 PM           | 6:15 PM        | 14             | 14        | 34        | 54        | 8              | - | - | - | 4              | 43        | 304        | - | 17             | - | 200        | 5         |
| 6:15 PM           | 6:30 PM        | 10             | 5         | 17        | 36        | 9              | - | - | - | 2              | 23        | 250        | - | 12             | - | 248        | 12        |
| Intersection PHV: |                | 87 310 221     |           |           |           | 0 0 0          |   |   |   | 110 987 0      |           |            |   | 0 1,076 41     |   |            |           |
| PHF:              |                | 0.78 0.85 0.86 |           |           |           | 0.00 0.00 0.00 |   |   |   | 0.79 0.87 0.00 |           |            |   | 0.00 0.92 0.68 |   |            |           |

Intersection Peak Hour: 5:00 PM - 6:00 PM

Intersection PHF: 0.97

|                 |      |      |      |      |      |      |      |      |      |      |       |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|-------|------|
| Study Area PHV: | 88   | 302  | 197  | 0    | 0    | 0    | 80   | 912  | 0    | 0    | 1,069 | 49   |
| PHF:            | 0.79 | 0.83 | 0.79 | 0.00 | 0.00 | 0.00 | 0.91 | 0.90 | 0.00 | 0.00 | 0.97  | 0.68 |

**Study Peak Hour: 4:30 PM - 5:30 PM**

**Study Area PHF: 0.97**

Observations:



File: C2X3HRS - 4L&12Mv\_Peds.XLS

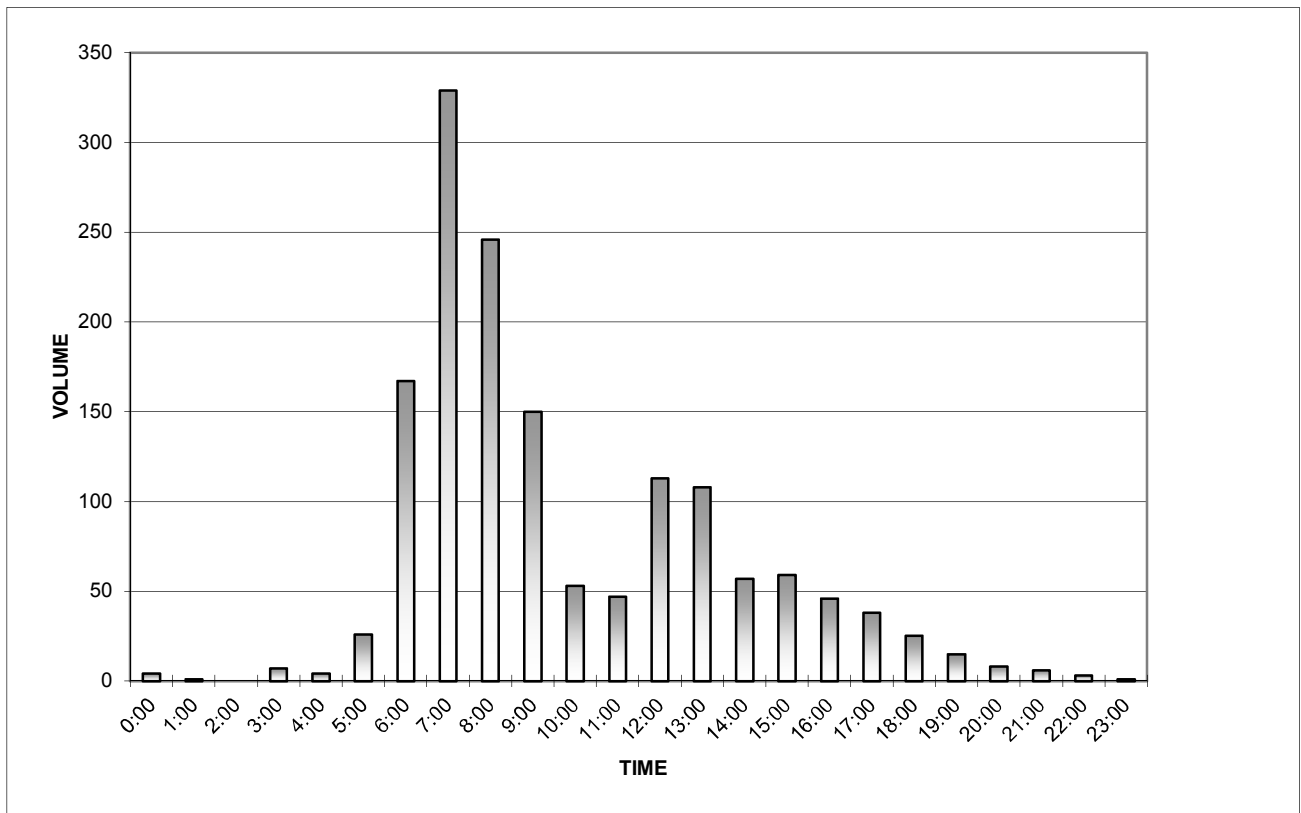
# **NB Colorado Street between 15th Street and 16th Street**

Date Began:  
7/21/2015

| TIME  | 0:00 | 0:15 | 0:30 | 0:45 | TOTAL |
|-------|------|------|------|------|-------|
| 0:00  | 3    | 0    | 1    | 0    | 4     |
| 1:00  | 0    | 1    | 0    | 0    | 1     |
| 2:00  | 0    | 0    | 0    | 0    | 0     |
| 3:00  | 0    | 2    | 4    | 1    | 7     |
| 4:00  | 1    | 0    | 1    | 2    | 4     |
| 5:00  | 2    | 7    | 4    | 13   | 26    |
| 6:00  | 16   | 20   | 53   | 78   | 167   |
| 7:00  | 83   | 82   | 84   | 80   | 329   |
| 8:00  | 77   | 51   | 58   | 60   | 246   |
| 9:00  | 57   | 51   | 24   | 18   | 150   |
| 10:00 | 15   | 14   | 13   | 11   | 53    |
| 11:00 | 9    | 12   | 11   | 15   | 47    |
| 12:00 | 22   | 26   | 24   | 41   | 113   |
| 13:00 | 38   | 26   | 26   | 18   | 108   |
| 14:00 | 17   | 13   | 16   | 11   | 57    |
| 15:00 | 21   | 8    | 14   | 16   | 59    |
| 16:00 | 15   | 8    | 10   | 13   | 46    |
| 17:00 | 17   | 12   | 4    | 5    | 38    |
| 18:00 | 8    | 7    | 8    | 2    | 25    |
| 19:00 | 5    | 5    | 3    | 2    | 15    |
| 20:00 | 1    | 1    | 2    | 4    | 8     |
| 21:00 | 1    | 3    | 1    | 1    | 6     |
| 22:00 | 1    | 1    | 1    | 0    | 3     |
| 23:00 | 1    | 0    | 0    | 0    | 1     |

TOTAL: 1513

|  |
|--|
| The A.M. peak hour from 7:00 to 8:00 is 329  |
| The P.M. peak hour from 14:15 to 15:15 is 61 |

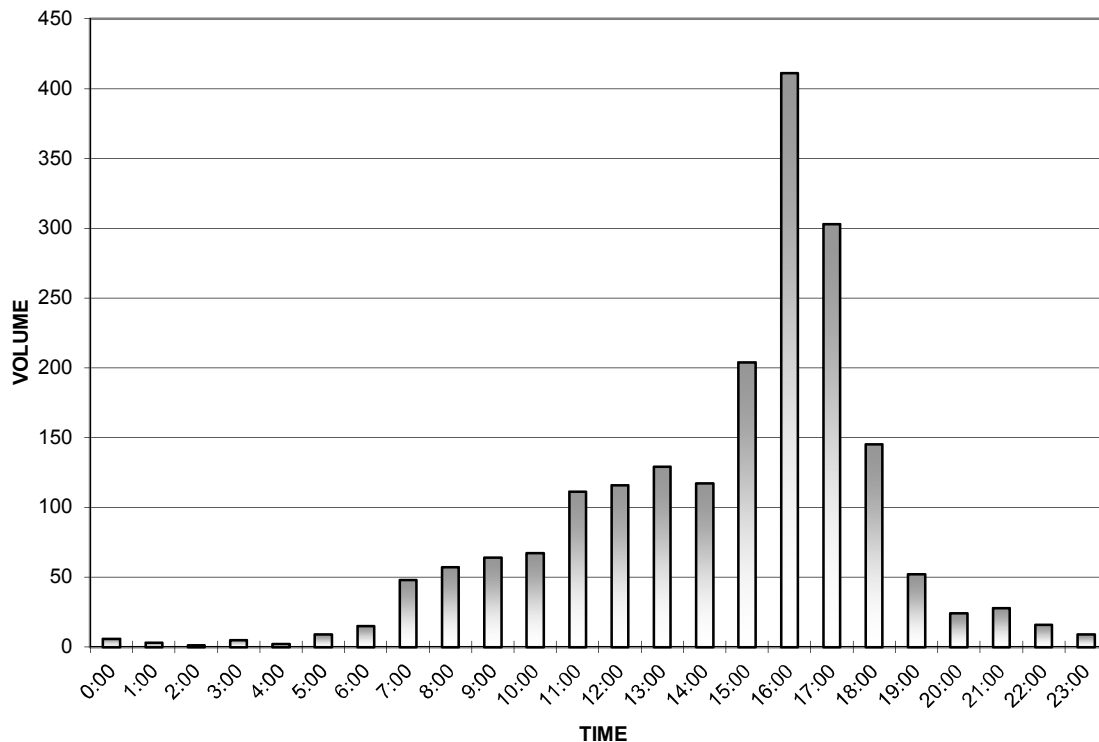


# **SB Colorado Street between 15th Street and 16th Street**

Date Began:  
7/21/2015

| TIME   | 0:00 | 0:15 | 0:30 | 0:45 | TOTAL |
|--------|------|------|------|------|-------|
| 0:00   | 1    | 4    | 1    | 0    | 6     |
| 1:00   | 1    | 1    | 1    | 0    | 3     |
| 2:00   | 1    | 0    | 0    | 0    | 1     |
| 3:00   | 0    | 1    | 3    | 1    | 5     |
| 4:00   | 0    | 1    | 0    | 1    | 2     |
| 5:00   | 0    | 5    | 1    | 3    | 9     |
| 6:00   | 2    | 2    | 4    | 7    | 15    |
| 7:00   | 10   | 13   | 11   | 14   | 48    |
| 8:00   | 10   | 11   | 16   | 20   | 57    |
| 9:00   | 20   | 15   | 12   | 17   | 64    |
| 10:00  | 23   | 14   | 13   | 17   | 67    |
| 11:00  | 25   | 26   | 31   | 29   | 111   |
| 12:00  | 37   | 32   | 25   | 22   | 116   |
| 13:00  | 41   | 21   | 29   | 38   | 129   |
| 14:00  | 21   | 26   | 32   | 38   | 117   |
| 15:00  | 47   | 35   | 41   | 81   | 204   |
| 16:00  | 114  | 83   | 123  | 91   | 411   |
| 17:00  | 104  | 73   | 61   | 65   | 303   |
| 18:00  | 40   | 49   | 38   | 18   | 145   |
| 19:00  | 18   | 12   | 13   | 9    | 52    |
| 20:00  | 12   | 8    | 1    | 3    | 24    |
| 21:00  | 5    | 7    | 8    | 8    | 28    |
| 22:00  | 3    | 6    | 2    | 5    | 16    |
| 23:00  | 5    | 2    | 2    | 0    | 9     |
| TOTAL: |      |      |      |      | 1942  |

|   |
|---|
| The A.M. peak hour from 8:30 to 9:30 is 71    |
| The P.M. peak hour from 16:00 to 17:00 is 411 |



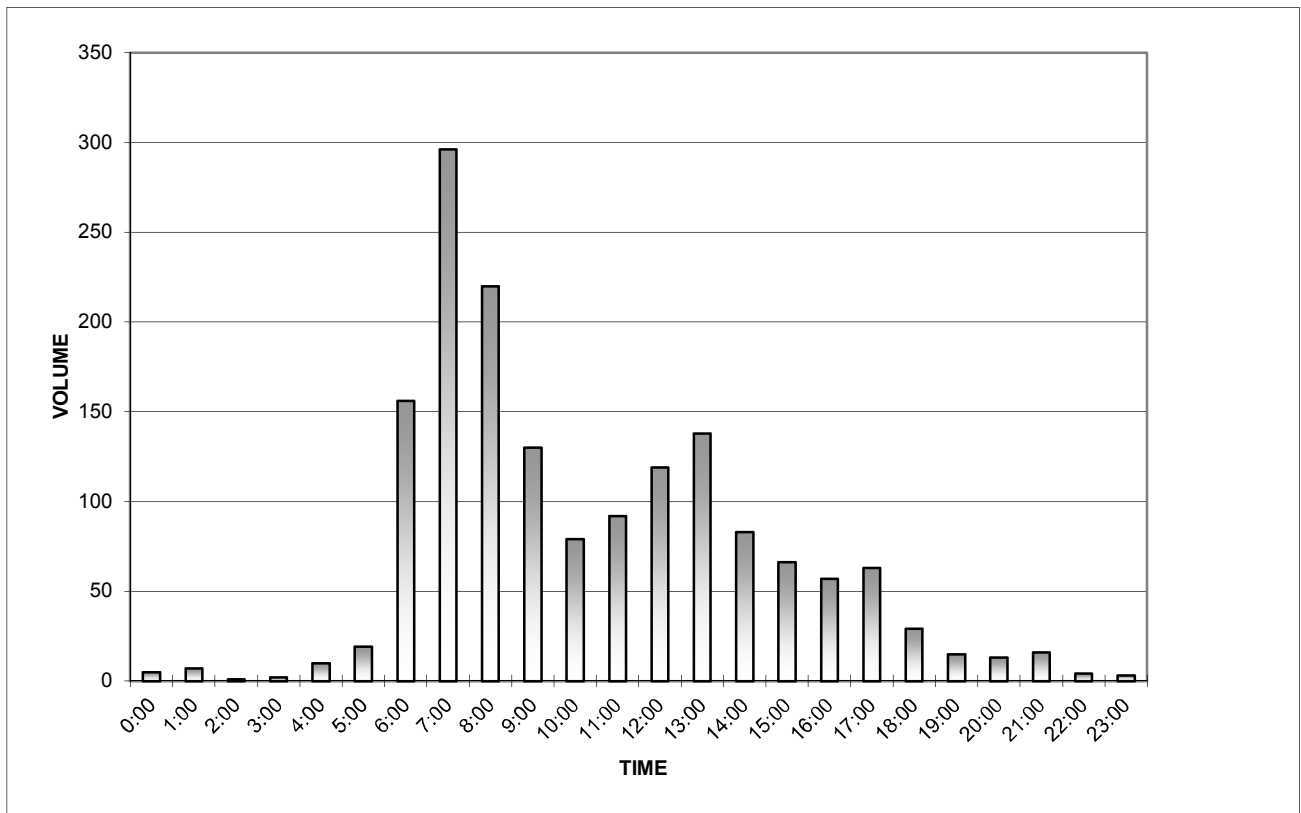
# **NB Congress Avenue between 15th Street and 16th Street**

Date Began:  
7/21/2015

| TIME  | 0:00 | 0:15 | 0:30 | 0:45 | TOTAL |
|-------|------|------|------|------|-------|
| 0:00  | 2    | 3    | 0    | 0    | 5     |
| 1:00  | 1    | 3    | 2    | 1    | 7     |
| 2:00  | 0    | 1    | 0    | 0    | 1     |
| 3:00  | 0    | 0    | 2    | 0    | 2     |
| 4:00  | 0    | 1    | 4    | 5    | 10    |
| 5:00  | 2    | 3    | 5    | 9    | 19    |
| 6:00  | 12   | 39   | 41   | 64   | 156   |
| 7:00  | 80   | 72   | 73   | 71   | 296   |
| 8:00  | 57   | 59   | 65   | 39   | 220   |
| 9:00  | 50   | 30   | 25   | 25   | 130   |
| 10:00 | 22   | 20   | 14   | 23   | 79    |
| 11:00 | 20   | 26   | 33   | 13   | 92    |
| 12:00 | 28   | 22   | 38   | 31   | 119   |
| 13:00 | 37   | 32   | 38   | 31   | 138   |
| 14:00 | 27   | 17   | 20   | 19   | 83    |
| 15:00 | 17   | 17   | 15   | 17   | 66    |
| 16:00 | 12   | 16   | 13   | 16   | 57    |
| 17:00 | 18   | 16   | 21   | 8    | 63    |
| 18:00 | 16   | 4    | 5    | 4    | 29    |
| 19:00 | 5    | 5    | 3    | 2    | 15    |
| 20:00 | 2    | 4    | 3    | 4    | 13    |
| 21:00 | 3    | 4    | 5    | 4    | 16    |
| 22:00 | 0    | 2    | 0    | 2    | 4     |
| 23:00 | 3    | 0    | 0    | 0    | 3     |

TOTAL: 1623

|  |
|--|
| The A.M. peak hour from 7:00 to 8:00 is 296  |
| The P.M. peak hour from 14:30 to 15:30 is 73 |

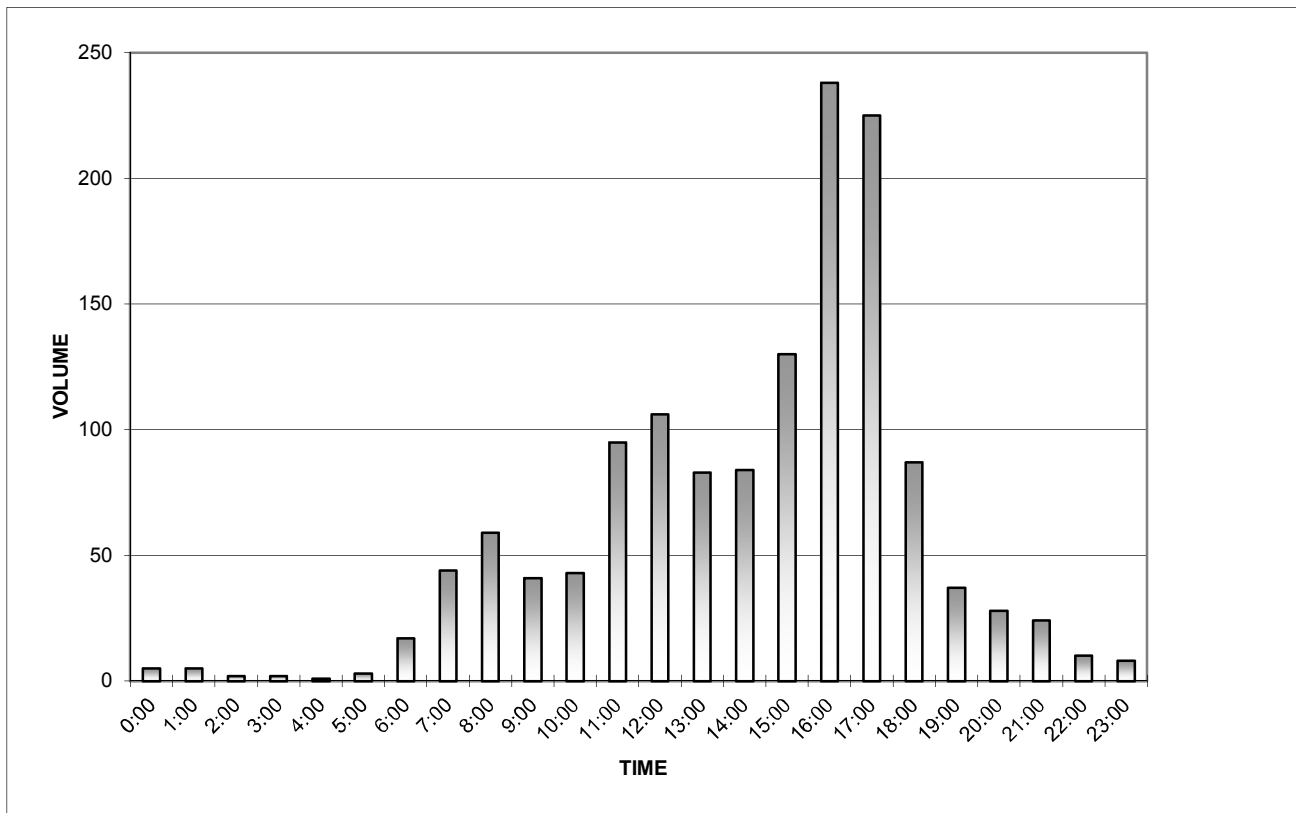


# **SB Congress Avenue between 15th Street and 16th Street**

Date Began:  
7/21/2015

| TIME   | 0:00 | 0:15 | 0:30 | 0:45 | TOTAL |
|--------|------|------|------|------|-------|
| 0:00   | 0    | 4    | 0    | 1    | 5     |
| 1:00   | 0    | 3    | 2    | 0    | 5     |
| 2:00   | 0    | 1    | 1    | 0    | 2     |
| 3:00   | 0    | 0    | 1    | 1    | 2     |
| 4:00   | 0    | 0    | 1    | 0    | 1     |
| 5:00   | 1    | 0    | 1    | 1    | 3     |
| 6:00   | 3    | 2    | 4    | 8    | 17    |
| 7:00   | 5    | 10   | 13   | 16   | 44    |
| 8:00   | 14   | 11   | 16   | 18   | 59    |
| 9:00   | 14   | 11   | 9    | 7    | 41    |
| 10:00  | 15   | 13   | 6    | 9    | 43    |
| 11:00  | 15   | 15   | 28   | 37   | 95    |
| 12:00  | 20   | 30   | 23   | 33   | 106   |
| 13:00  | 24   | 21   | 18   | 20   | 83    |
| 14:00  | 24   | 19   | 9    | 32   | 84    |
| 15:00  | 30   | 21   | 36   | 43   | 130   |
| 16:00  | 69   | 44   | 70   | 55   | 238   |
| 17:00  | 99   | 54   | 35   | 37   | 225   |
| 18:00  | 27   | 29   | 16   | 15   | 87    |
| 19:00  | 10   | 13   | 9    | 5    | 37    |
| 20:00  | 8    | 7    | 7    | 6    | 28    |
| 21:00  | 8    | 5    | 7    | 4    | 24    |
| 22:00  | 3    | 2    | 4    | 1    | 10    |
| 23:00  | 2    | 3    | 2    | 1    | 8     |
| TOTAL: |      |      |      |      | 1377  |

|   |
|---|
| The A.M. peak hour from 8:30 to 9:30 is 59    |
| The P.M. peak hour from 16:30 to 17:30 is 278 |

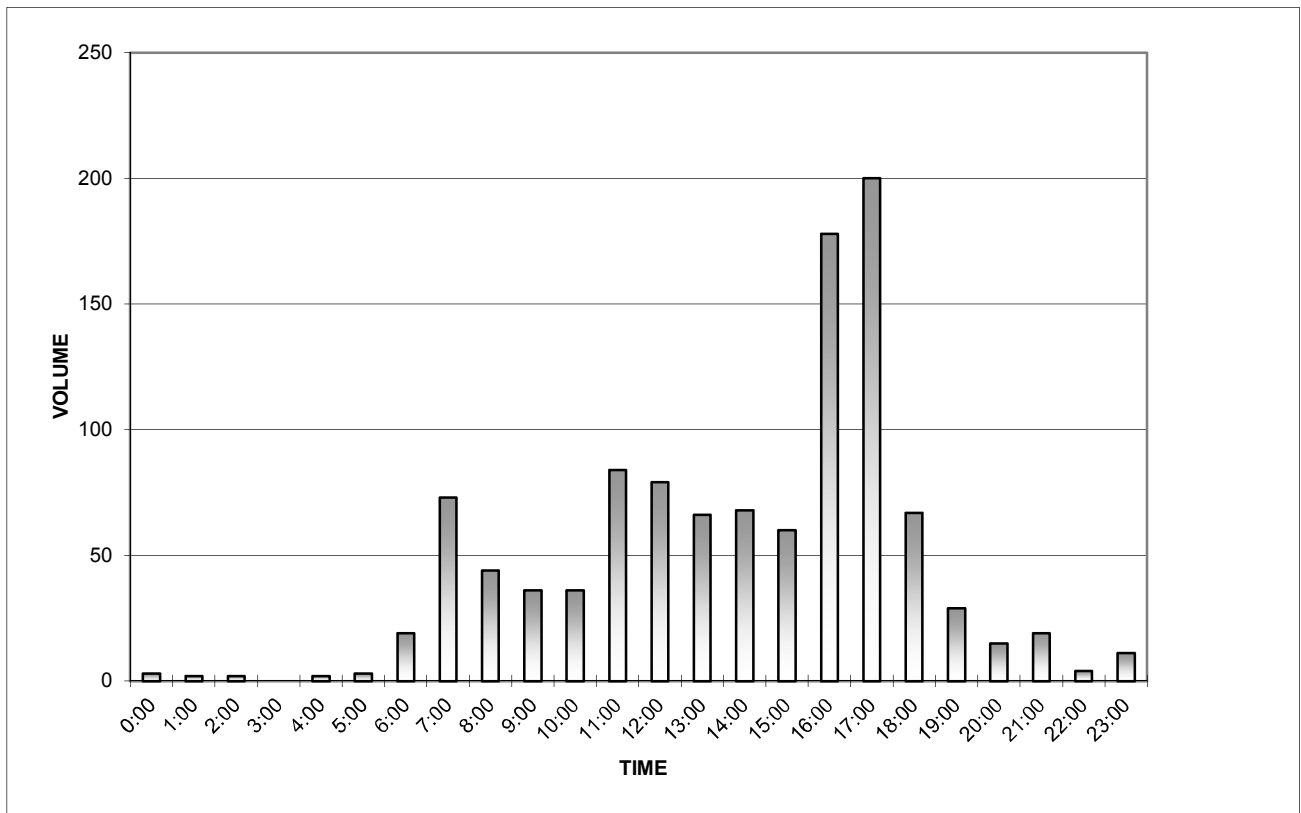


# **NB Congress Avenue between 18th Street and Martin Luther King Jr. Boulevard**

Date Began:  
7/21/2015

| TIME   | 0:00 | 0:15 | 0:30 | 0:45 | TOTAL |
|--------|------|------|------|------|-------|
| 0:00   | 0    | 1    | 1    | 1    | 3     |
| 1:00   | 0    | 0    | 0    | 2    | 2     |
| 2:00   | 0    | 2    | 0    | 0    | 2     |
| 3:00   | 0    | 0    | 0    | 0    | 0     |
| 4:00   | 0    | 0    | 2    | 0    | 2     |
| 5:00   | 2    | 0    | 1    | 0    | 3     |
| 6:00   | 1    | 3    | 5    | 10   | 19    |
| 7:00   | 15   | 18   | 23   | 17   | 73    |
| 8:00   | 7    | 13   | 13   | 11   | 44    |
| 9:00   | 6    | 10   | 10   | 10   | 36    |
| 10:00  | 14   | 5    | 8    | 9    | 36    |
| 11:00  | 16   | 29   | 19   | 20   | 84    |
| 12:00  | 22   | 13   | 22   | 22   | 79    |
| 13:00  | 23   | 22   | 12   | 9    | 66    |
| 14:00  | 15   | 14   | 17   | 22   | 68    |
| 15:00  | 19   | 11   | 18   | 12   | 60    |
| 16:00  | 32   | 35   | 61   | 50   | 178   |
| 17:00  | 65   | 50   | 56   | 29   | 200   |
| 18:00  | 31   | 15   | 10   | 11   | 67    |
| 19:00  | 8    | 9    | 7    | 5    | 29    |
| 20:00  | 5    | 3    | 3    | 4    | 15    |
| 21:00  | 7    | 7    | 1    | 4    | 19    |
| 22:00  | 1    | 0    | 1    | 2    | 4     |
| 23:00  | 2    | 2    | 1    | 6    | 11    |
| TOTAL: |      |      |      |      | 1100  |

|   |
|---|
| The A.M. peak hour from 7:00 to 8:00 is 73    |
| The P.M. peak hour from 16:30 to 17:30 is 226 |

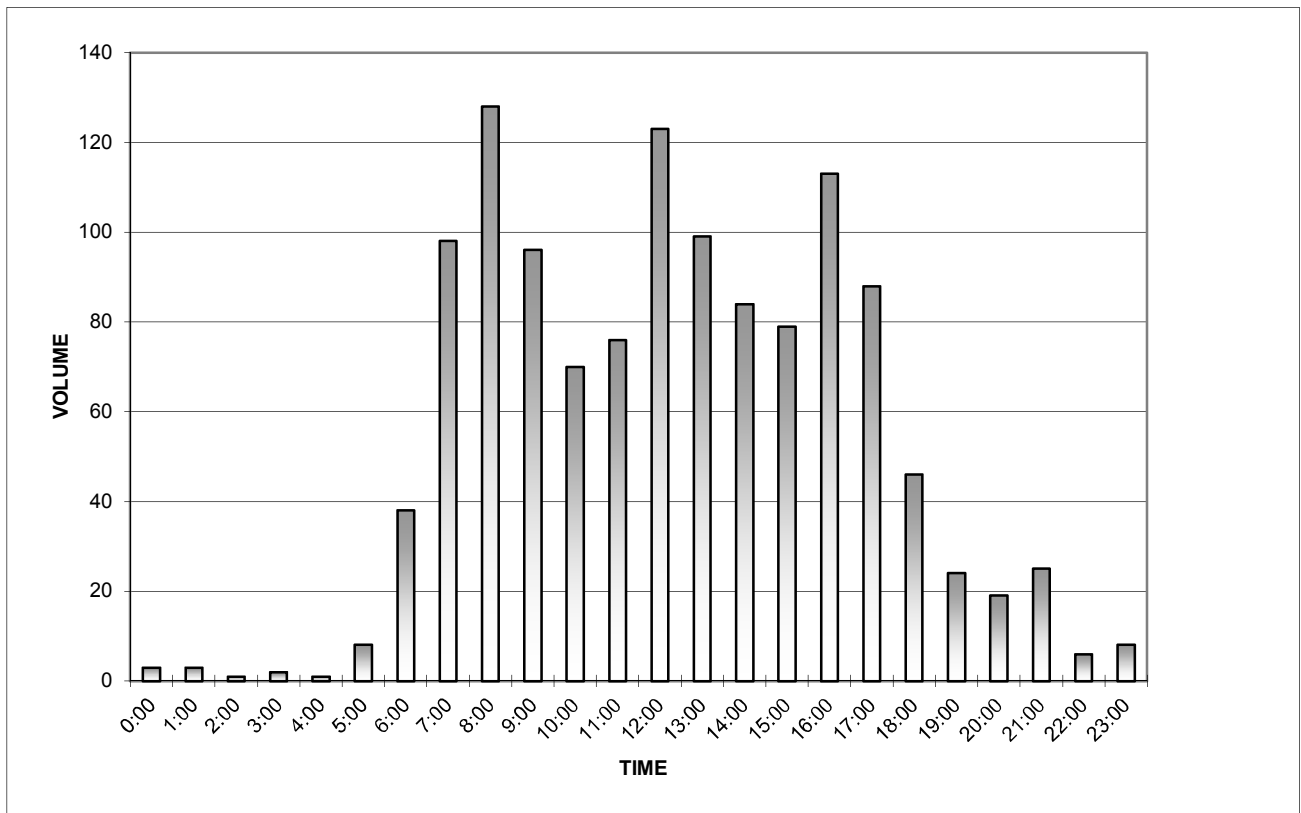


# **SB Congress Avenue between 18th Street and Martin Luther King Jr. Boulevard**

Date Began:  
7/21/2015

| TIME   | 0:00 | 0:15 | 0:30 | 0:45 | TOTAL |
|--------|------|------|------|------|-------|
| 0:00   | 1    | 1    | 0    | 1    | 3     |
| 1:00   | 1    | 0    | 2    | 0    | 3     |
| 2:00   | 0    | 1    | 0    | 0    | 1     |
| 3:00   | 0    | 0    | 0    | 2    | 2     |
| 4:00   | 0    | 0    | 1    | 0    | 1     |
| 5:00   | 1    | 0    | 4    | 3    | 8     |
| 6:00   | 2    | 8    | 7    | 21   | 38    |
| 7:00   | 17   | 13   | 26   | 42   | 98    |
| 8:00   | 40   | 26   | 29   | 33   | 128   |
| 9:00   | 23   | 25   | 25   | 23   | 96    |
| 10:00  | 23   | 18   | 18   | 11   | 70    |
| 11:00  | 21   | 16   | 14   | 25   | 76    |
| 12:00  | 18   | 30   | 45   | 30   | 123   |
| 13:00  | 29   | 27   | 20   | 23   | 99    |
| 14:00  | 23   | 16   | 13   | 32   | 84    |
| 15:00  | 19   | 25   | 15   | 20   | 79    |
| 16:00  | 22   | 20   | 34   | 37   | 113   |
| 17:00  | 21   | 32   | 18   | 17   | 88    |
| 18:00  | 15   | 10   | 11   | 10   | 46    |
| 19:00  | 7    | 5    | 7    | 5    | 24    |
| 20:00  | 4    | 5    | 4    | 6    | 19    |
| 21:00  | 7    | 7    | 8    | 3    | 25    |
| 22:00  | 1    | 1    | 4    | 0    | 6     |
| 23:00  | 2    | 3    | 3    | 0    | 8     |
| TOTAL: |      |      |      |      | 1238  |

|   |
|---|
| The A.M. peak hour from 7:45 to 8:45 is 137   |
| The P.M. peak hour from 16:30 to 17:30 is 124 |



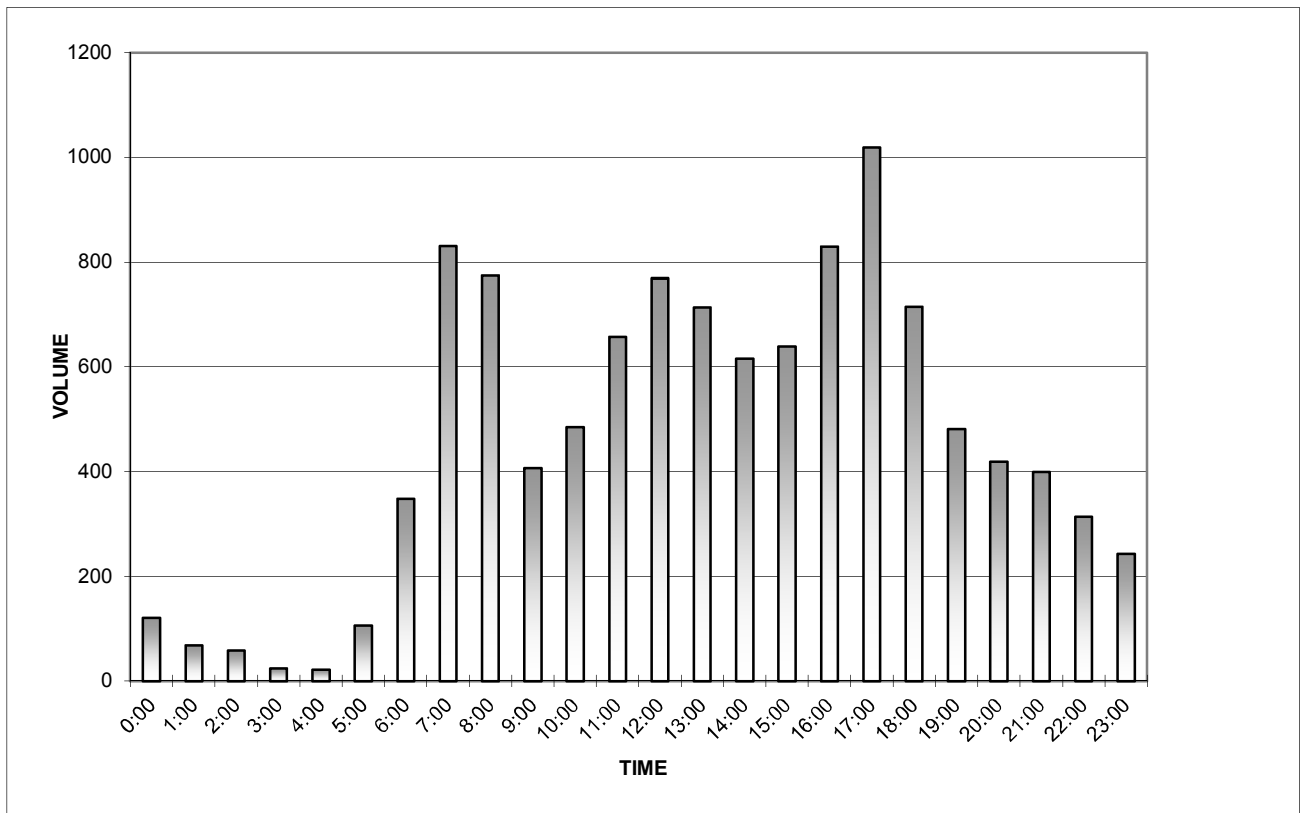
# **NB Lavaca Street between 15th Street and 16th Street**

Date Began:  
7/21/2015

| TIME  | 0:00 | 0:15 | 0:30 | 0:45 | TOTAL |
|-------|------|------|------|------|-------|
| 0:00  | 44   | 33   | 25   | 18   | 120   |
| 1:00  | 19   | 18   | 22   | 9    | 68    |
| 2:00  | 14   | 20   | 15   | 9    | 58    |
| 3:00  | 11   | 5    | 6    | 2    | 24    |
| 4:00  | 2    | 4    | 9    | 6    | 21    |
| 5:00  | 12   | 18   | 35   | 41   | 106   |
| 6:00  | 43   | 71   | 90   | 144  | 348   |
| 7:00  | 193  | 199  | 213  | 226  | 831   |
| 8:00  | 224  | 189  | 174  | 188  | 775   |
| 9:00  | 118  | 21   | 138  | 130  | 407   |
| 10:00 | 122  | 111  | 118  | 134  | 485   |
| 11:00 | 140  | 167  | 166  | 184  | 657   |
| 12:00 | 188  | 200  | 163  | 218  | 769   |
| 13:00 | 216  | 172  | 158  | 167  | 713   |
| 14:00 | 161  | 159  | 144  | 152  | 616   |
| 15:00 | 152  | 154  | 157  | 176  | 639   |
| 16:00 | 182  | 182  | 236  | 230  | 830   |
| 17:00 | 240  | 284  | 271  | 224  | 1019  |
| 18:00 | 238  | 188  | 134  | 154  | 714   |
| 19:00 | 144  | 106  | 112  | 119  | 481   |
| 20:00 | 82   | 121  | 96   | 120  | 419   |
| 21:00 | 92   | 93   | 112  | 102  | 399   |
| 22:00 | 88   | 86   | 78   | 62   | 314   |
| 23:00 | 70   | 58   | 40   | 75   | 243   |

TOTAL: 11056

|  |
|--|
| The A.M. peak hour from 7:15 to 8:15 is 862    |
| The P.M. peak hour from 16:45 to 17:45 is 1025 |



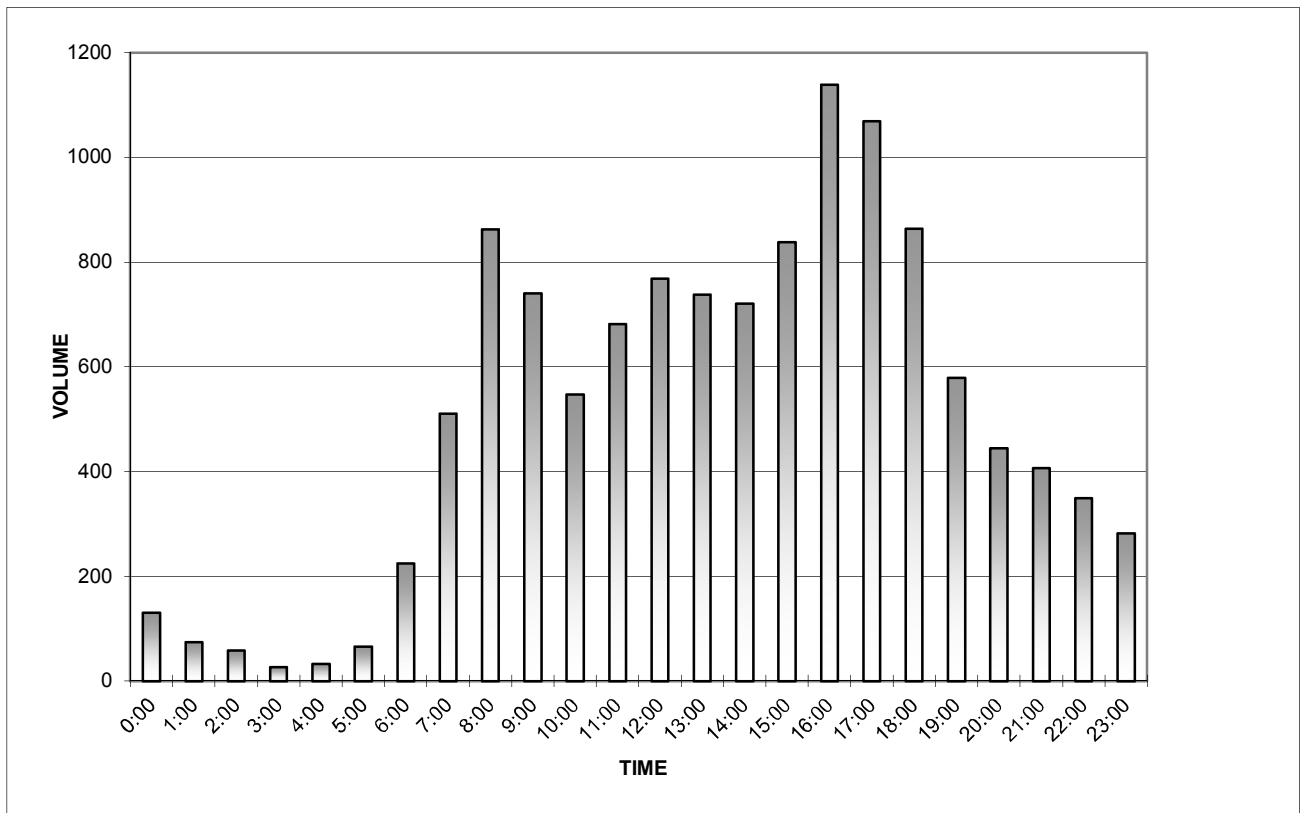
# **SB Guadalupe Street between 15th Street and 16th Street**

Date Began:  
7/21/2015

| TIME  | 0:00 | 0:15 | 0:30 | 0:45 | TOTAL |
|-------|------|------|------|------|-------|
| 0:00  | 42   | 38   | 26   | 24   | 130   |
| 1:00  | 24   | 17   | 15   | 18   | 74    |
| 2:00  | 15   | 17   | 13   | 13   | 58    |
| 3:00  | 6    | 4    | 10   | 6    | 26    |
| 4:00  | 10   | 7    | 7    | 8    | 32    |
| 5:00  | 13   | 11   | 14   | 28   | 66    |
| 6:00  | 26   | 52   | 62   | 84   | 224   |
| 7:00  | 90   | 93   | 160  | 168  | 511   |
| 8:00  | 198  | 186  | 240  | 239  | 863   |
| 9:00  | 242  | 182  | 175  | 141  | 740   |
| 10:00 | 148  | 145  | 126  | 128  | 547   |
| 11:00 | 154  | 156  | 194  | 178  | 682   |
| 12:00 | 188  | 180  | 200  | 200  | 768   |
| 13:00 | 213  | 182  | 181  | 162  | 738   |
| 14:00 | 174  | 165  | 183  | 199  | 721   |
| 15:00 | 210  | 184  | 208  | 236  | 838   |
| 16:00 | 255  | 307  | 297  | 280  | 1139  |
| 17:00 | 286  | 294  | 267  | 222  | 1069  |
| 18:00 | 236  | 208  | 232  | 188  | 864   |
| 19:00 | 183  | 138  | 128  | 130  | 579   |
| 20:00 | 138  | 106  | 108  | 92   | 444   |
| 21:00 | 96   | 103  | 106  | 102  | 407   |
| 22:00 | 78   | 112  | 82   | 77   | 349   |
| 23:00 | 82   | 70   | 64   | 66   | 282   |

TOTAL: 12151

|  |
|--|
| The A.M. peak hour from 8:15 to 9:15 is 907    |
| The P.M. peak hour from 16:15 to 17:15 is 1170 |



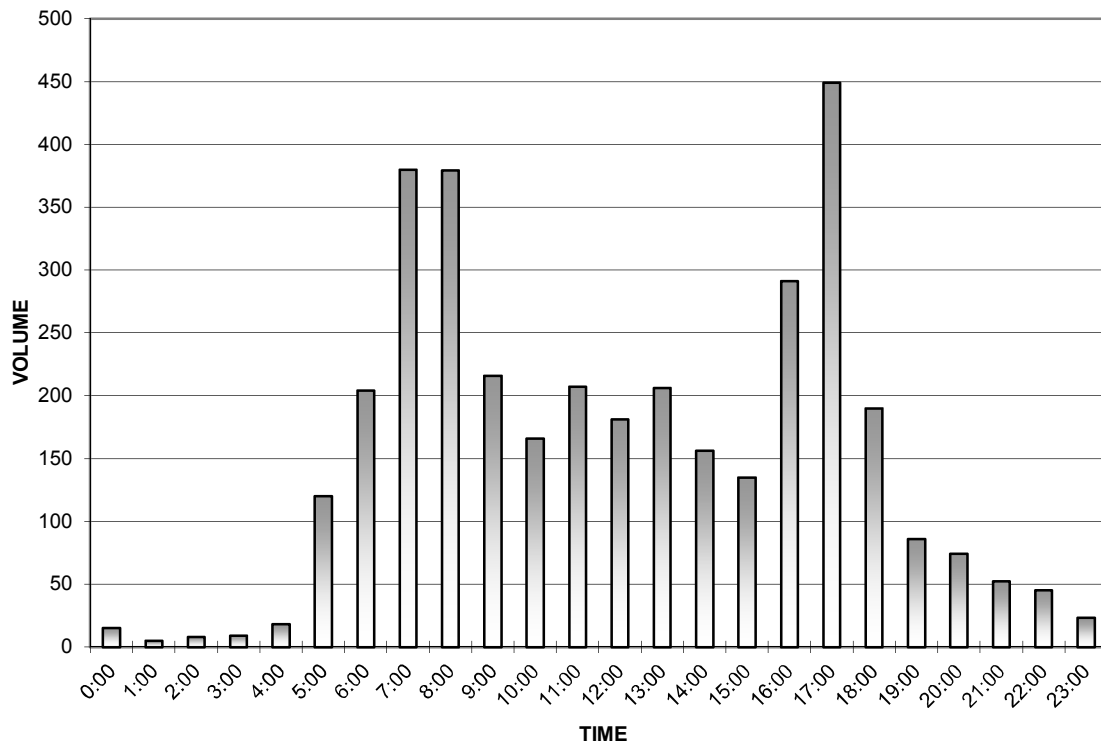
# **NB Trinity Street between 15th Street and 17th Street**

Date Began:  
7/21/2015

| TIME  | 0:00 | 0:15 | 0:30 | 0:45 | TOTAL |
|-------|------|------|------|------|-------|
| 0:00  | 7    | 4    | 2    | 2    | 15    |
| 1:00  | 0    | 0    | 4    | 1    | 5     |
| 2:00  | 3    | 2    | 2    | 1    | 8     |
| 3:00  | 2    | 2    | 2    | 3    | 9     |
| 4:00  | 2    | 2    | 4    | 10   | 18    |
| 5:00  | 10   | 16   | 41   | 53   | 120   |
| 6:00  | 32   | 50   | 52   | 70   | 204   |
| 7:00  | 80   | 88   | 98   | 114  | 380   |
| 8:00  | 100  | 105  | 84   | 90   | 379   |
| 9:00  | 64   | 51   | 60   | 41   | 216   |
| 10:00 | 52   | 41   | 39   | 34   | 166   |
| 11:00 | 52   | 48   | 62   | 45   | 207   |
| 12:00 | 48   | 39   | 56   | 38   | 181   |
| 13:00 | 54   | 53   | 49   | 50   | 206   |
| 14:00 | 44   | 37   | 38   | 37   | 156   |
| 15:00 | 35   | 36   | 32   | 32   | 135   |
| 16:00 | 72   | 49   | 77   | 93   | 291   |
| 17:00 | 106  | 132  | 110  | 101  | 449   |
| 18:00 | 78   | 48   | 38   | 26   | 190   |
| 19:00 | 20   | 18   | 21   | 27   | 86    |
| 20:00 | 24   | 26   | 10   | 14   | 74    |
| 21:00 | 14   | 16   | 12   | 10   | 52    |
| 22:00 | 14   | 8    | 10   | 13   | 45    |
| 23:00 | 7    | 4    | 7    | 5    | 23    |

TOTAL: 3615

|   |
|---|
| The A.M. peak hour from 7:30 to 8:30 is 417   |
| The P.M. peak hour from 17:00 to 18:00 is 449 |

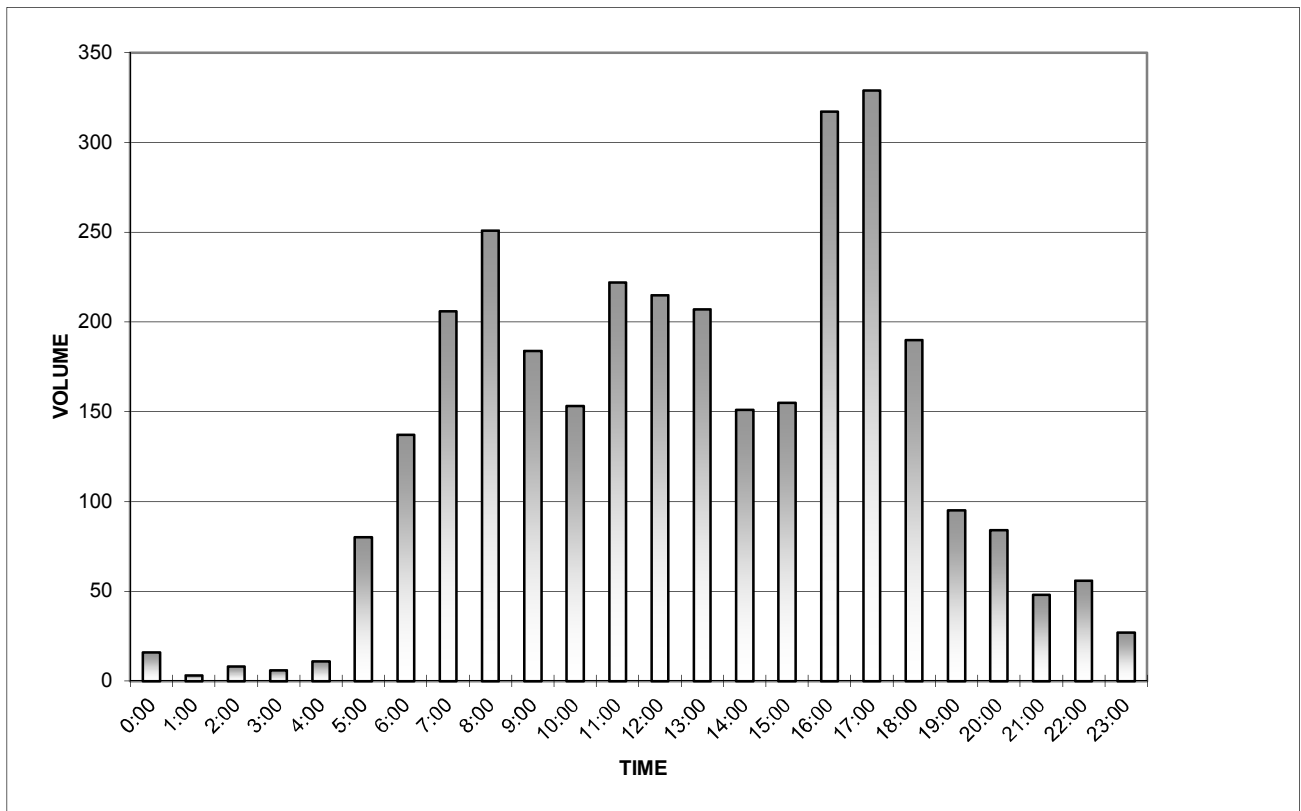


# **NB Trinity Street between 18th Street and Martin Luther King Jr. Boulevard**

Date Began:  
7/21/2015

| TIME   | 0:00 | 0:15 | 0:30 | 0:45 | TOTAL |
|--------|------|------|------|------|-------|
| 0:00   | 6    | 4    | 2    | 4    | 16    |
| 1:00   | 0    | 0    | 2    | 1    | 3     |
| 2:00   | 3    | 2    | 2    | 1    | 8     |
| 3:00   | 2    | 2    | 2    | 0    | 6     |
| 4:00   | 4    | 0    | 4    | 3    | 11    |
| 5:00   | 8    | 9    | 32   | 31   | 80    |
| 6:00   | 22   | 31   | 32   | 52   | 137   |
| 7:00   | 46   | 49   | 54   | 57   | 206   |
| 8:00   | 69   | 62   | 54   | 66   | 251   |
| 9:00   | 47   | 42   | 58   | 37   | 184   |
| 10:00  | 50   | 38   | 32   | 33   | 153   |
| 11:00  | 54   | 48   | 66   | 54   | 222   |
| 12:00  | 54   | 59   | 62   | 40   | 215   |
| 13:00  | 60   | 52   | 51   | 44   | 207   |
| 14:00  | 42   | 38   | 39   | 32   | 151   |
| 15:00  | 35   | 38   | 46   | 36   | 155   |
| 16:00  | 88   | 60   | 88   | 81   | 317   |
| 17:00  | 102  | 73   | 64   | 90   | 329   |
| 18:00  | 82   | 44   | 37   | 27   | 190   |
| 19:00  | 23   | 20   | 24   | 28   | 95    |
| 20:00  | 29   | 30   | 13   | 12   | 84    |
| 21:00  | 11   | 18   | 9    | 10   | 48    |
| 22:00  | 20   | 10   | 11   | 15   | 56    |
| 23:00  | 9    | 3    | 7    | 8    | 27    |
| TOTAL: |      |      |      |      | 3151  |

|   |
|---|
| The A.M. peak hour from 8:00 to 9:00 is 251   |
| The P.M. peak hour from 16:30 to 17:30 is 344 |

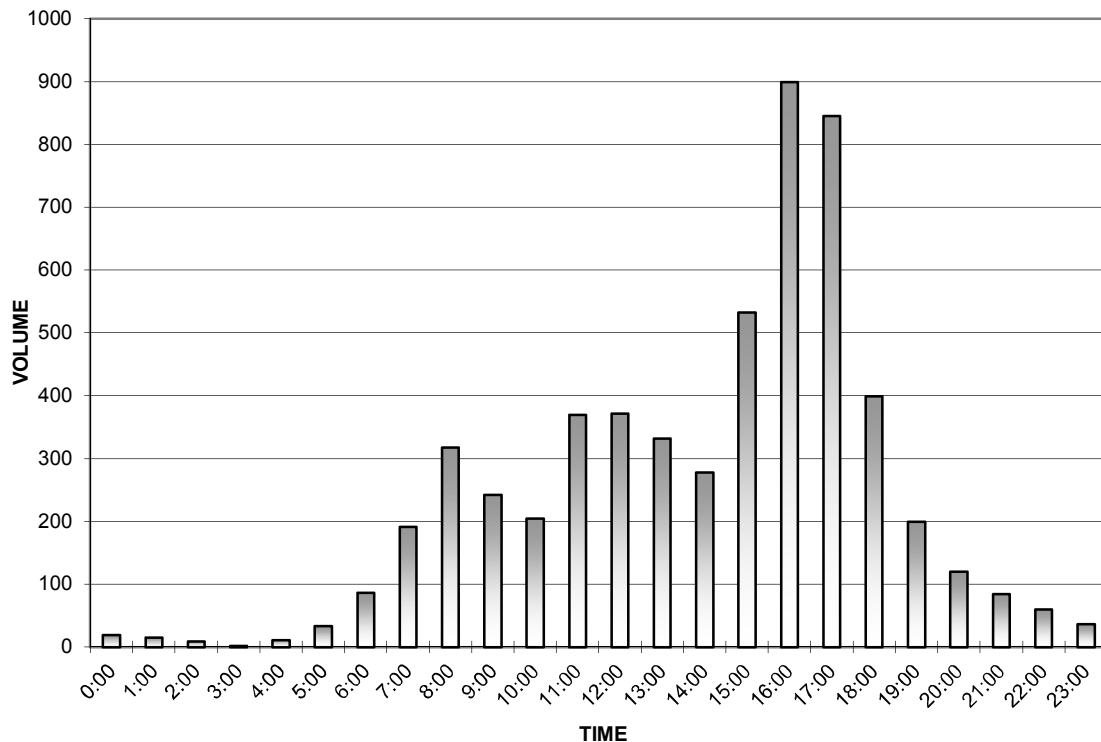


# **SB San Jacinto Boulevard between 15th Street and 16th Street**

Date Began:  
7/21/2015

| TIME   | 0:00 | 0:15 | 0:30 | 0:45 | TOTAL |
|--------|------|------|------|------|-------|
| 0:00   | 7    | 5    | 4    | 3    | 19    |
| 1:00   | 4    | 4    | 4    | 3    | 15    |
| 2:00   | 2    | 0    | 2    | 5    | 9     |
| 3:00   | 1    | 0    | 1    | 0    | 2     |
| 4:00   | 1    | 1    | 6    | 3    | 11    |
| 5:00   | 7    | 4    | 6    | 16   | 33    |
| 6:00   | 10   | 14   | 28   | 34   | 86    |
| 7:00   | 46   | 34   | 49   | 62   | 191   |
| 8:00   | 60   | 65   | 84   | 108  | 317   |
| 9:00   | 88   | 65   | 46   | 43   | 242   |
| 10:00  | 52   | 34   | 51   | 67   | 204   |
| 11:00  | 70   | 89   | 114  | 96   | 369   |
| 12:00  | 118  | 78   | 83   | 92   | 371   |
| 13:00  | 94   | 92   | 90   | 56   | 332   |
| 14:00  | 67   | 64   | 79   | 68   | 278   |
| 15:00  | 106  | 110  | 179  | 137  | 532   |
| 16:00  | 219  | 187  | 287  | 206  | 899   |
| 17:00  | 270  | 205  | 189  | 181  | 845   |
| 18:00  | 160  | 107  | 74   | 58   | 399   |
| 19:00  | 58   | 52   | 39   | 50   | 199   |
| 20:00  | 32   | 40   | 24   | 24   | 120   |
| 21:00  | 26   | 24   | 19   | 15   | 84    |
| 22:00  | 18   | 19   | 10   | 13   | 60    |
| 23:00  | 15   | 11   | 6    | 4    | 36    |
| TOTAL: |      |      |      |      | 5653  |

|   |
|---|
| The A.M. peak hour from 8:30 to 9:30 is 345   |
| The P.M. peak hour from 16:30 to 17:30 is 968 |



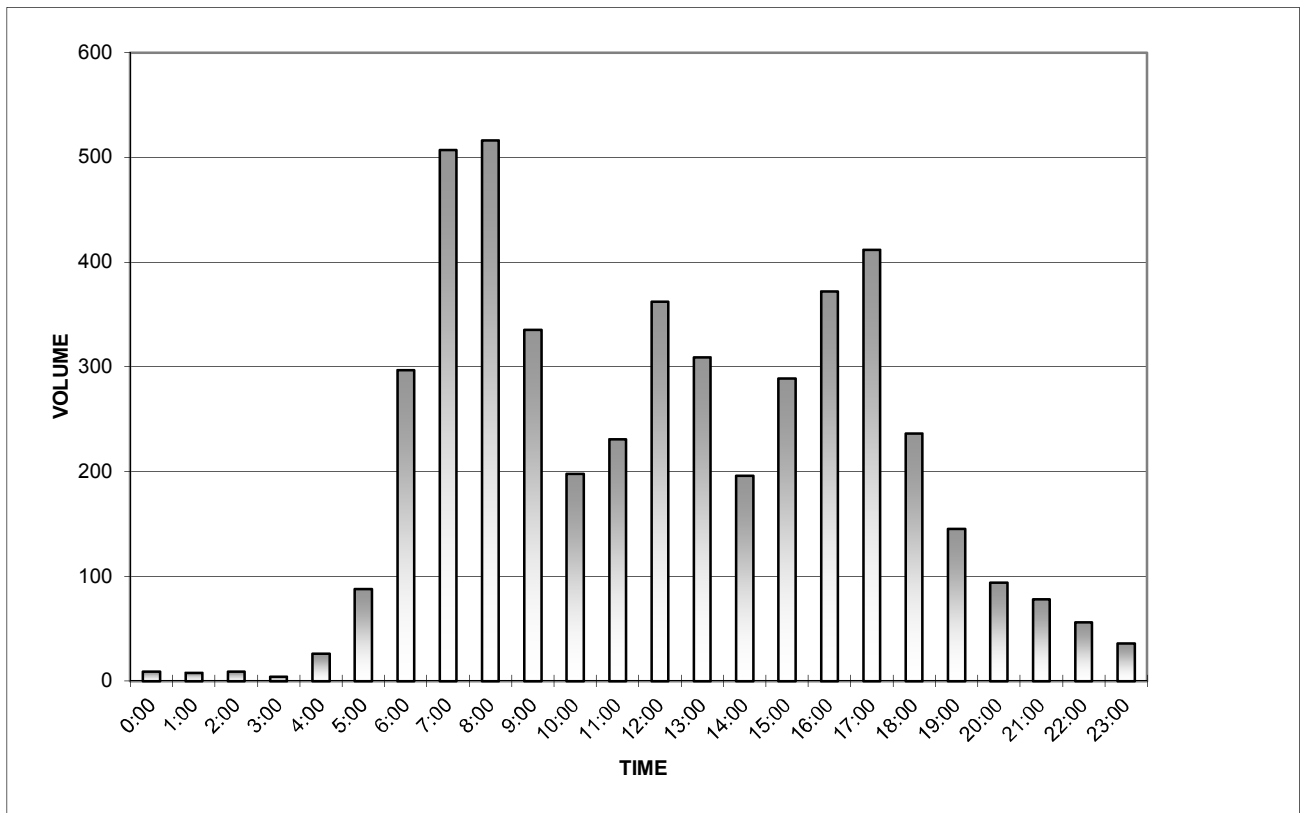
# **SB San Jacinto Boulevard between 18th Street and Martin Luther King Jr Boulevard**

Date Began:  
7/21/2015

| TIME  | 0:00 | 0:15 | 0:30 | 0:45 | TOTAL |
|-------|------|------|------|------|-------|
| 0:00  | 1    | 3    | 2    | 3    | 9     |
| 1:00  | 2    | 2    | 1    | 3    | 8     |
| 2:00  | 4    | 1    | 2    | 2    | 9     |
| 3:00  | 1    | 0    | 0    | 3    | 4     |
| 4:00  | 3    | 1    | 12   | 10   | 26    |
| 5:00  | 12   | 14   | 26   | 36   | 88    |
| 6:00  | 32   | 53   | 92   | 120  | 297   |
| 7:00  | 101  | 116  | 144  | 146  | 507   |
| 8:00  | 130  | 122  | 110  | 154  | 516   |
| 9:00  | 121  | 104  | 55   | 55   | 335   |
| 10:00 | 54   | 36   | 48   | 60   | 198   |
| 11:00 | 46   | 56   | 59   | 70   | 231   |
| 12:00 | 86   | 72   | 94   | 110  | 362   |
| 13:00 | 89   | 100  | 66   | 54   | 309   |
| 14:00 | 51   | 51   | 54   | 40   | 196   |
| 15:00 | 70   | 72   | 71   | 76   | 289   |
| 16:00 | 76   | 86   | 93   | 117  | 372   |
| 17:00 | 86   | 110  | 104  | 112  | 412   |
| 18:00 | 90   | 70   | 36   | 40   | 236   |
| 19:00 | 40   | 41   | 24   | 40   | 145   |
| 20:00 | 26   | 26   | 22   | 20   | 94    |
| 21:00 | 22   | 20   | 25   | 11   | 78    |
| 22:00 | 16   | 14   | 14   | 12   | 56    |
| 23:00 | 18   | 7    | 6    | 5    | 36    |

TOTAL: 4813

|   |
|---|
| The A.M. peak hour from 7:30 to 8:30 is 542   |
| The P.M. peak hour from 16:45 to 17:45 is 417 |



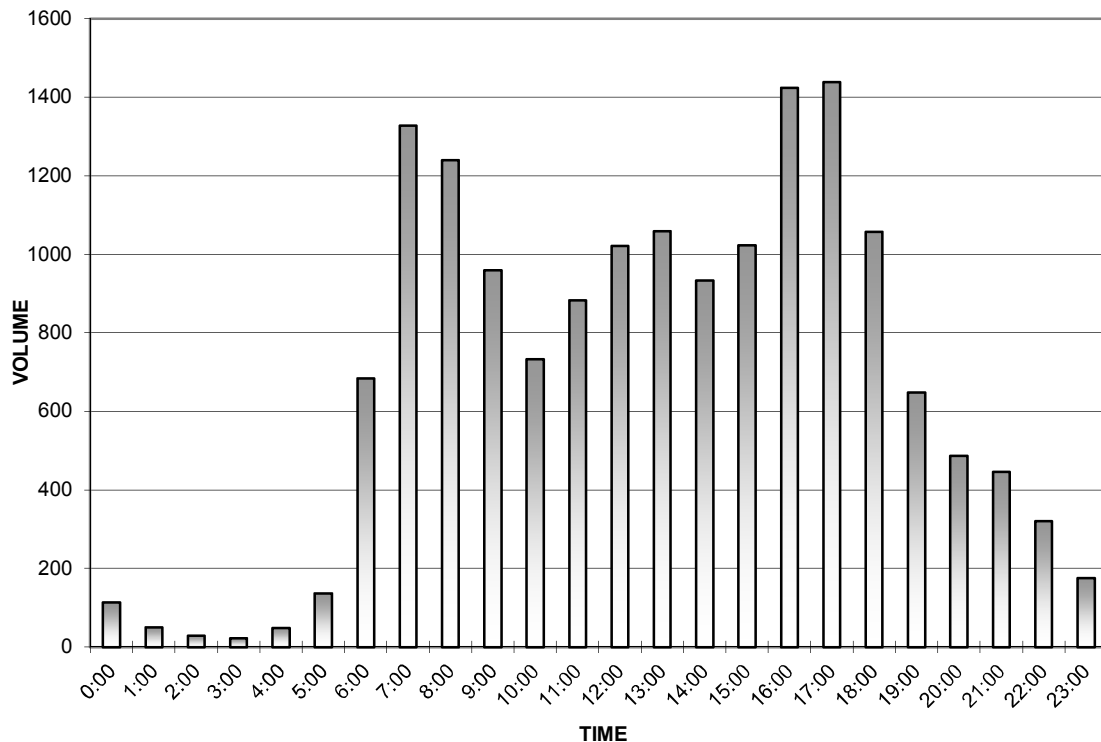
# **EB 15th Street between Colorado Street and Congress Avenue**

Date Began:  
7/21/2015

| TIME  | 0:00 | 0:15 | 0:30 | 0:45 | TOTAL |
|-------|------|------|------|------|-------|
| 0:00  | 38   | 34   | 21   | 20   | 113   |
| 1:00  | 15   | 13   | 9    | 13   | 50    |
| 2:00  | 6    | 10   | 5    | 7    | 28    |
| 3:00  | 6    | 4    | 8    | 4    | 22    |
| 4:00  | 6    | 10   | 10   | 22   | 48    |
| 5:00  | 17   | 30   | 32   | 58   | 137   |
| 6:00  | 81   | 128  | 188  | 287  | 684   |
| 7:00  | 264  | 355  | 320  | 388  | 1327  |
| 8:00  | 296  | 332  | 314  | 298  | 1240  |
| 9:00  | 271  | 264  | 230  | 194  | 959   |
| 10:00 | 174  | 182  | 176  | 200  | 732   |
| 11:00 | 188  | 224  | 244  | 226  | 882   |
| 12:00 | 260  | 244  | 235  | 282  | 1021  |
| 13:00 | 256  | 271  | 246  | 286  | 1059  |
| 14:00 | 211  | 242  | 238  | 242  | 933   |
| 15:00 | 272  | 224  | 251  | 276  | 1023  |
| 16:00 | 374  | 326  | 366  | 358  | 1424  |
| 17:00 | 378  | 298  | 407  | 356  | 1439  |
| 18:00 | 334  | 292  | 229  | 202  | 1057  |
| 19:00 | 181  | 174  | 133  | 160  | 648   |
| 20:00 | 126  | 124  | 108  | 128  | 486   |
| 21:00 | 95   | 104  | 129  | 118  | 446   |
| 22:00 | 93   | 102  | 56   | 70   | 321   |
| 23:00 | 55   | 36   | 40   | 44   | 175   |

TOTAL: 16254

|  |
|--|
| The A.M. peak hour from 7:15 to 8:15 is 1359   |
| The P.M. peak hour from 16:45 to 17:45 is 1441 |



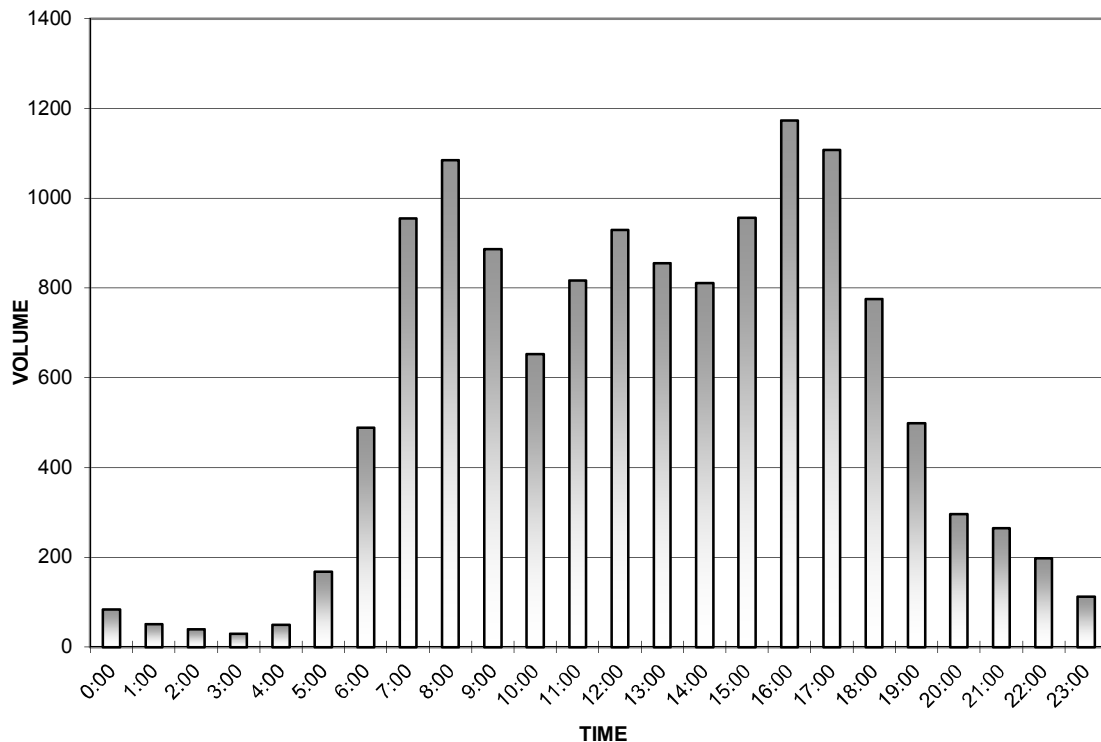
# **WB 15th Street between Colorado Street and Congress Avenue**

Date Began:  
7/21/2015

| TIME  | 0:00 | 0:15 | 0:30 | 0:45 | TOTAL |
|-------|------|------|------|------|-------|
| 0:00  | 19   | 30   | 20   | 14   | 83    |
| 1:00  | 24   | 9    | 11   | 7    | 51    |
| 2:00  | 8    | 13   | 12   | 7    | 40    |
| 3:00  | 10   | 8    | 6    | 6    | 30    |
| 4:00  | 5    | 12   | 12   | 20   | 49    |
| 5:00  | 22   | 37   | 46   | 62   | 167   |
| 6:00  | 68   | 94   | 120  | 206  | 488   |
| 7:00  | 186  | 223  | 251  | 295  | 955   |
| 8:00  | 276  | 246  | 276  | 286  | 1084  |
| 9:00  | 268  | 202  | 197  | 220  | 887   |
| 10:00 | 162  | 164  | 169  | 158  | 653   |
| 11:00 | 148  | 178  | 238  | 252  | 816   |
| 12:00 | 242  | 218  | 209  | 260  | 929   |
| 13:00 | 234  | 226  | 205  | 190  | 855   |
| 14:00 | 183  | 206  | 186  | 236  | 811   |
| 15:00 | 218  | 230  | 270  | 238  | 956   |
| 16:00 | 332  | 252  | 300  | 289  | 1173  |
| 17:00 | 331  | 260  | 260  | 256  | 1107  |
| 18:00 | 210  | 224  | 183  | 158  | 775   |
| 19:00 | 140  | 120  | 138  | 100  | 498   |
| 20:00 | 90   | 80   | 60   | 66   | 296   |
| 21:00 | 59   | 75   | 69   | 62   | 265   |
| 22:00 | 55   | 49   | 51   | 43   | 198   |
| 23:00 | 40   | 26   | 22   | 24   | 112   |

TOTAL: 13278

|  |
|--|
| The A.M. peak hour from 7:45 to 8:45 is 1093   |
| The P.M. peak hour from 16:30 to 17:30 is 1180 |



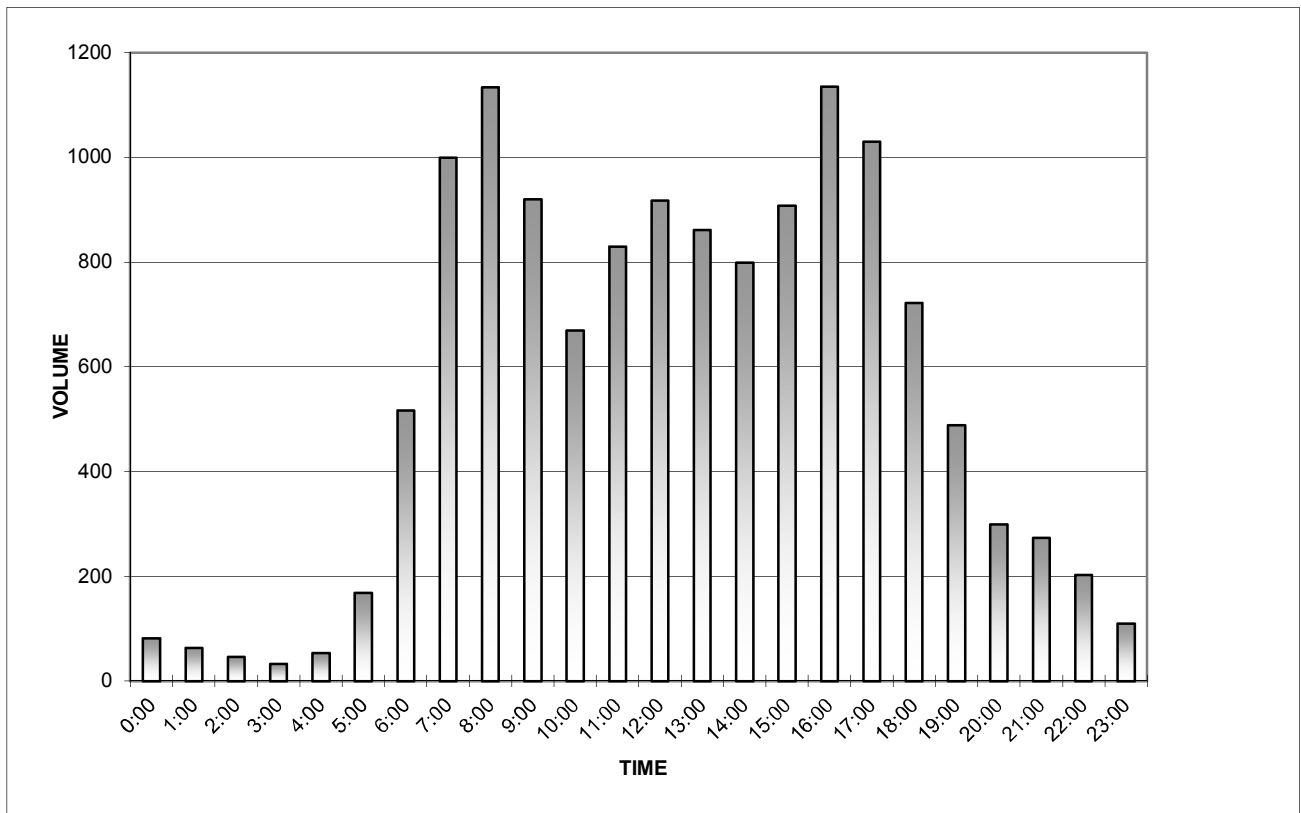
# **WB 15th Street between Congress Avenue and Brazos Street**

Date Began:  
7/21/2015

| TIME  | 0:00 | 0:15 | 0:30 | 0:45 | TOTAL |
|-------|------|------|------|------|-------|
| 0:00  | 19   | 28   | 20   | 15   | 82    |
| 1:00  | 24   | 12   | 10   | 17   | 63    |
| 2:00  | 16   | 12   | 11   | 7    | 46    |
| 3:00  | 12   | 7    | 6    | 7    | 32    |
| 4:00  | 4    | 12   | 13   | 24   | 53    |
| 5:00  | 21   | 35   | 48   | 64   | 168   |
| 6:00  | 71   | 104  | 129  | 212  | 516   |
| 7:00  | 201  | 226  | 268  | 304  | 999   |
| 8:00  | 300  | 254  | 290  | 290  | 1134  |
| 9:00  | 282  | 215  | 203  | 220  | 920   |
| 10:00 | 175  | 161  | 178  | 155  | 669   |
| 11:00 | 163  | 184  | 242  | 241  | 830   |
| 12:00 | 245  | 213  | 220  | 240  | 918   |
| 13:00 | 242  | 223  | 214  | 182  | 861   |
| 14:00 | 188  | 198  | 181  | 232  | 799   |
| 15:00 | 212  | 220  | 261  | 215  | 908   |
| 16:00 | 315  | 250  | 296  | 274  | 1135  |
| 17:00 | 342  | 220  | 245  | 223  | 1030  |
| 18:00 | 191  | 204  | 178  | 149  | 722   |
| 19:00 | 131  | 126  | 133  | 98   | 488   |
| 20:00 | 87   | 80   | 62   | 70   | 299   |
| 21:00 | 58   | 86   | 63   | 66   | 273   |
| 22:00 | 58   | 48   | 52   | 44   | 202   |
| 23:00 | 40   | 26   | 20   | 24   | 110   |

TOTAL: 13257

|  |
|--|
| The A.M. peak hour from 7:45 to 8:45 is 1148   |
| The P.M. peak hour from 16:15 to 17:15 is 1162 |

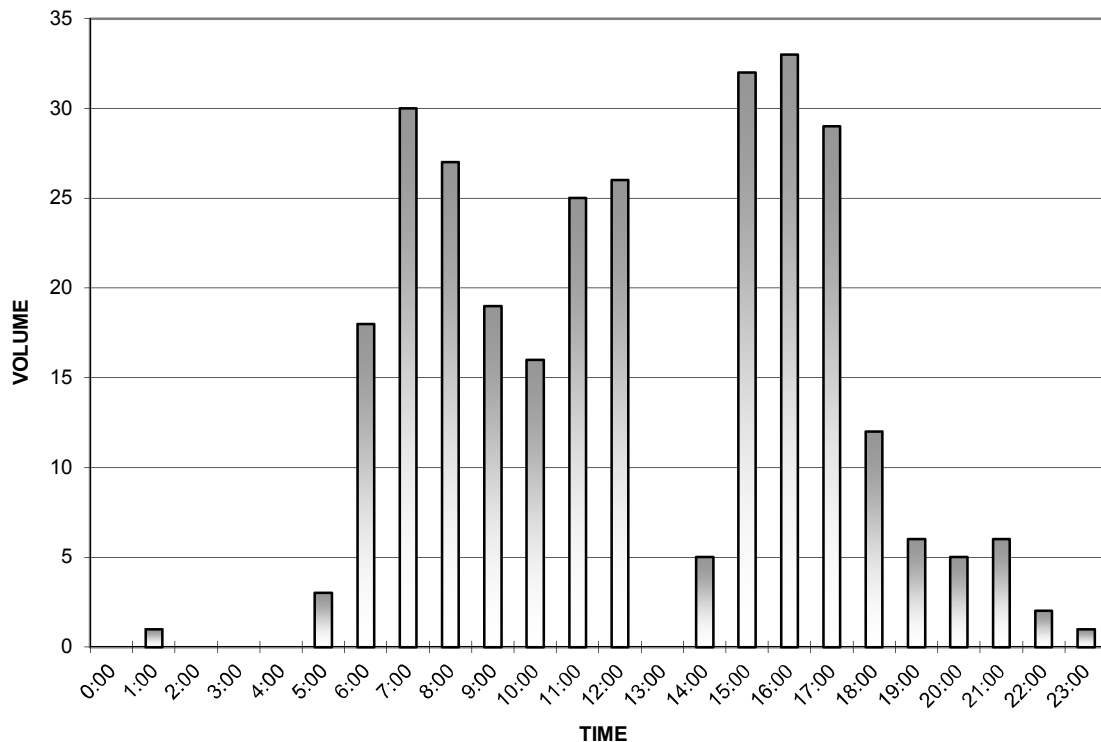


# **WB 16th Street between Colorado Street and Congress Avenue**

Date Began:  
7/21/2015

| TIME   | 0:00 | 0:15 | 0:30 | 0:45 | TOTAL |
|--------|------|------|------|------|-------|
| 0:00   | 0    | 0    | 0    | 0    | 0     |
| 1:00   | 0    | 0    | 1    | 0    | 1     |
| 2:00   | 0    | 0    | 0    | 0    | 0     |
| 3:00   | 0    | 0    | 0    | 0    | 0     |
| 4:00   | 0    | 0    | 0    | 0    | 0     |
| 5:00   | 1    | 0    | 1    | 1    | 3     |
| 6:00   | 1    | 3    | 5    | 9    | 18    |
| 7:00   | 8    | 4    | 9    | 9    | 30    |
| 8:00   | 9    | 3    | 10   | 5    | 27    |
| 9:00   | 7    | 4    | 4    | 4    | 19    |
| 10:00  | 1    | 6    | 2    | 7    | 16    |
| 11:00  | 4    | 6    | 7    | 8    | 25    |
| 12:00  | 6    | 16   | 4    | 0    | 26    |
| 13:00  | 0    | 0    | 0    | 0    | 0     |
| 14:00  | 0    | 0    | 0    | 5    | 5     |
| 15:00  | 11   | 3    | 6    | 12   | 32    |
| 16:00  | 9    | 6    | 9    | 9    | 33    |
| 17:00  | 11   | 12   | 4    | 2    | 29    |
| 18:00  | 9    | 1    | 0    | 2    | 12    |
| 19:00  | 1    | 4    | 0    | 1    | 6     |
| 20:00  | 1    | 2    | 0    | 2    | 5     |
| 21:00  | 2    | 1    | 2    | 1    | 6     |
| 22:00  | 0    | 1    | 1    | 0    | 2     |
| 23:00  | 1    | 0    | 0    | 0    | 1     |
| TOTAL: |      |      |      |      | 296   |

|  |
|--|
| The A.M. peak hour from 7:45 to 8:45 is 31   |
| The P.M. peak hour from 16:30 to 17:30 is 41 |

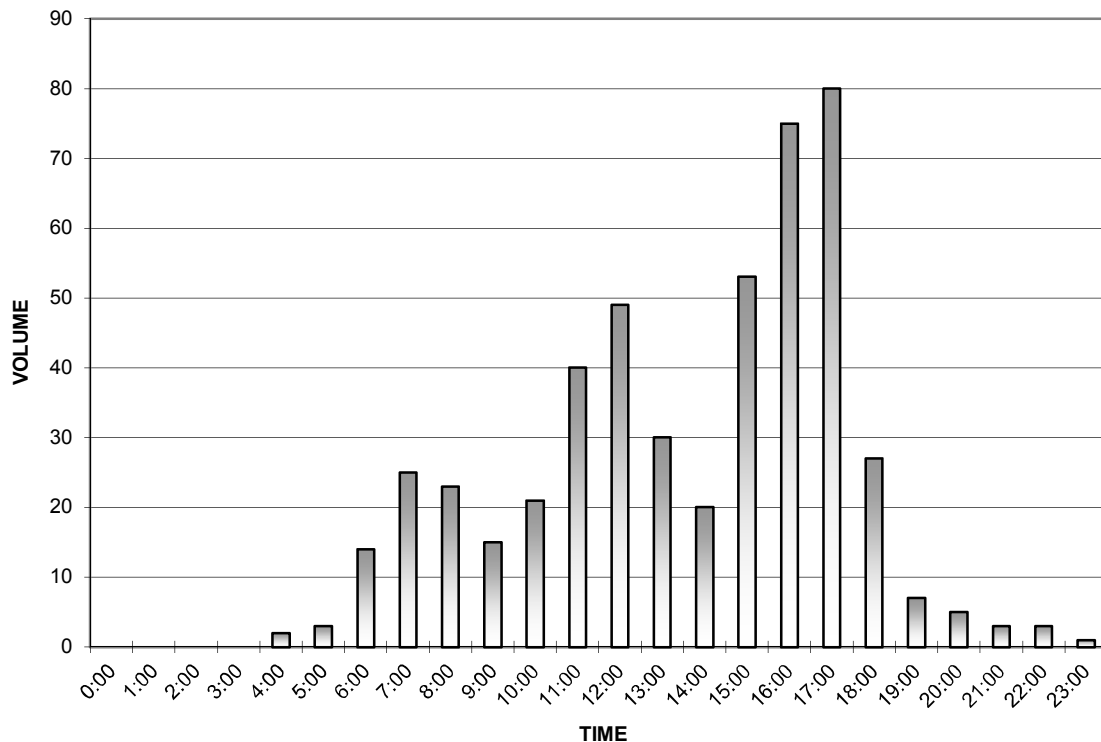


# **WB 16th Street between Congress Avenue and San Jacinto Boulevard**

Date Began:  
7/21/2015

| TIME   | 0:00 | 0:15 | 0:30 | 0:45 | TOTAL |
|--------|------|------|------|------|-------|
| 0:00   | 0    | 0    | 0    | 0    | 0     |
| 1:00   | 0    | 0    | 0    | 0    | 0     |
| 2:00   | 0    | 0    | 0    | 0    | 0     |
| 3:00   | 0    | 0    | 0    | 0    | 0     |
| 4:00   | 0    | 0    | 2    | 0    | 2     |
| 5:00   | 0    | 0    | 0    | 3    | 3     |
| 6:00   | 3    | 2    | 5    | 4    | 14    |
| 7:00   | 5    | 6    | 5    | 9    | 25    |
| 8:00   | 4    | 10   | 6    | 3    | 23    |
| 9:00   | 7    | 2    | 3    | 3    | 15    |
| 10:00  | 3    | 7    | 4    | 7    | 21    |
| 11:00  | 9    | 8    | 11   | 12   | 40    |
| 12:00  | 7    | 14   | 17   | 11   | 49    |
| 13:00  | 12   | 3    | 13   | 2    | 30    |
| 14:00  | 4    | 5    | 6    | 5    | 20    |
| 15:00  | 11   | 6    | 19   | 17   | 53    |
| 16:00  | 21   | 15   | 26   | 13   | 75    |
| 17:00  | 35   | 23   | 11   | 11   | 80    |
| 18:00  | 11   | 9    | 5    | 2    | 27    |
| 19:00  | 1    | 4    | 0    | 2    | 7     |
| 20:00  | 0    | 2    | 1    | 2    | 5     |
| 21:00  | 0    | 0    | 3    | 0    | 3     |
| 22:00  | 2    | 1    | 0    | 0    | 3     |
| 23:00  | 1    | 0    | 0    | 0    | 1     |
| TOTAL: |      |      |      |      | 496   |

|  |
|--|
| The A.M. peak hour from 7:45 to 8:45 is 29   |
| The P.M. peak hour from 16:30 to 17:30 is 97 |



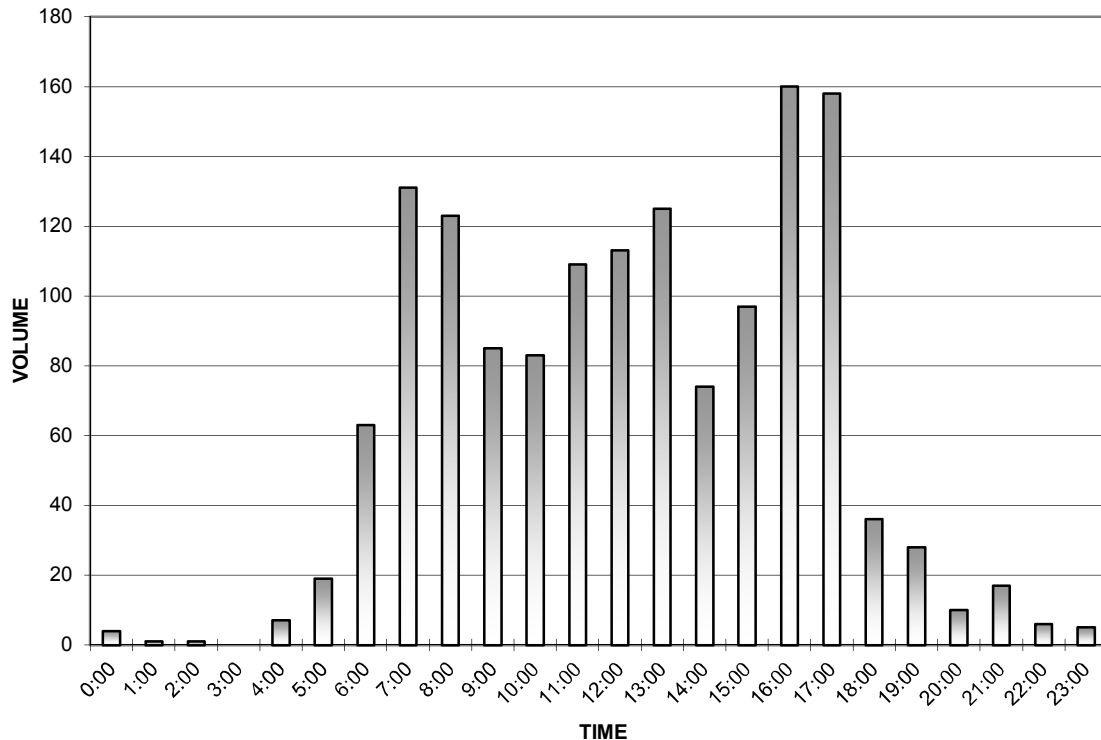
# **EB 17th Street between Brazos Street and San Jacinto Boulevard**

Date Began:  
7/21/2015

| TIME  | 0:00 | 0:15 | 0:30 | 0:45 | TOTAL |
|-------|------|------|------|------|-------|
| 0:00  | 2    | 0    | 0    | 2    | 4     |
| 1:00  | 0    | 0    | 1    | 0    | 1     |
| 2:00  | 0    | 0    | 0    | 1    | 1     |
| 3:00  | 0    | 0    | 0    | 0    | 0     |
| 4:00  | 1    | 2    | 2    | 2    | 7     |
| 5:00  | 1    | 6    | 3    | 9    | 19    |
| 6:00  | 4    | 15   | 16   | 28   | 63    |
| 7:00  | 32   | 35   | 29   | 35   | 131   |
| 8:00  | 37   | 32   | 36   | 18   | 123   |
| 9:00  | 26   | 18   | 26   | 15   | 85    |
| 10:00 | 25   | 22   | 13   | 23   | 83    |
| 11:00 | 25   | 25   | 28   | 31   | 109   |
| 12:00 | 33   | 24   | 28   | 28   | 113   |
| 13:00 | 36   | 35   | 32   | 22   | 125   |
| 14:00 | 15   | 16   | 19   | 24   | 74    |
| 15:00 | 19   | 30   | 32   | 16   | 97    |
| 16:00 | 39   | 29   | 53   | 39   | 160   |
| 17:00 | 57   | 48   | 27   | 26   | 158   |
| 18:00 | 19   | 3    | 7    | 7    | 36    |
| 19:00 | 10   | 9    | 7    | 2    | 28    |
| 20:00 | 2    | 5    | 1    | 2    | 10    |
| 21:00 | 6    | 4    | 3    | 4    | 17    |
| 22:00 | 2    | 2    | 1    | 1    | 6     |
| 23:00 | 5    | 0    | 0    | 0    | 5     |

TOTAL: 1455

|   |
|---|
| The A.M. peak hour from 7:45 to 8:45 is 140   |
| The P.M. peak hour from 16:30 to 17:30 is 197 |

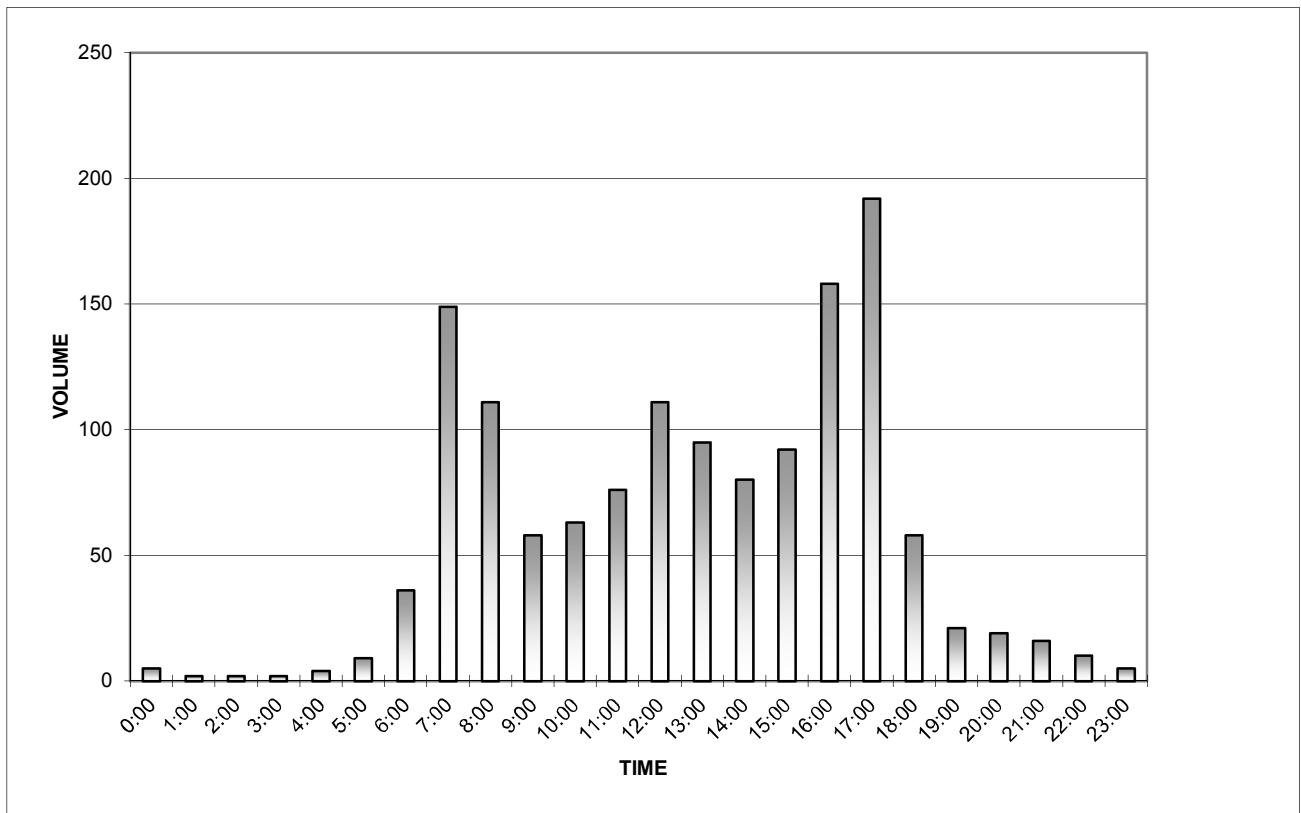


# **EB 17th Street between Colorado Street and Congress Avenue**

Date Began:  
7/21/2015

| TIME   | 0:00 | 0:15 | 0:30 | 0:45 | TOTAL |
|--------|------|------|------|------|-------|
| 0:00   | 2    | 0    | 3    | 0    | 5     |
| 1:00   | 0    | 0    | 1    | 1    | 2     |
| 2:00   | 0    | 0    | 1    | 1    | 2     |
| 3:00   | 0    | 2    | 0    | 0    | 2     |
| 4:00   | 2    | 1    | 1    | 0    | 4     |
| 5:00   | 1    | 3    | 1    | 4    | 9     |
| 6:00   | 2    | 6    | 11   | 17   | 36    |
| 7:00   | 23   | 44   | 43   | 39   | 149   |
| 8:00   | 29   | 24   | 30   | 28   | 111   |
| 9:00   | 14   | 22   | 11   | 11   | 58    |
| 10:00  | 20   | 12   | 18   | 13   | 63    |
| 11:00  | 9    | 18   | 25   | 24   | 76    |
| 12:00  | 32   | 21   | 22   | 36   | 111   |
| 13:00  | 26   | 24   | 24   | 21   | 95    |
| 14:00  | 23   | 11   | 14   | 32   | 80    |
| 15:00  | 27   | 9    | 27   | 29   | 92    |
| 16:00  | 28   | 36   | 57   | 37   | 158   |
| 17:00  | 83   | 47   | 36   | 26   | 192   |
| 18:00  | 24   | 12   | 12   | 10   | 58    |
| 19:00  | 7    | 9    | 5    | 0    | 21    |
| 20:00  | 5    | 5    | 4    | 5    | 19    |
| 21:00  | 4    | 8    | 1    | 3    | 16    |
| 22:00  | 3    | 2    | 3    | 2    | 10    |
| 23:00  | 3    | 2    | 0    | 0    | 5     |
| TOTAL: |      |      |      |      | 1374  |

|   |
|---|
| The A.M. peak hour from 7:15 to 8:15 is 155   |
| The P.M. peak hour from 16:30 to 17:30 is 224 |

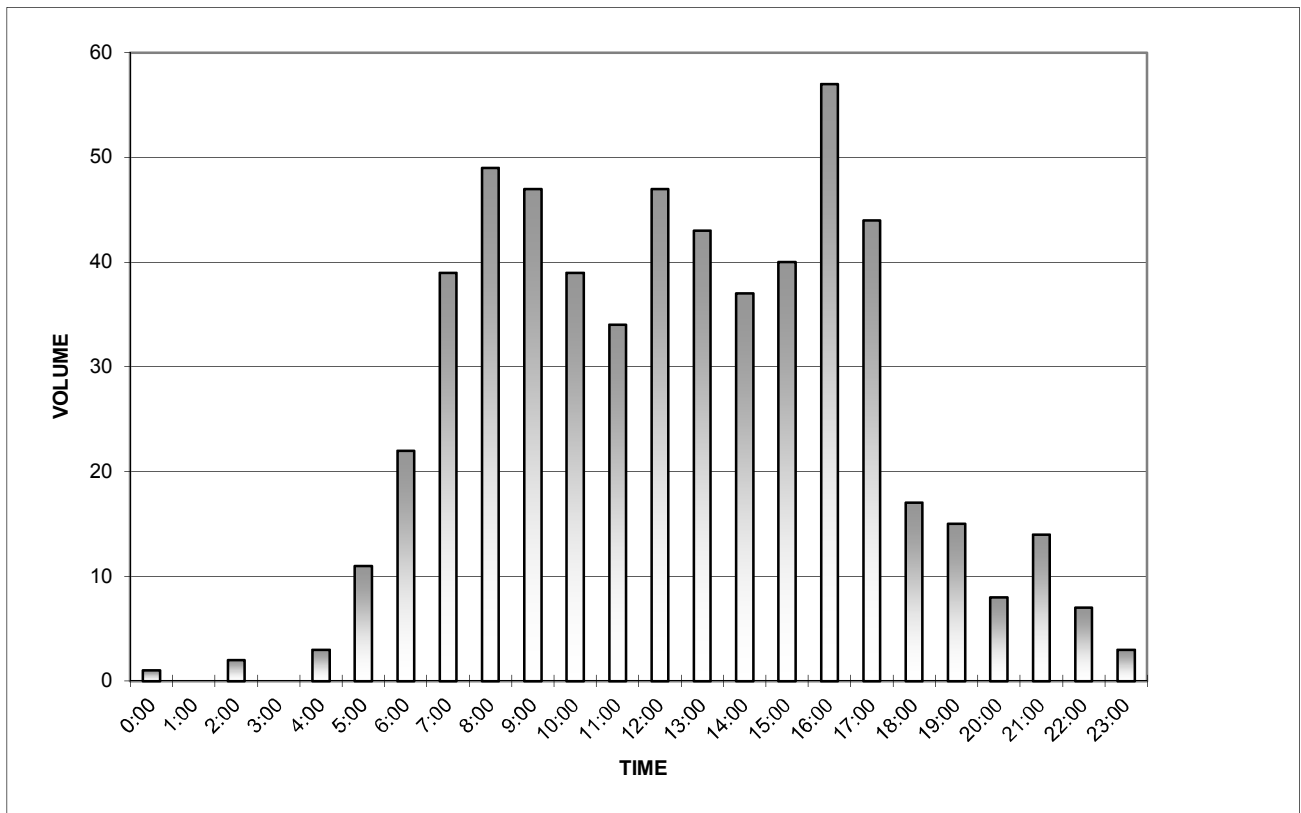


# **WB 18th Street between Brazos Street and San Jacinto Boulevard**

Date Began:  
7/21/2015

| TIME   | 0:00 | 0:15 | 0:30 | 0:45 | TOTAL |
|--------|------|------|------|------|-------|
| 0:00   | 0    | 0    | 0    | 1    | 1     |
| 1:00   | 0    | 0    | 0    | 0    | 0     |
| 2:00   | 1    | 1    | 0    | 0    | 2     |
| 3:00   | 0    | 0    | 0    | 0    | 0     |
| 4:00   | 1    | 1    | 0    | 1    | 3     |
| 5:00   | 1    | 4    | 2    | 4    | 11    |
| 6:00   | 7    | 1    | 7    | 7    | 22    |
| 7:00   | 11   | 9    | 6    | 13   | 39    |
| 8:00   | 13   | 13   | 12   | 11   | 49    |
| 9:00   | 16   | 7    | 14   | 10   | 47    |
| 10:00  | 11   | 8    | 6    | 14   | 39    |
| 11:00  | 4    | 11   | 13   | 6    | 34    |
| 12:00  | 10   | 8    | 20   | 9    | 47    |
| 13:00  | 9    | 16   | 8    | 10   | 43    |
| 14:00  | 15   | 6    | 9    | 7    | 37    |
| 15:00  | 4    | 8    | 13   | 15   | 40    |
| 16:00  | 21   | 7    | 13   | 16   | 57    |
| 17:00  | 9    | 11   | 17   | 7    | 44    |
| 18:00  | 8    | 4    | 1    | 4    | 17    |
| 19:00  | 4    | 2    | 4    | 5    | 15    |
| 20:00  | 4    | 2    | 2    | 0    | 8     |
| 21:00  | 5    | 3    | 3    | 3    | 14    |
| 22:00  | 1    | 1    | 5    | 0    | 7     |
| 23:00  | 1    | 2    | 0    | 0    | 3     |
| TOTAL: |      |      |      |      | 579   |

|  |
|--|
| The A.M. peak hour from 8:15 to 9:15 is 52   |
| The P.M. peak hour from 16:00 to 17:00 is 57 |

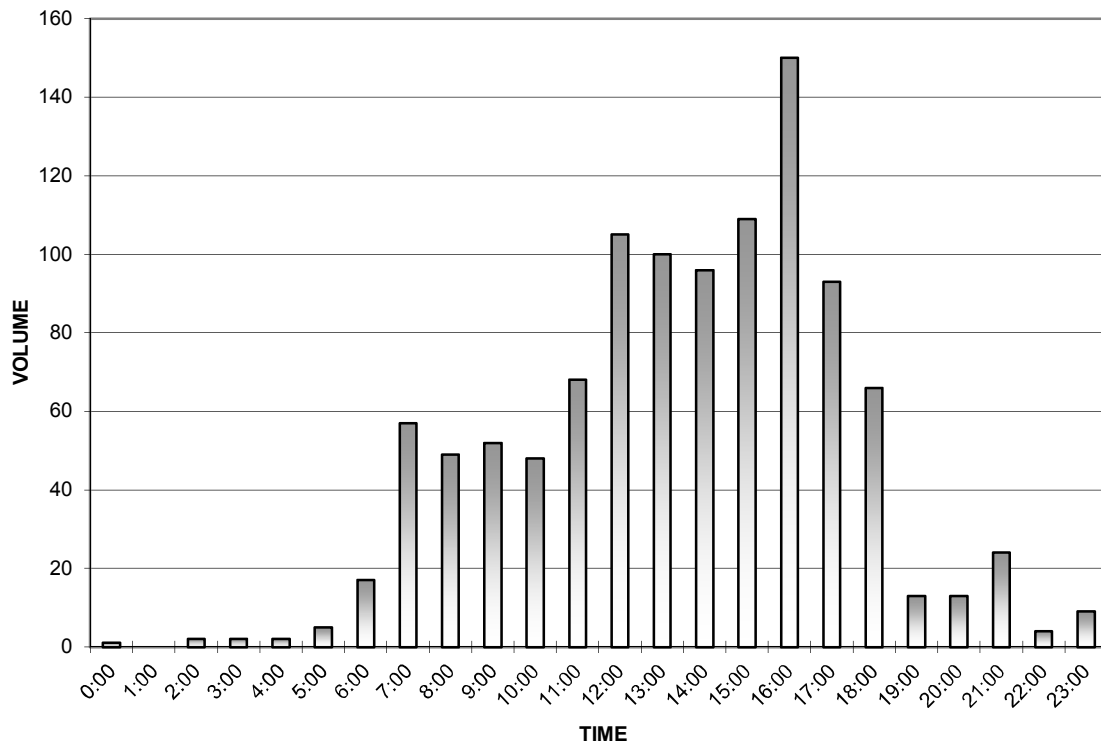


# **WB 18th Street between Colorado Street and Congress Avenue**

Date Began:  
7/21/2015

| TIME   | 0:00 | 0:15 | 0:30 | 0:45 | TOTAL |
|--------|------|------|------|------|-------|
| 0:00   | 0    | 1    | 0    | 0    | 1     |
| 1:00   | 0    | 0    | 0    | 0    | 0     |
| 2:00   | 1    | 1    | 0    | 0    | 2     |
| 3:00   | 0    | 2    | 0    | 0    | 2     |
| 4:00   | 0    | 2    | 0    | 0    | 2     |
| 5:00   | 0    | 3    | 1    | 1    | 5     |
| 6:00   | 1    | 2    | 4    | 10   | 17    |
| 7:00   | 13   | 14   | 11   | 19   | 57    |
| 8:00   | 11   | 13   | 12   | 13   | 49    |
| 9:00   | 14   | 7    | 11   | 20   | 52    |
| 10:00  | 13   | 10   | 15   | 10   | 48    |
| 11:00  | 11   | 16   | 17   | 24   | 68    |
| 12:00  | 24   | 24   | 31   | 26   | 105   |
| 13:00  | 27   | 23   | 22   | 28   | 100   |
| 14:00  | 31   | 21   | 24   | 20   | 96    |
| 15:00  | 26   | 17   | 27   | 39   | 109   |
| 16:00  | 48   | 34   | 37   | 31   | 150   |
| 17:00  | 39   | 28   | 18   | 8    | 93    |
| 18:00  | 20   | 18   | 18   | 10   | 66    |
| 19:00  | 3    | 4    | 1    | 5    | 13    |
| 20:00  | 3    | 4    | 3    | 3    | 13    |
| 21:00  | 11   | 5    | 4    | 4    | 24    |
| 22:00  | 1    | 0    | 2    | 1    | 4     |
| 23:00  | 1    | 0    | 2    | 6    | 9     |
| TOTAL: |      |      |      |      | 1085  |

|   |
|---|
| The A.M. peak hour from 7:00 to 8:00 is 57    |
| The P.M. peak hour from 15:45 to 16:45 is 158 |



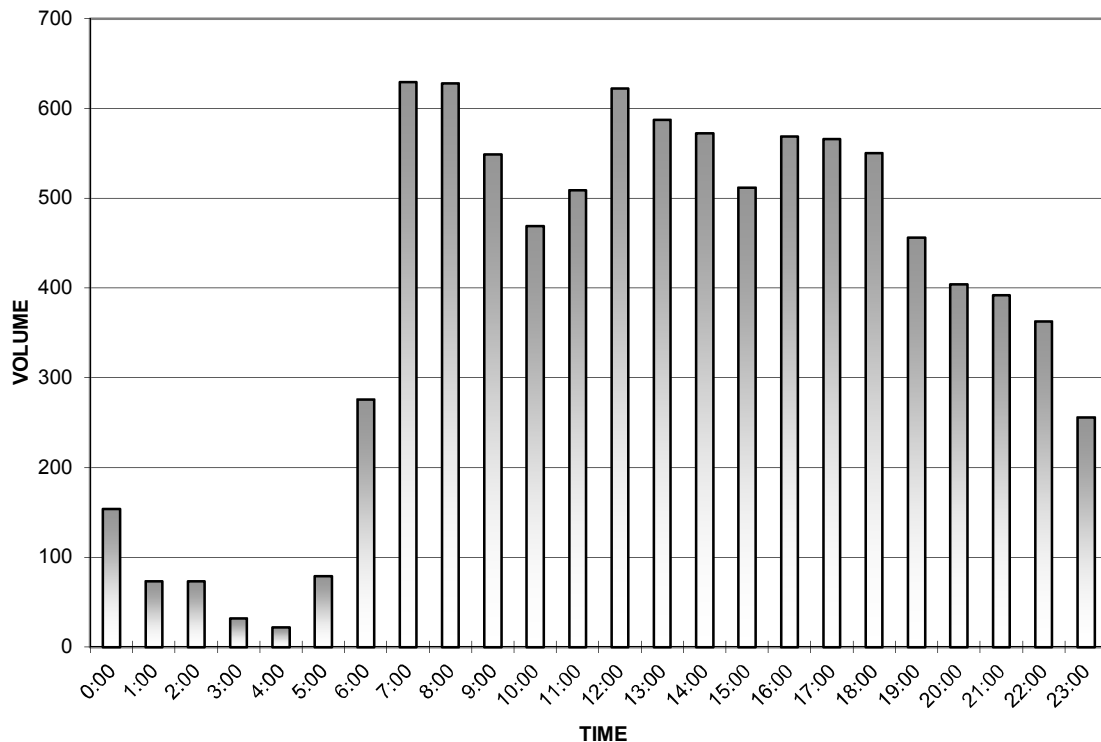
# **EB Martin Luther King Jr. Boulevard between Colorado Street and Congress Avenue**

Date Began:  
7/21/2015

| TIME  | 0:00 | 0:15 | 0:30 | 0:45 | TOTAL |
|-------|------|------|------|------|-------|
| 0:00  | 45   | 48   | 40   | 21   | 154   |
| 1:00  | 28   | 16   | 14   | 15   | 73    |
| 2:00  | 23   | 25   | 13   | 12   | 73    |
| 3:00  | 11   | 7    | 7    | 7    | 32    |
| 4:00  | 11   | 2    | 5    | 4    | 22    |
| 5:00  | 9    | 8    | 28   | 34   | 79    |
| 6:00  | 49   | 47   | 89   | 91   | 276   |
| 7:00  | 133  | 157  | 159  | 180  | 629   |
| 8:00  | 172  | 139  | 165  | 152  | 628   |
| 9:00  | 137  | 156  | 134  | 122  | 549   |
| 10:00 | 124  | 115  | 114  | 116  | 469   |
| 11:00 | 133  | 111  | 121  | 144  | 509   |
| 12:00 | 166  | 139  | 181  | 136  | 622   |
| 13:00 | 146  | 156  | 154  | 131  | 587   |
| 14:00 | 143  | 147  | 146  | 136  | 572   |
| 15:00 | 150  | 123  | 123  | 116  | 512   |
| 16:00 | 152  | 132  | 159  | 126  | 569   |
| 17:00 | 138  | 118  | 151  | 159  | 566   |
| 18:00 | 141  | 140  | 143  | 126  | 550   |
| 19:00 | 138  | 123  | 101  | 94   | 456   |
| 20:00 | 95   | 116  | 92   | 101  | 404   |
| 21:00 | 108  | 99   | 83   | 102  | 392   |
| 22:00 | 96   | 88   | 106  | 73   | 363   |
| 23:00 | 77   | 74   | 48   | 57   | 256   |

TOTAL: 9342

|   |
|---|
| The A.M. peak hour from 7:15 to 8:15 is 668   |
| The P.M. peak hour from 17:30 to 18:30 is 591 |



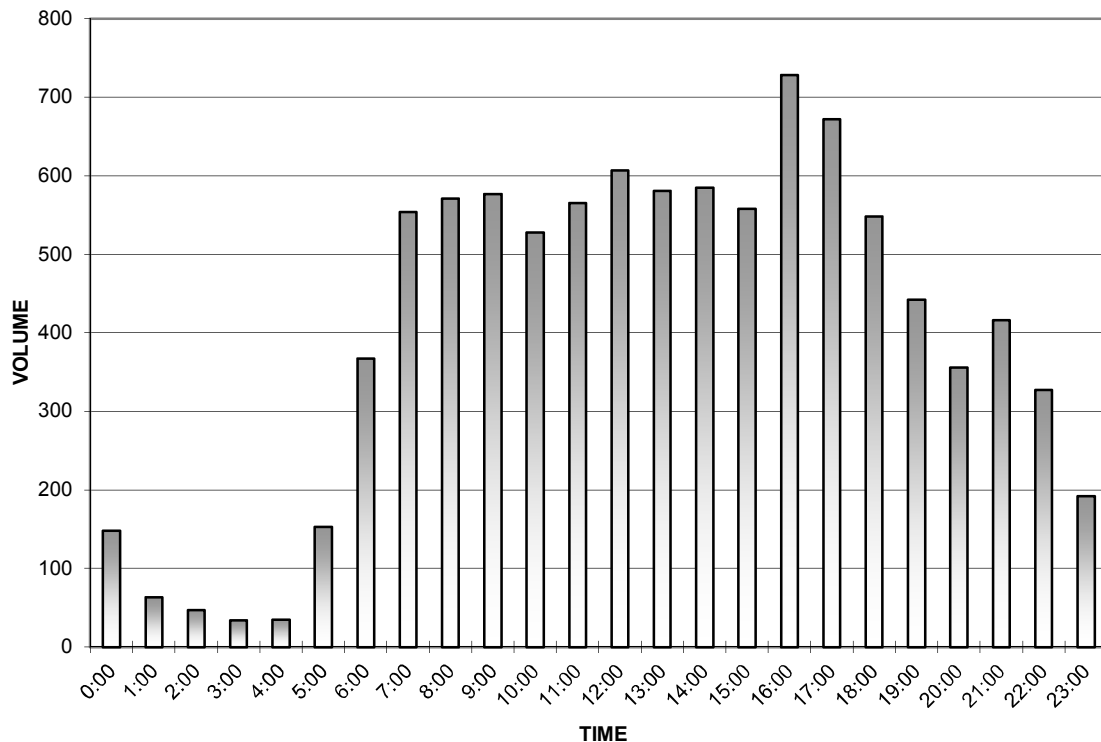
# **WB Martin Luther King Jr. Boulevard between Colorado Street and Congress Avenue**

Date Began:  
7/21/2015

| TIME  | 0:00 | 0:15 | 0:30 | 0:45 | TOTAL |
|-------|------|------|------|------|-------|
| 0:00  | 49   | 43   | 31   | 25   | 148   |
| 1:00  | 22   | 12   | 14   | 15   | 63    |
| 2:00  | 11   | 17   | 8    | 11   | 47    |
| 3:00  | 11   | 7    | 14   | 2    | 34    |
| 4:00  | 8    | 9    | 6    | 12   | 35    |
| 5:00  | 15   | 28   | 31   | 79   | 153   |
| 6:00  | 64   | 92   | 81   | 130  | 367   |
| 7:00  | 130  | 124  | 155  | 145  | 554   |
| 8:00  | 146  | 129  | 138  | 158  | 571   |
| 9:00  | 138  | 128  | 149  | 162  | 577   |
| 10:00 | 143  | 119  | 132  | 134  | 528   |
| 11:00 | 132  | 144  | 151  | 138  | 565   |
| 12:00 | 154  | 152  | 149  | 152  | 607   |
| 13:00 | 140  | 154  | 158  | 129  | 581   |
| 14:00 | 159  | 137  | 133  | 156  | 585   |
| 15:00 | 123  | 136  | 145  | 154  | 558   |
| 16:00 | 183  | 183  | 174  | 188  | 728   |
| 17:00 | 149  | 151  | 179  | 193  | 672   |
| 18:00 | 144  | 142  | 142  | 120  | 548   |
| 19:00 | 113  | 130  | 90   | 109  | 442   |
| 20:00 | 93   | 101  | 94   | 68   | 356   |
| 21:00 | 105  | 103  | 106  | 102  | 416   |
| 22:00 | 95   | 92   | 70   | 70   | 327   |
| 23:00 | 48   | 44   | 32   | 68   | 192   |

TOTAL: 9654

|   |
|---|
| The A.M. peak hour from 9:15 to 10:15 is 582  |
| The P.M. peak hour from 16:00 to 17:00 is 728 |

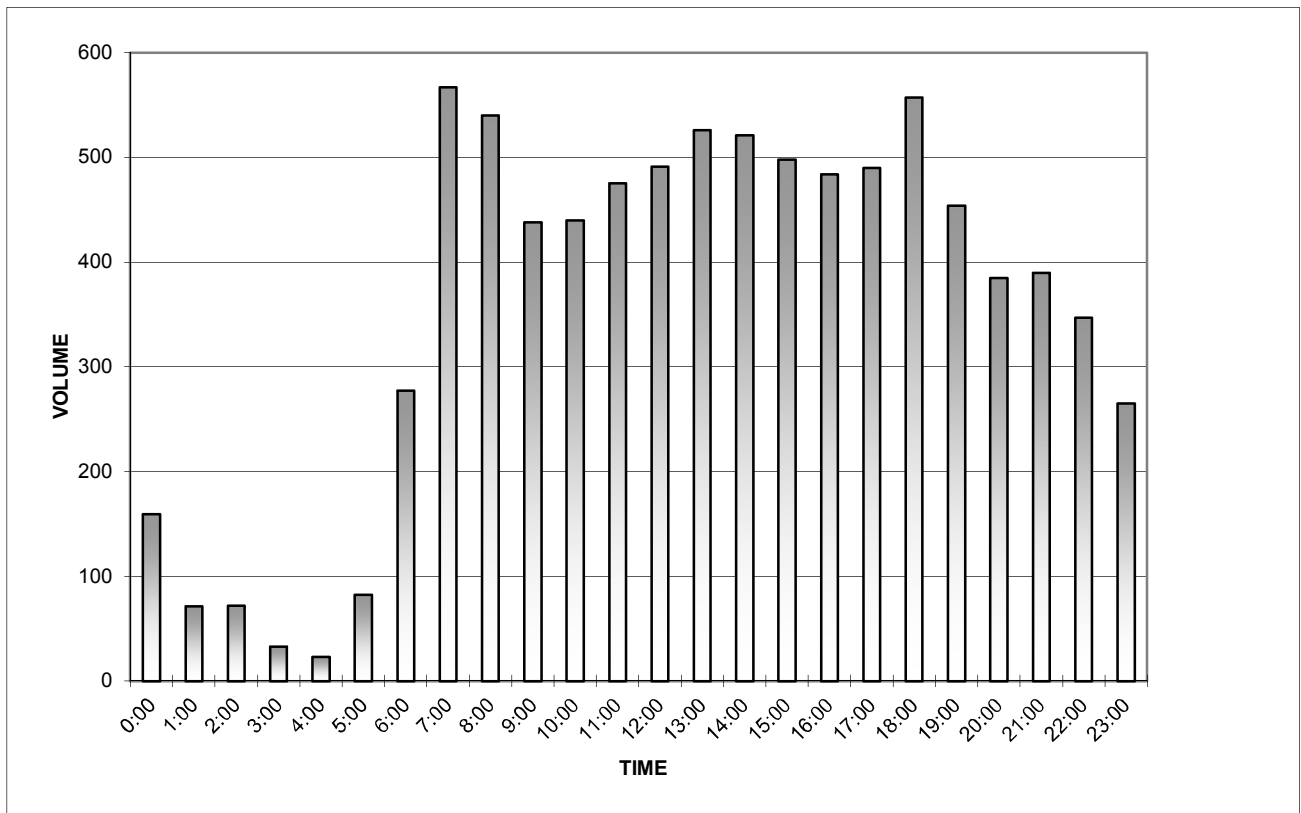


# **EB Martin Luther King Jr. Boulevard between Congress Avenue and Brazos Street**

Date Began:  
7/21/2015

| TIME   | 0:00 | 0:15 | 0:30 | 0:45 | TOTAL |
|--------|------|------|------|------|-------|
| 0:00   | 41   | 50   | 47   | 21   | 159   |
| 1:00   | 28   | 14   | 13   | 16   | 71    |
| 2:00   | 23   | 25   | 12   | 12   | 72    |
| 3:00   | 12   | 7    | 8    | 6    | 33    |
| 4:00   | 11   | 2    | 6    | 4    | 23    |
| 5:00   | 9    | 9    | 24   | 40   | 82    |
| 6:00   | 50   | 54   | 78   | 95   | 277   |
| 7:00   | 136  | 139  | 145  | 147  | 567   |
| 8:00   | 139  | 123  | 144  | 134  | 540   |
| 9:00   | 111  | 123  | 110  | 94   | 438   |
| 10:00  | 112  | 102  | 97   | 129  | 440   |
| 11:00  | 120  | 112  | 113  | 130  | 475   |
| 12:00  | 133  | 103  | 133  | 122  | 491   |
| 13:00  | 141  | 116  | 136  | 133  | 526   |
| 14:00  | 133  | 134  | 138  | 116  | 521   |
| 15:00  | 132  | 110  | 139  | 117  | 498   |
| 16:00  | 137  | 127  | 119  | 101  | 484   |
| 17:00  | 107  | 86   | 154  | 143  | 490   |
| 18:00  | 162  | 138  | 132  | 125  | 557   |
| 19:00  | 128  | 125  | 98   | 103  | 454   |
| 20:00  | 100  | 107  | 83   | 95   | 385   |
| 21:00  | 111  | 94   | 82   | 103  | 390   |
| 22:00  | 99   | 86   | 85   | 77   | 347   |
| 23:00  | 81   | 73   | 49   | 62   | 265   |
| TOTAL: |      |      |      |      | 8585  |

|   |
|---|
| The A.M. peak hour from 7:15 to 8:15 is 570   |
| The P.M. peak hour from 17:30 to 18:30 is 597 |



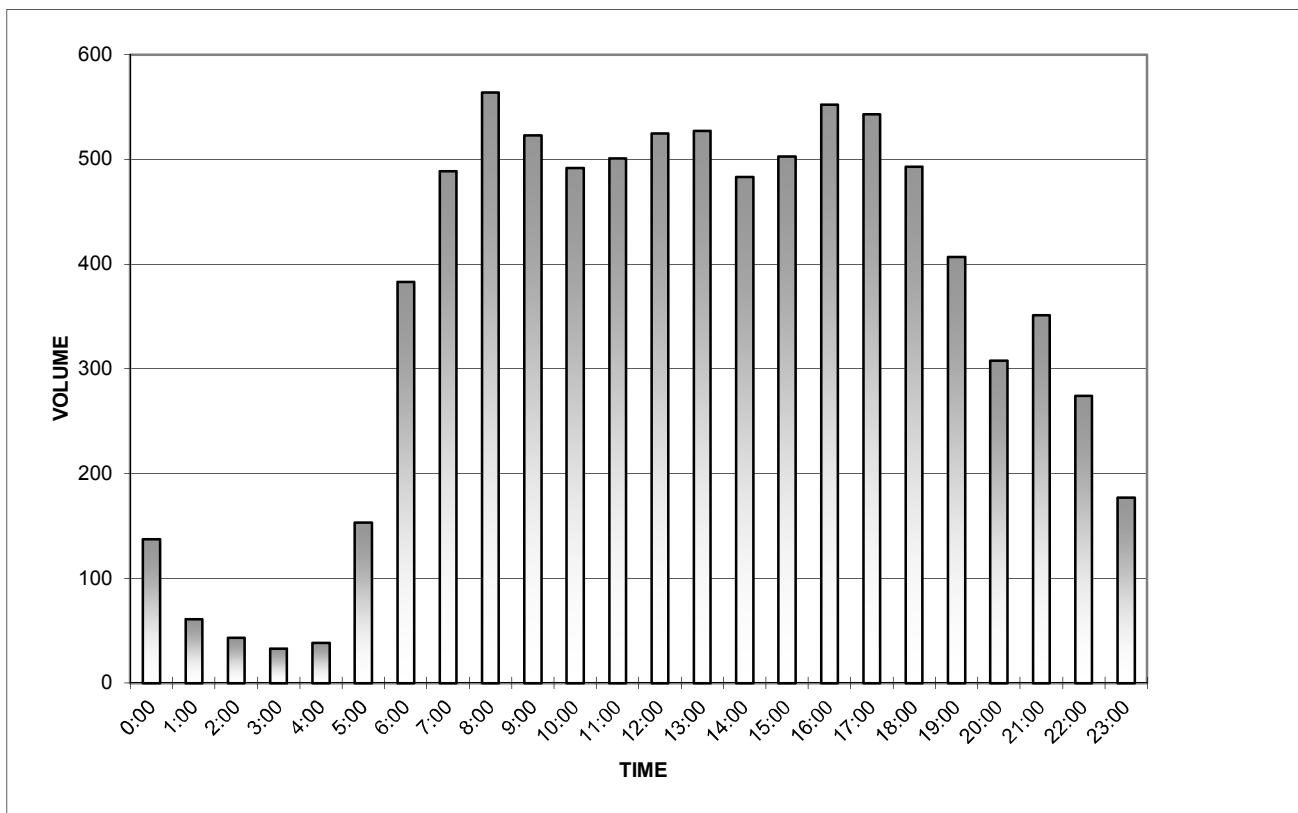
# **WB Martin Luther King Jr. Boulevard between Congress Avenue and Brazos Street**

Date Began:  
7/21/2015

| TIME  | 0:00 | 0:15 | 0:30 | 0:45 | TOTAL |
|-------|------|------|------|------|-------|
| 0:00  | 44   | 40   | 29   | 24   | 137   |
| 1:00  | 23   | 13   | 15   | 10   | 61    |
| 2:00  | 11   | 13   | 10   | 9    | 43    |
| 3:00  | 10   | 7    | 13   | 3    | 33    |
| 4:00  | 8    | 9    | 9    | 12   | 38    |
| 5:00  | 14   | 27   | 36   | 76   | 153   |
| 6:00  | 62   | 95   | 95   | 131  | 383   |
| 7:00  | 139  | 92   | 132  | 126  | 489   |
| 8:00  | 156  | 117  | 145  | 146  | 564   |
| 9:00  | 145  | 117  | 128  | 133  | 523   |
| 10:00 | 119  | 115  | 133  | 125  | 492   |
| 11:00 | 116  | 138  | 120  | 127  | 501   |
| 12:00 | 122  | 128  | 142  | 133  | 525   |
| 13:00 | 112  | 134  | 144  | 137  | 527   |
| 14:00 | 139  | 107  | 119  | 118  | 483   |
| 15:00 | 120  | 113  | 132  | 138  | 503   |
| 16:00 | 165  | 160  | 99   | 128  | 552   |
| 17:00 | 130  | 118  | 133  | 162  | 543   |
| 18:00 | 145  | 124  | 121  | 103  | 493   |
| 19:00 | 106  | 108  | 84   | 109  | 407   |
| 20:00 | 87   | 85   | 75   | 61   | 308   |
| 21:00 | 85   | 89   | 99   | 78   | 351   |
| 22:00 | 82   | 75   | 58   | 59   | 274   |
| 23:00 | 49   | 36   | 36   | 56   | 177   |

TOTAL: 8560

|   |
|---|
| The A.M. peak hour from 8:00 to 9:00 is 564   |
| The P.M. peak hour from 15:30 to 16:30 is 595 |



## ***Appendix C.***

Trip Generation Summary - 2020\_Phase 1  
Average Weekday Driveway Volumes

Project: 15206  
Alternative: Texas Capital Complex Master Plan 2018

Open Date: 9/29/2016  
Analysis 9/29/2016

| ITE   | Land Use                                  | Average Daily Trips |      |       | AM Peak Hour |      |       | PM Peak Hour |      |       |
|---|---|---------------------|------|-------|--------------|------|-------|--------------|------|-------|
|   |   | Enter               | Exit | Total | Enter        | Exit | Total | Enter        | Exit | Total |
| 710   | General Office Building                   | 3849                | 3849 | 7698  | 1083         | 148  | 1231  | 208          | 1018 | 1226  |
| 1025  | Gross Floor Area 1000 SF                  |                     |      |       |              |      |       |              |      |       |
| <hr/>   |   |                     |      |       |              |      |       |              |      |       |
|   | Unadjusted Driveway Volume                | 3849                | 3849 | 7698  | 1083         | 148  | 1231  | 208          | 1018 | 1226  |
|   | Unadjusted Pass-By Trips                  | 0                   | 0    | 0     | 0            | 0    | 0     | 0            | 0    | 0     |
|   | Internal Capture Trips                    | 0                   | 0    | 0     | 0            | 0    | 0     | 0            | 0    | 0     |
|   | Adjusted Driveway Volume                  | 3849                | 3849 | 7698  | 1083         | 148  | 1231  | 208          | 1018 | 1226  |
|   | Adjusted Pass-By Trips                    | 0                   | 0    | 0     | 0            | 0    | 0     | 0            | 0    | 0     |
|   | Adjusted Volume Added to Adjacent Streets | 3849                | 3849 | 7698  | 1083         | 148  | 1231  | 208          | 1018 | 1226  |
| <hr/>   |   |                     |      |       |              |      |       |              |      |       |
| Total AM Peak Hour Internal Capture = 0 Percent |   |                     |      |       |              |      |       |              |      |       |
| Total PM Peak Hour Internal Capture = 0 Percent |   |                     |      |       |              |      |       |              |      |       |
| <hr/>   |   |                     |      |       |              |      |       |              |      |       |

Trip Generation Summary - 2022\_Phase 2  
Average Weekday Driveway Volumes

Project: 15206  
Alternative: Texas Capital Complex Master Plan 2018

Open Date: 9/29/2016  
Analysis 9/29/2016

| ITE   | Land Use                                  | Average Daily Trips |      |       | AM Peak Hour |      |       | PM Peak Hour |      |       |
|---|---|---------------------|------|-------|--------------|------|-------|--------------|------|-------|
|   |   | Enter               | Exit | Total | Enter        | Exit | Total | Enter        | Exit | Total |
| 710   | General Office Building                   | 2315                | 2314 | 4629  | 634          | 87   | 721   | 113          | 553  | 666   |
| 525   | Gross Floor Area 1000 SF                  |                     |      |       |              |      |       |              |      |       |
| <hr/>   |   |                     |      |       |              |      |       |              |      |       |
|   | Unadjusted Driveway Volume                | 2315                | 2314 | 4629  | 634          | 87   | 721   | 113          | 553  | 666   |
|   | Unadjusted Pass-By Trips                  | 0                   | 0    | 0     | 0            | 0    | 0     | 0            | 0    | 0     |
|   | Internal Capture Trips                    | 0                   | 0    | 0     | 0            | 0    | 0     | 0            | 0    | 0     |
|   | Adjusted Driveway Volume                  | 2315                | 2314 | 4629  | 634          | 87   | 721   | 113          | 553  | 666   |
|   | Adjusted Pass-By Trips                    | 0                   | 0    | 0     | 0            | 0    | 0     | 0            | 0    | 0     |
|   | Adjusted Volume Added to Adjacent Streets | 2315                | 2314 | 4629  | 634          | 87   | 721   | 113          | 553  | 666   |
| <hr/>   |   |                     |      |       |              |      |       |              |      |       |
| Total AM Peak Hour Internal Capture = 0 Percent |   |                     |      |       |              |      |       |              |      |       |
| Total PM Peak Hour Internal Capture = 0 Percent |   |                     |      |       |              |      |       |              |      |       |
| <hr/>   |   |                     |      |       |              |      |       |              |      |       |

Trip Generation Summary - 2024\_Phase 3  
Average Weekday Driveway Volumes

Project: 15206  
Alternative: Texas Capital Complex Master Plan 2018

Open Date: 9/29/2016  
Analysis 9/29/2016

| ITE   | Land Use                                  | Average Daily Trips |      |       | AM Peak Hour |      |       | PM Peak Hour |      |       |
|---|---|---------------------|------|-------|--------------|------|-------|--------------|------|-------|
|   |   | Enter               | Exit | Total | Enter        | Exit | Total | Enter        | Exit | Total |
| 710   | General Office Building                   | 2332                | 2331 | 4663  | 640          | 87   | 727   | 114          | 558  | 672   |
| 530   | Gross Floor Area 1000 SF                  |                     |      |       |              |      |       |              |      |       |
| <hr/>   |   |                     |      |       |              |      |       |              |      |       |
|   | Unadjusted Driveway Volume                | 2332                | 2331 | 4663  | 640          | 87   | 727   | 114          | 558  | 672   |
|   | Unadjusted Pass-By Trips                  | 0                   | 0    | 0     | 0            | 0    | 0     | 0            | 0    | 0     |
|   | Internal Capture Trips                    | 0                   | 0    | 0     | 0            | 0    | 0     | 0            | 0    | 0     |
|   | Adjusted Driveway Volume                  | 2332                | 2331 | 4663  | 640          | 87   | 727   | 114          | 558  | 672   |
|   | Adjusted Pass-By Trips                    | 0                   | 0    | 0     | 0            | 0    | 0     | 0            | 0    | 0     |
|   | Adjusted Volume Added to Adjacent Streets | 2332                | 2331 | 4663  | 640          | 87   | 727   | 114          | 558  | 672   |
| <hr/>   |   |                     |      |       |              |      |       |              |      |       |
| Total AM Peak Hour Internal Capture = 0 Percent |   |                     |      |       |              |      |       |              |      |       |
| Total PM Peak Hour Internal Capture = 0 Percent |   |                     |      |       |              |      |       |              |      |       |
| <hr/>   |   |                     |      |       |              |      |       |              |      |       |

## Land Use: 710

### General Office Building

#### Description

A general office building houses multiple tenants; it is a location where affairs of businesses, commercial or industrial organizations, or professional persons or firms are conducted. An office building or buildings may contain a mixture of tenants including professional services, insurance companies, investment brokers and tenant services, such as a bank or savings and loan institution, a restaurant or cafeteria and service retail facilities. Corporate headquarters building (Land Use 714), single tenant office building (Land Use 715), office park (Land Use 750), research and development center (Land Use 760) and business park (Land Use 770) are related uses.

If information is known about individual buildings, it is suggested that the general office building category be used rather than office parks when estimating trip generation for one or more office buildings in a single development. The office park category is more general and should be used when a breakdown of individual or different uses is not known. If the general office building category is used and if additional buildings, such as banks, restaurants, or retail stores, are included in the development, the development should be treated as a multiuse project. On the other hand, if the office park category is used, internal trips are already reflected in the data and do not need to be considered.

When the buildings are interrelated (defined by shared parking facilities or the ability to easily walk between buildings) or house one tenant, it is suggested that the total area or employment of all the buildings be used for calculating the trip generation. When the individual buildings are isolated and not related to one another, it is suggested that trip generation be calculated for each building separately and then summed.

#### Additional Data

##### Average weekday transit trip ends—

Transit service was either nonexistent or negligible at the majority of the sites surveyed in this land use. Users may wish to modify trip generation rates presented in this land use to reflect the presence of public transit, carpools and other transportation demand management (TDM) strategies. Information has not been analyzed to document the impacts of TDM measures on the total trip generation of a site. See the *ITE Trip Generation Handbook*, Second Edition for additional information on this topic.

The average building occupancy varied considerably within the studies for which occupancy data were provided. For buildings with occupancy rates reported, the average occupied gross leasable area was 88 percent.

Some of the regression curves plotted for this land use may produce illogical trip-end estimates for small office buildings. When the proposed site size is significantly smaller than the average-sized facility published in this report, caution should be used when applying these statistics. For more information, please refer to Chapter 3, "Guidelines for Estimating Trip Generation," of the *ITE Trip Generation Handbook*, Second Edition.

In some regions, peaking may occur earlier or later and may last somewhat longer than the traditional 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m. peak period time frames.

The sites were surveyed between the 1960s and the 2000s throughout the United States.

### **Trip Characteristics**

The trip generation for the A.M. and P.M. peak hours of the generator typically coincided with the peak hours of the adjacent street traffic; therefore, only one A.M. peak hour and one P.M. peak hour, which represent both the peak hour of the generator and the peak hour of the adjacent street traffic, are shown for general office buildings.

### **Source Numbers**

2, 5, 20, 21, 51, 53, 54, 72, 88, 89, 92, 95, 98, 100, 159, 161, 172, 175, 178, 183, 184, 185, 189, 193, 207, 212, 217, 247, 253, 257, 260, 262, 279, 295, 297, 298, 300, 301, 302, 303, 304, 321, 322, 323, 324, 327, 404, 407, 408, 418, 419, 423, 562, 734

# General Office Building (710)

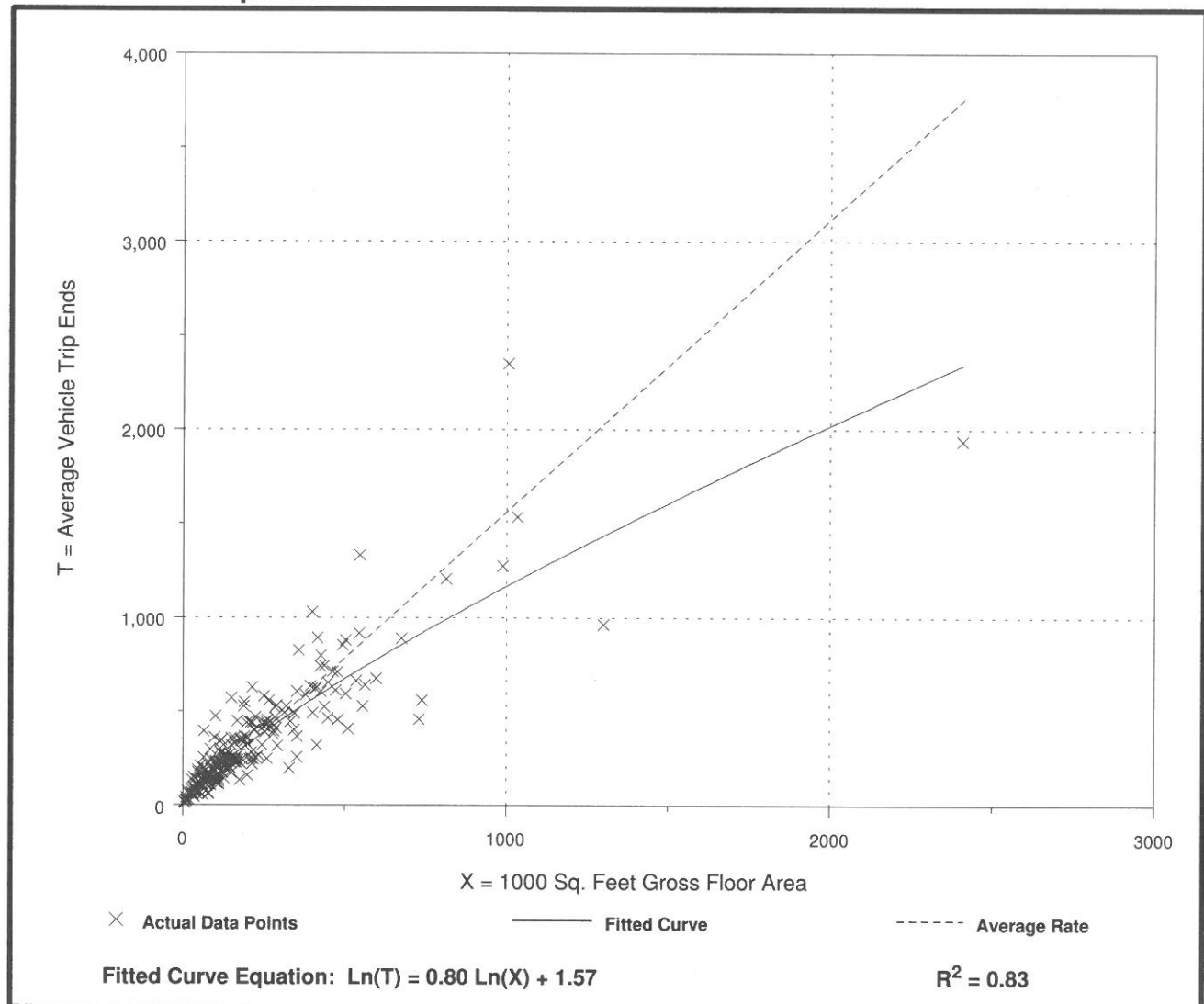
**Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area**  
**On a: Weekday,**  
**A.M. Peak Hour**

Number of Studies: 218  
Average 1000 Sq. Feet GFA: 222  
Directional Distribution: 88% entering, 12% exiting

## Trip Generation per 1000 Sq. Feet Gross Floor Area

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 1.56         | 0.60 - 5.98    | 1.40               |

## Data Plot and Equation



# General Office Building (710)

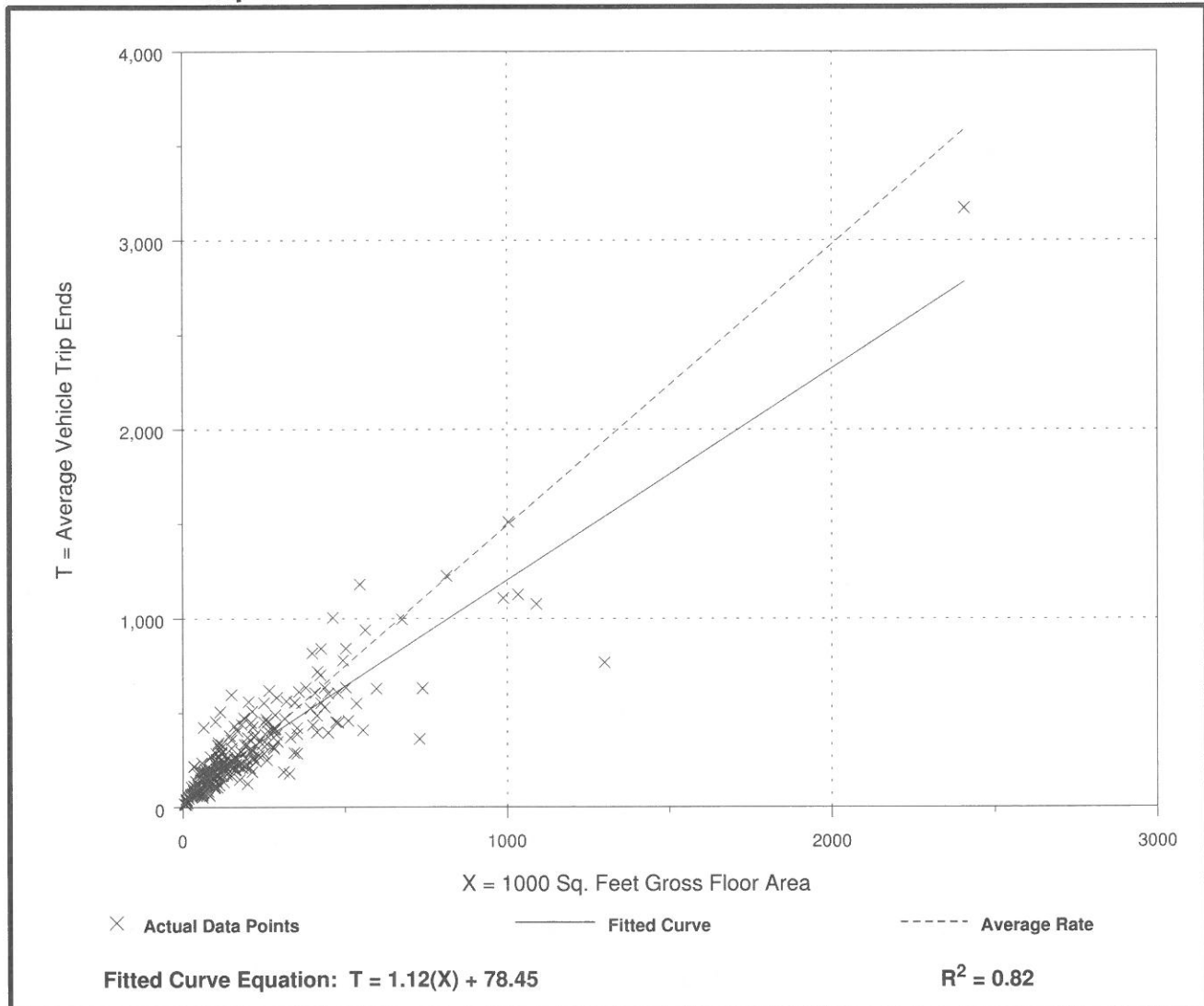
**Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area**  
**On a: Weekday,**  
**P.M. Peak Hour**

Number of Studies: 236  
 Average 1000 Sq. Feet GFA: 215  
 Directional Distribution: 17% entering, 83% exiting

## Trip Generation per 1000 Sq. Feet Gross Floor Area

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 1.49         | 0.49 - 6.39    | 1.37               |

## Data Plot and Equation



# General Office Building (710)

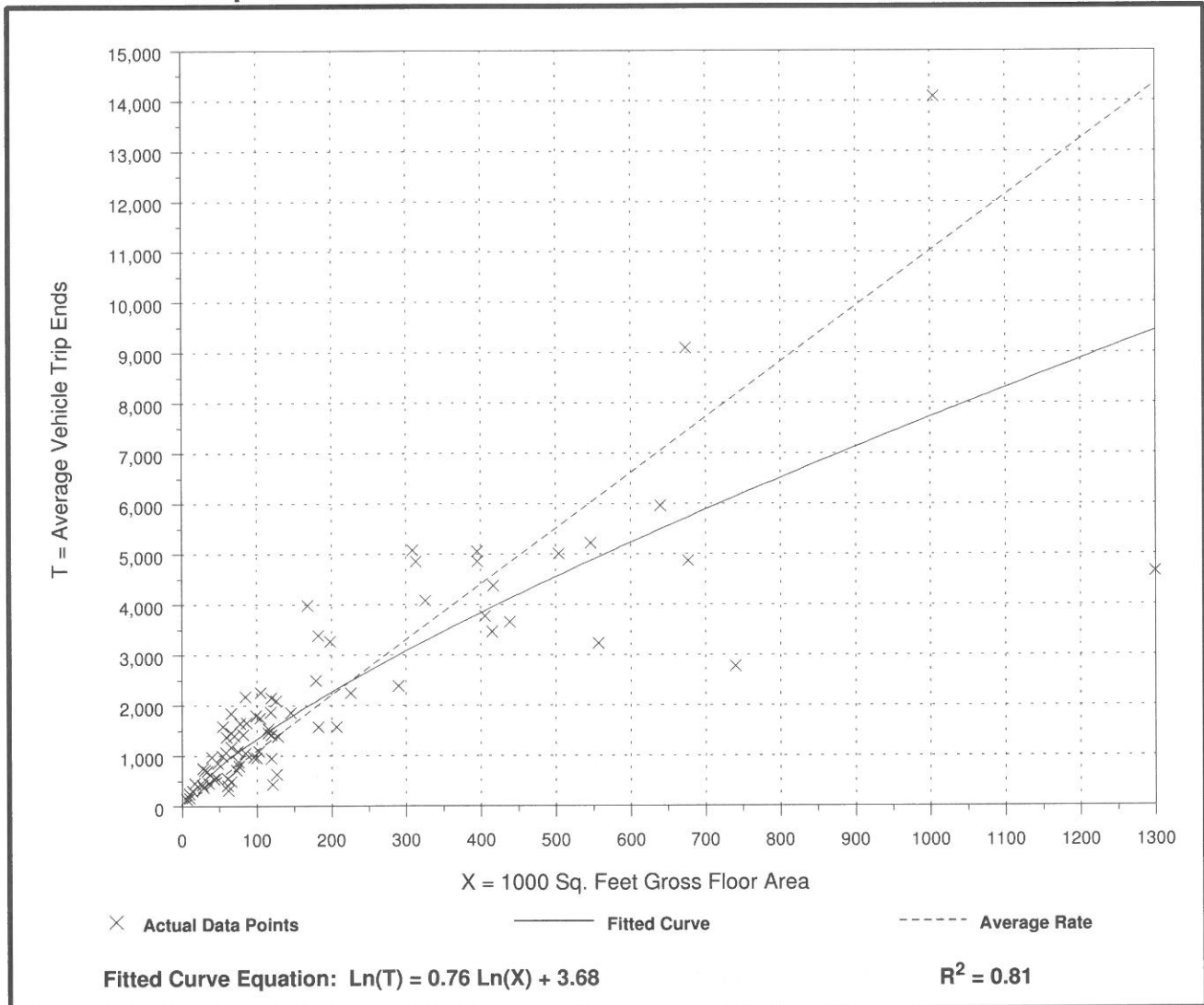
**Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area  
On a: Weekday**

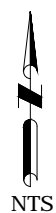
Number of Studies: 79  
Average 1000 Sq. Feet GFA: 197  
Directional Distribution: 50% entering, 50% exiting

## Trip Generation per 1000 Sq. Feet Gross Floor Area

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 11.03        | 3.58 - 28.80   | 6.15               |

## Data Plot and Equation

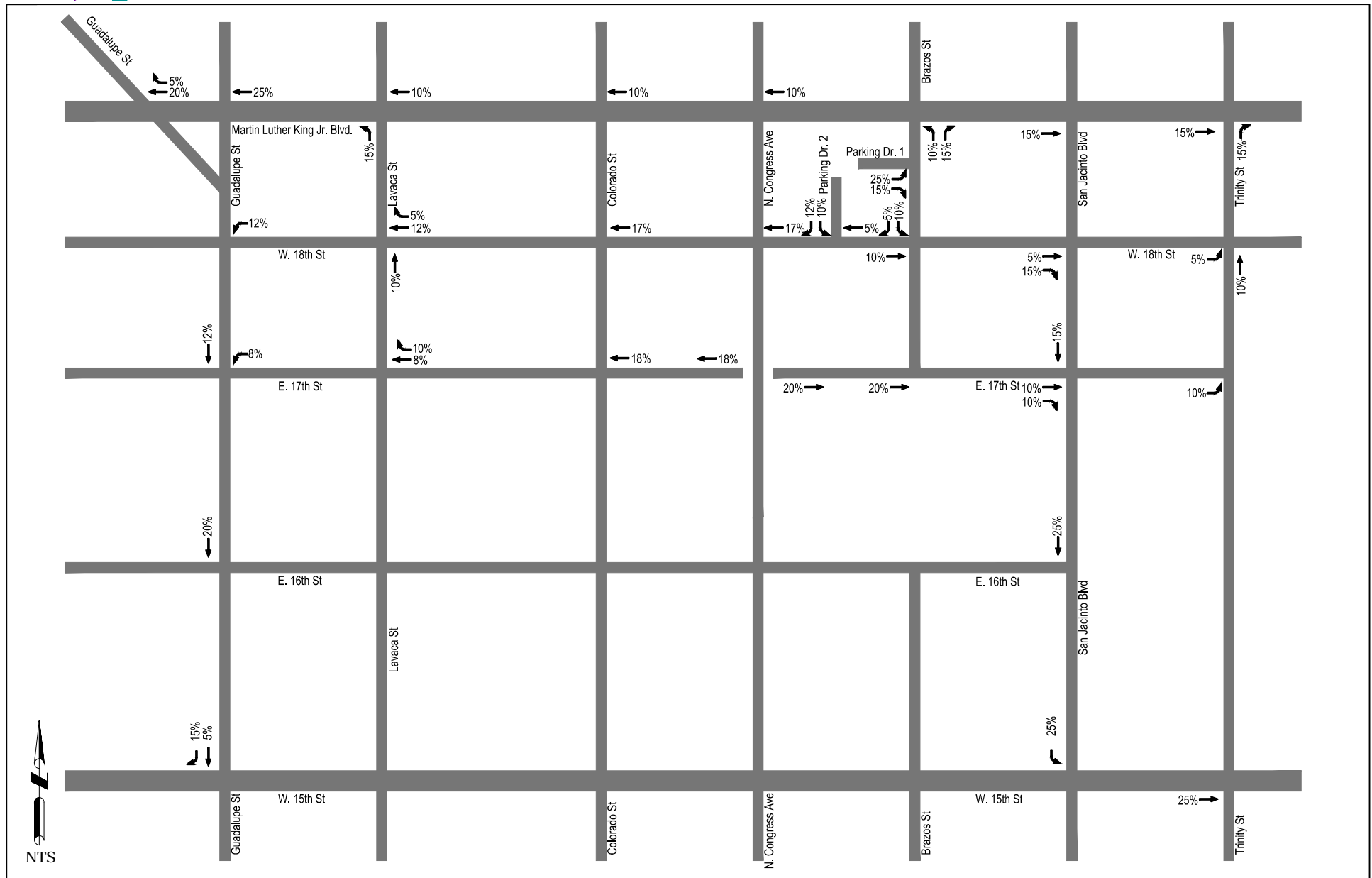




## EXHIBIT

PROJECT #15206

# 1



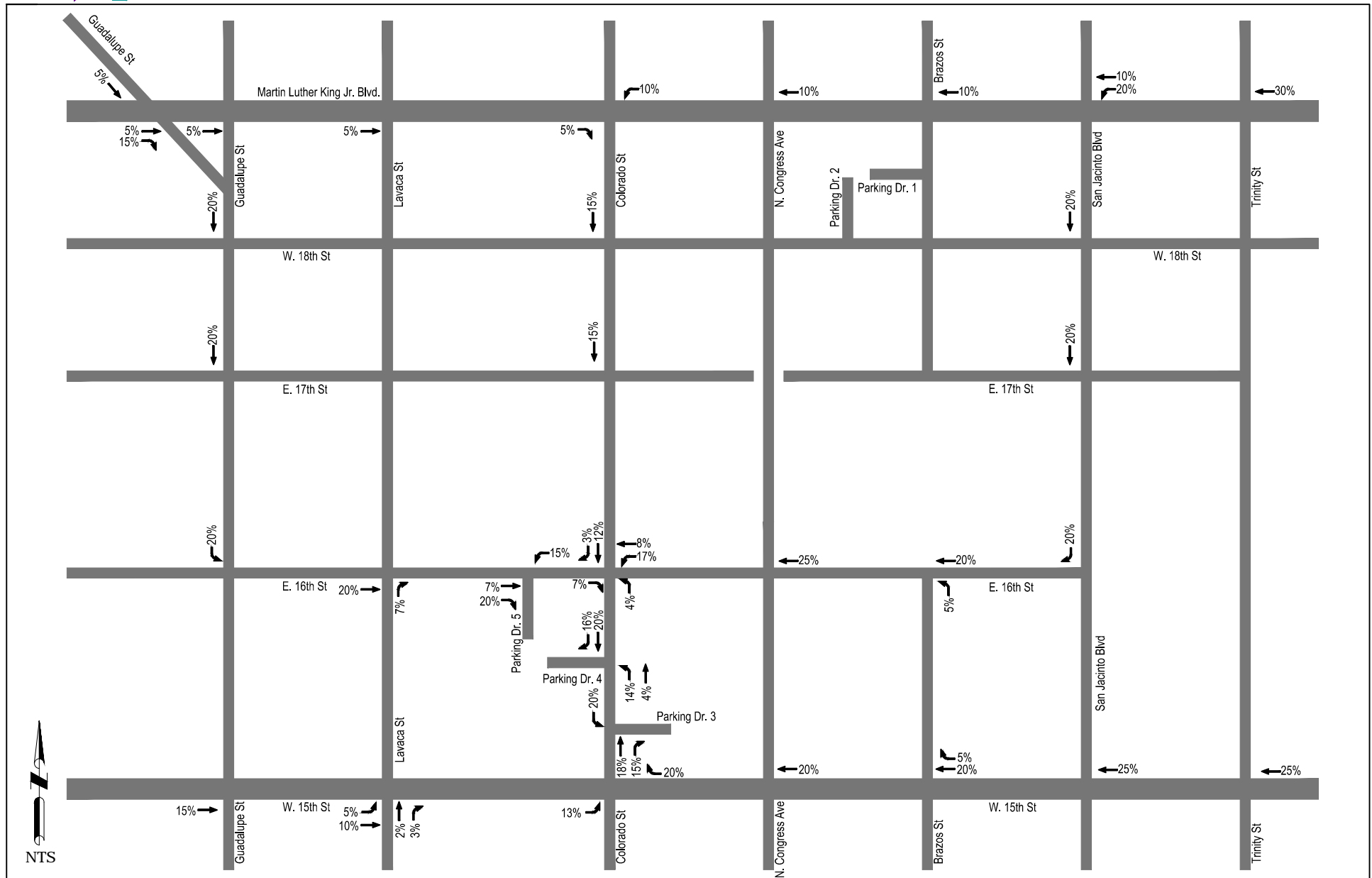
## Phase 1 - Traffic Assignment - Outbound

TIA for TFC Capital Complex in Austin, Texas

PROJECT #15206

EXHIBIT

2



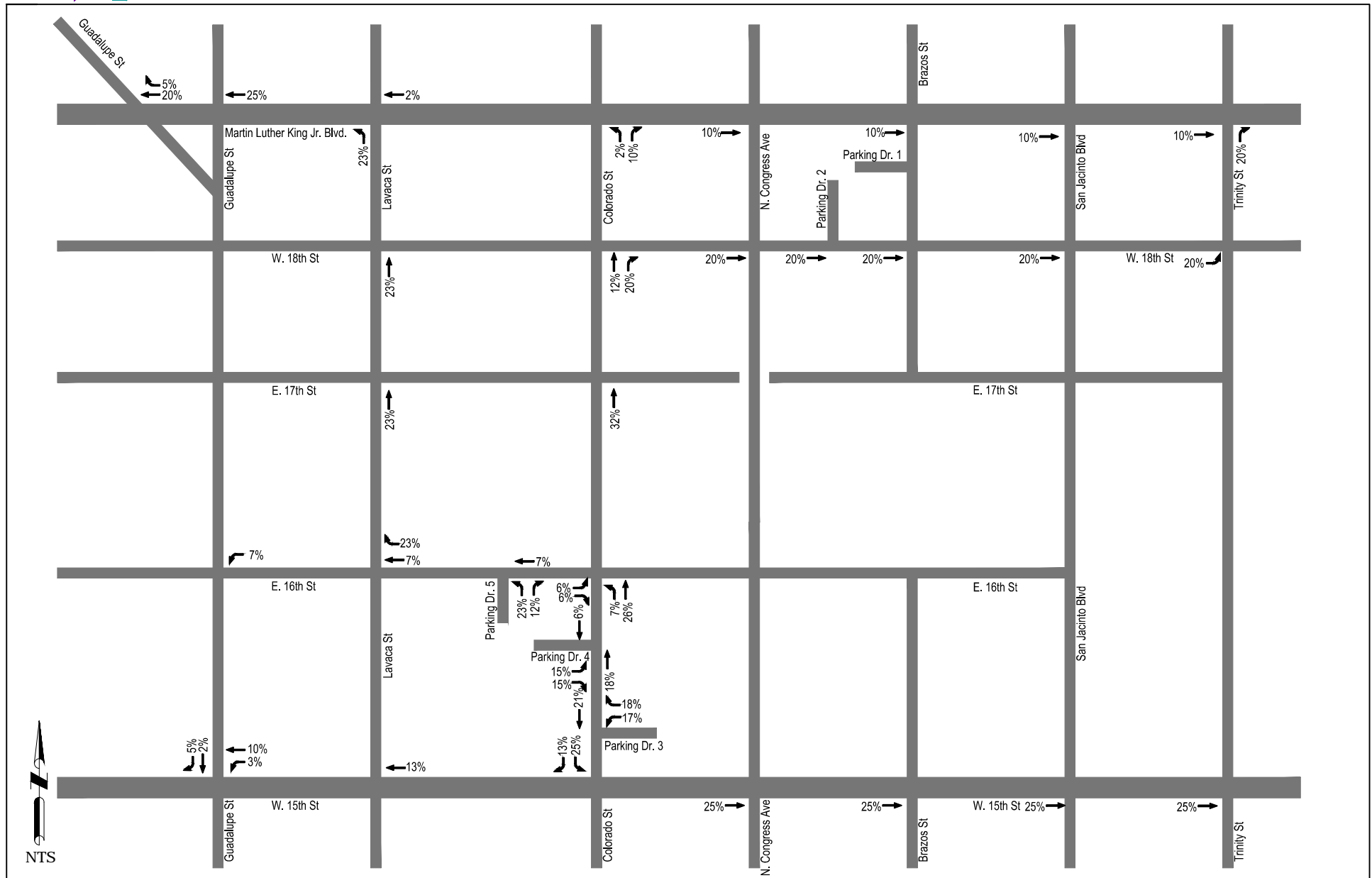
## Phase 2 - Traffic Assignment - Inbound

TIA for TFC Capital Complex in Austin, Texas

PROJECT #15206

EXHIBIT

3



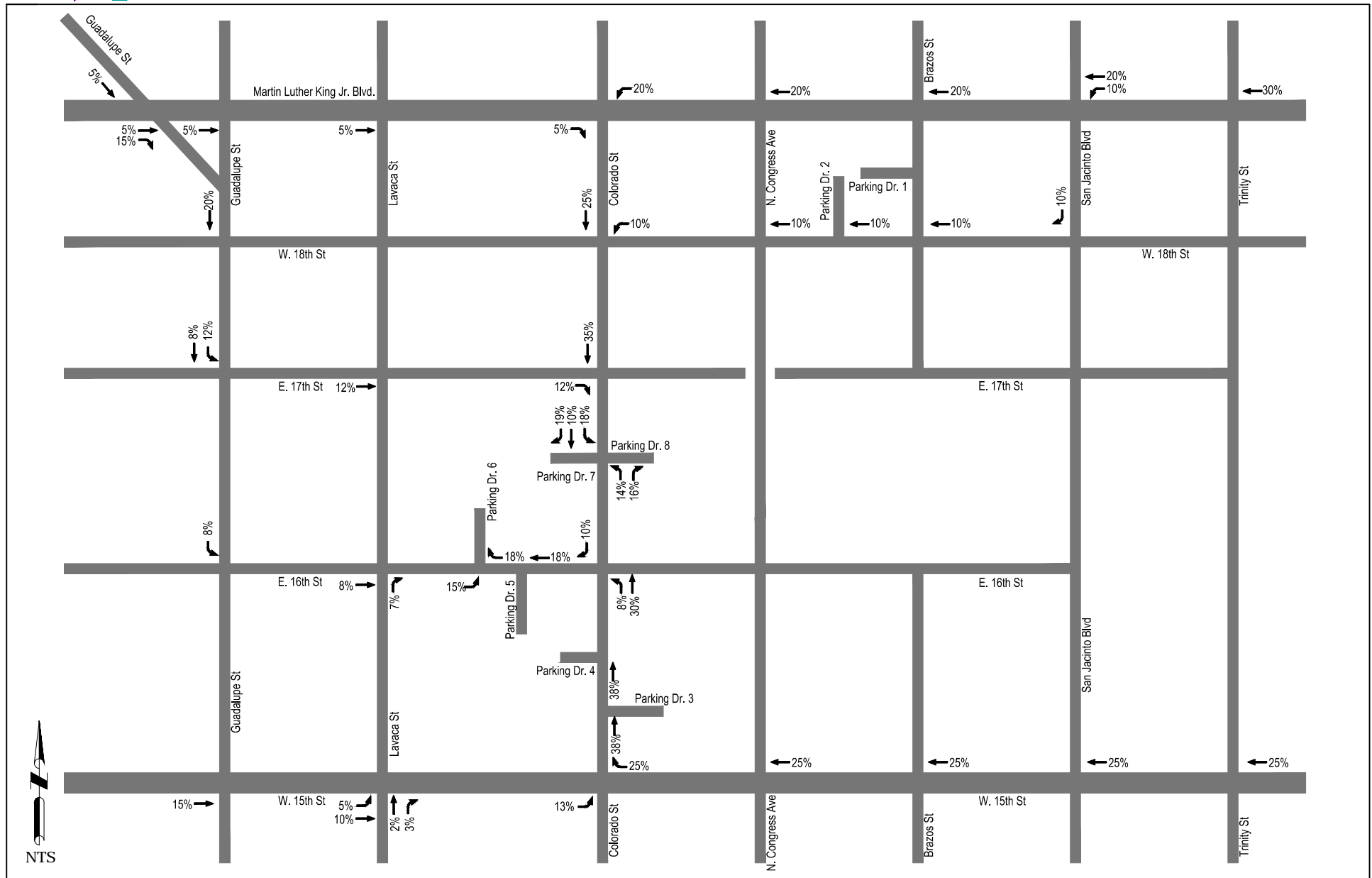
## Phase 2 - Traffic Assignment - Outbound

TIA for TFC Capital Complex in Austin, Texas

PROJECT #15206

EXHIBIT

4



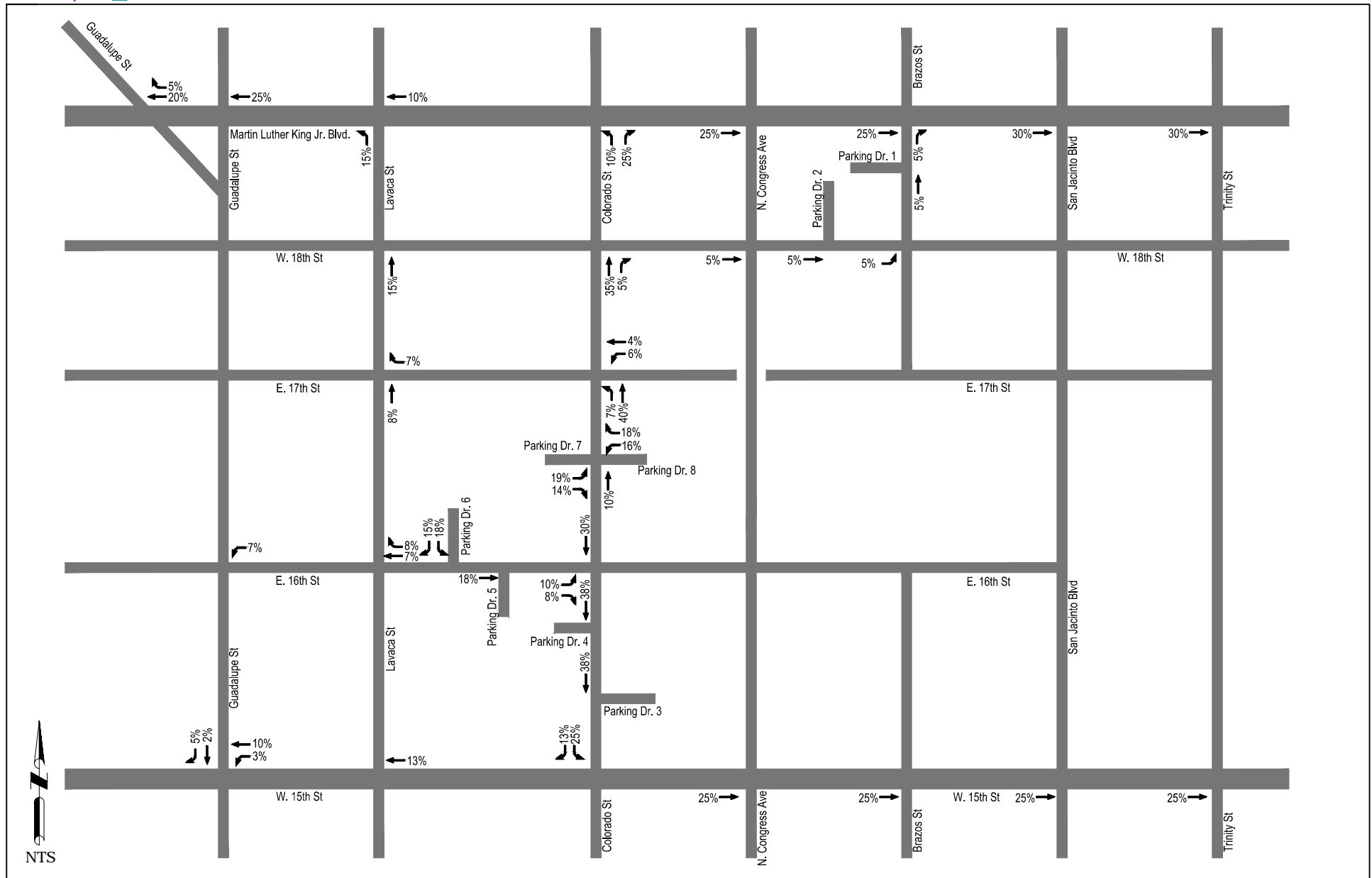
## Phase 3 - Traffic Assignment - Inbound

TIA for TFC Capital Complex in Austin, Texas

PROJECT #15206

EXHIBIT

5



## Phase 3 - Traffic Assignment - Outbound

TIA for TFC Capital Complex in Austin, Texas

PROJECT #15206

EXHIBIT

6

***Appendix D.***

1: Martin Luther King Jr. Blvd & Guadalupe ST  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR   | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|------|------|-------|-------|------|------|------|-------|-------|-------|
| Lane Configurations     | ↰     | ↰↱    |      |      | ↱↰    | ↰     |      |      |      | ↰     | ↰↱    | ↰     |
| Traffic Volume (vph)    | 63    | 670   | 152  | 0    | 479   | 299   | 0    | 0    | 0    | 224   | 654   | 124   |
| Future Volume (vph)     | 63    | 670   | 152  | 0    | 479   | 299   | 0    | 0    | 0    | 224   | 654   | 124   |
| Confl. Peds. (#/hr)     | 26    |       | 18   | 18   |       | 26    |      |      |      | 27    |       | 18    |
| Confl. Bikes (#/hr)     |       |       | 1    |      |       | 1     |      |      |      |       |       | 12    |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94 | 0.94 | 0.94  | 0.94  | 0.94 | 0.94 | 0.94 | 0.94  | 0.94  | 0.94  |
| Adj. Flow (vph)         | 67    | 713   | 162  | 0    | 510   | 318   | 0    | 0    | 0    | 238   | 696   | 132   |
| Shared Lane Traffic (%) |       |       |      |      |       |       |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 67    | 875   | 0    | 0    | 510   | 318   | 0    | 0    | 0    | 238   | 696   | 132   |
| Turn Type               | Prot  | NA    |      |      | NA    | pm+ov |      |      |      | pm+pt | NA    | Perm  |
| Protected Phases        | 5     | 2     |      |      | 6     | 7     |      |      |      | 7     | 4     |       |
| Permitted Phases        |       |       |      |      | 6     |       |      |      |      | 4     |       | 4     |
| Detector Phase          | 5     | 2     |      |      | 6     | 7     |      |      |      | 7     | 4     | 4     |
| Switch Phase            |       |       |      |      |       |       |      |      |      |       |       |       |
| Minimum Initial (s)     | 10.0  | 5.0   |      |      | 15.0  | 5.0   |      |      |      | 5.0   | 15.0  | 15.0  |
| Minimum Split (s)       | 15.0  | 32.0  |      |      | 34.0  | 10.0  |      |      |      | 10.0  | 34.0  | 34.0  |
| Total Split (s)         | 18.0  | 75.0  |      |      | 57.0  | 45.0  |      |      |      | 45.0  | 45.0  | 45.0  |
| Total Split (%)         | 15.0% | 62.5% |      |      | 47.5% | 37.5% |      |      |      | 37.5% | 37.5% | 37.5% |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   | 4.0   |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   | 1.0   |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   | 0.0   |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   | 5.0   |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                | Lag   |       |      |      | Lead  |       |      |      |      |       |       |       |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |       |      |      |      |       |       |       |
| Recall Mode             | None  | C-Max |      |      | C-Max | None  |      |      |      | None  | Max   | Max   |
| Act Effect Green (s)    | 12.4  | 70.0  |      |      | 55.6  | 95.6  |      |      |      | 40.0  | 40.0  | 40.0  |
| Actuated g/C Ratio      | 0.10  | 0.58  |      |      | 0.46  | 0.80  |      |      |      | 0.33  | 0.33  | 0.33  |
| v/c Ratio               | 0.37  | 0.44  |      |      | 0.31  | 0.25  |      |      |      | 0.40  | 0.59  | 0.23  |
| Control Delay           | 56.0  | 14.1  |      |      | 37.1  | 4.3   |      |      |      | 33.4  | 35.7  | 11.0  |
| Queue Delay             | 0.0   | 0.0   |      |      | 0.0   | 0.0   |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             | 56.0  | 14.1  |      |      | 37.1  | 4.4   |      |      |      | 33.4  | 35.7  | 11.0  |
| LOS                     | E     | B     |      |      | D     | A     |      |      |      | C     | D     | B     |
| Approach Delay          |       | 17.1  |      |      | 24.6  |       |      |      |      |       | 32.1  |       |
| Approach LOS            |       | B     |      |      | C     |       |      |      |      |       | C     |       |
| Queue Length 50th (ft)  | 49    | 180   |      |      | 195   | 72    |      |      |      | 141   | 234   | 20    |
| Queue Length 95th (ft)  | 96    | 226   |      |      | 270   | 116   |      |      |      | 216   | 298   | 66    |
| Internal Link Dist (ft) |       | 228   |      |      | 45    |       | 159  |      |      |       | 210   |       |
| Turn Bay Length (ft)    | 160   |       |      |      |       |       |      |      |      | 130   |       | 120   |
| Base Capacity (vph)     | 191   | 2009  |      |      | 1639  | 1271  |      |      |      | 590   | 1179  | 568   |
| Starvation Cap Reductn  | 0     | 0     |      |      | 0     | 137   |      |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     | 0     |      |      |      | 0     | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     | 0     |      |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       | 0.35  | 0.44  |      |      | 0.31  | 0.28  |      |      |      | 0.40  | 0.59  | 0.23  |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green  
Natural Cycle: 85

1: Martin Luther King Jr. Blvd & Guadalupe ST  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.59

Intersection Signal Delay: 24.9

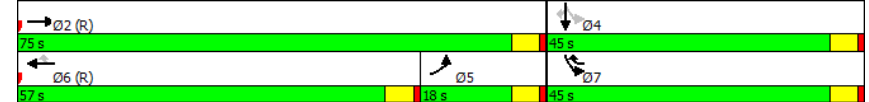
Intersection LOS: C

Intersection Capacity Utilization 69.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Martin Luther King Jr. Blvd & Guadalupe ST



3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

|                         | →     | ↖    | ↗    | ←     | ↖     | ↗     |
|-------------------------|-------|------|------|-------|-------|-------|
| Lane Group              | EBT   | EBR  | WBL  | WBT   | NBL   | NBR   |
| Lane Configurations     | ↑↑    |      |      | ↑↑    | ↖↗    | ↖↗    |
| Traffic Volume (vph)    | 897   | 0    | 0    | 665   | 309   | 210   |
| Future Volume (vph)     | 897   | 0    | 0    | 665   | 309   | 210   |
| Confl. Peds. (#/hr)     |       |      |      |       |       | 10    |
| Peak Hour Factor        | 0.86  | 0.86 | 0.86 | 0.86  | 0.86  | 0.86  |
| Adj. Flow (vph)         | 1043  | 0    | 0    | 773   | 359   | 244   |
| Shared Lane Traffic (%) |       |      |      |       |       |       |
| Lane Group Flow (vph)   | 1043  | 0    | 0    | 773   | 359   | 244   |
| Turn Type               | NA    |      |      | NA    | Prot  | Perm  |
| Protected Phases        | 2     |      |      | 6     | 8     |       |
| Permitted Phases        |       |      |      |       |       | 3     |
| Detector Phase          | 2     |      |      | 6     | 8     | 3     |
| Switch Phase            |       |      |      |       |       |       |
| Minimum Initial (s)     | 10.0  |      |      | 5.0   | 10.0  | 10.0  |
| Minimum Split (s)       | 30.0  |      |      | 10.0  | 30.0  | 30.0  |
| Total Split (s)         | 87.0  |      |      | 87.0  | 33.0  | 33.0  |
| Total Split (%)         | 72.5% |      |      | 72.5% | 27.5% | 27.5% |
| Yellow Time (s)         | 4.0   |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |       |      |      |       |       |       |
| Lead-Lag Optimize?      |       |      |      |       |       |       |
| Recall Mode             | C-Max |      |      | None  | Max   | Max   |
| Act Effct Green (s)     | 82.0  |      |      | 82.0  | 28.0  | 28.0  |
| Actuated g/C Ratio      | 0.68  |      |      | 0.68  | 0.23  | 0.23  |
| v/c Ratio               | 0.43  |      |      | 0.32  | 0.45  | 0.52  |
| Control Delay           | 7.9   |      |      | 6.9   | 43.5  | 25.7  |
| Queue Delay             | 0.1   |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             | 8.0   |      |      | 6.9   | 43.5  | 25.7  |
| LOS                     | A     |      |      | A     | D     | C     |
| Approach Delay          | 8.0   |      |      | 6.9   | 36.3  |       |
| Approach LOS            | A     |      |      | A     | D     |       |
| Queue Length 50th (ft)  | 121   |      |      | 65    | 92    | 43    |
| Queue Length 95th (ft)  | 133   |      |      | 64    | 149   | 126   |
| Internal Link Dist (ft) | 272   |      |      | 277   | 337   |       |
| Turn Bay Length (ft)    |       |      |      |       |       |       |
| Base Capacity (vph)     | 2418  |      |      | 2418  | 801   | 471   |
| Starvation Cap Reductn  | 464   |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   | 0     |      |      | 0     | 0     | 0     |
| Storage Cap Reductn     | 0     |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       | 0.53  |      |      | 0.32  | 0.45  | 0.52  |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green  
Natural Cycle: 60  
Control Type: Actuated-Coordinated

3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

Maximum v/c Ratio: 0.52

Intersection Signal Delay: 14.7

Intersection LOS: B

Intersection Capacity Utilization 54.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Lavaca St & Martin Luther King Jr. Blvd

|          |      |      |      |
|----------|------|------|------|
| → Ø2 (R) | 33 s | ↖ Ø3 | 33 s |
| ← Ø6     | 33 s | ↗ Ø8 | 33 s |

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

|                         | →     | ↖    | ↗     | ←     | ↖     | ↗     |
|-------------------------|-------|------|-------|-------|-------|-------|
| Lane Group              | EBT   | EBR  | WBL   | WBT   | NBL   | NBR   |
| Lane Configurations     | ↖↗    |      | ↖     | ↖↗    | ↖↗    | ↖     |
| Traffic Volume (vph)    | 910   | 50   | 80    | 845   | 12    | 43    |
| Future Volume (vph)     | 910   | 50   | 80    | 845   | 12    | 43    |
| Confl. Peds. (#/hr)     |       | 6    | 6     |       | 1     |       |
| Confl. Bikes (#/hr)     |       | 1    |       |       |       |       |
| Peak Hour Factor        | 0.89  | 0.89 | 0.89  | 0.89  | 0.89  | 0.89  |
| Adj. Flow (vph)         | 1022  | 56   | 90    | 949   | 13    | 48    |
| Shared Lane Traffic (%) |       |      |       |       |       |       |
| Lane Group Flow (vph)   | 1078  | 0    | 90    | 949   | 13    | 48    |
| Turn Type               | NA    |      | pm+pt | NA    | Prot  | Perm  |
| Protected Phases        | 2     |      | 1     | 6     | 4     |       |
| Permitted Phases        |       |      | 6     |       |       | 4     |
| Detector Phase          | 2     |      | 1     | 6     | 4     | 4     |
| Switch Phase            |       |      |       |       |       |       |
| Minimum Initial (s)     | 15.0  |      | 1.0   | 5.0   | 15.0  | 15.0  |
| Minimum Split (s)       | 34.0  |      | 6.0   | 29.0  | 34.0  | 34.0  |
| Total Split (s)         | 69.0  |      | 15.0  | 84.0  | 36.0  | 36.0  |
| Total Split (%)         | 57.5% |      | 12.5% | 70.0% | 30.0% | 30.0% |
| Yellow Time (s)         | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   |      | 5.0   | 5.0   | 5.0   | 5.0   |
| Lead/Lag                | Lead  |      | Lag   |       |       |       |
| Lead-Lag Optimize?      | Yes   |      | Yes   |       |       |       |
| Recall Mode             | C-Max |      | None  | C-Max | Max   | Max   |
| Act Effect Green (s)    | 64.0  |      | 79.0  | 79.0  | 31.0  | 31.0  |
| Actuated g/C Ratio      | 0.53  |      | 0.66  | 0.66  | 0.26  | 0.26  |
| v/c Ratio               | 0.58  |      | 0.26  | 0.41  | 0.01  | 0.11  |
| Control Delay           | 13.2  |      | 12.5  | 9.7   | 33.2  | 10.2  |
| Queue Delay             | 0.0   |      | 0.0   | 0.4   | 0.0   | 0.0   |
| Total Delay             | 13.2  |      | 12.5  | 10.1  | 33.2  | 10.2  |
| LOS                     | B     |      | B     | B     | C     | B     |
| Approach Delay          | 13.2  |      |       | 10.3  | 15.1  |       |
| Approach LOS            | B     |      |       | B     | B     |       |
| Queue Length 50th (ft)  | 271   |      | 26    | 264   | 4     | 0     |
| Queue Length 95th (ft)  | 358   |      | 50    | 329   | 11    | 30    |
| Internal Link Dist (ft) | 366   |      |       | 377   | 331   |       |
| Turn Bay Length (ft)    |       |      | 115   |       | 120   |       |
| Base Capacity (vph)     | 1872  |      | 345   | 2329  | 886   | 444   |
| Starvation Cap Reductn  | 0     |      | 0     | 807   | 0     | 0     |
| Spillback Cap Reductn   | 0     |      | 0     | 0     | 0     | 0     |
| Storage Cap Reductn     | 0     |      | 0     | 0     | 0     | 0     |
| Reduced v/c Ratio       | 0.58  |      | 0.26  | 0.62  | 0.01  | 0.11  |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 21 (18%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 75

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MS

Synchro 9 Report  
Page 5

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 11.9

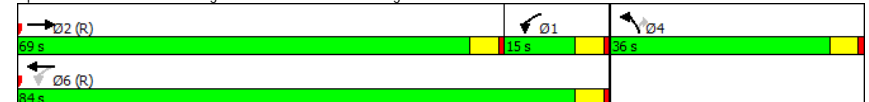
Intersection LOS: B

Intersection Capacity Utilization 56.2%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 5: N. Congress Ave & Martin Luther King Jr. Blvd



09/29/2016  
MS

Synchro 9 Report  
Page 6

6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations     | ↰     | ↰↱    |      | ↰     | ↰↱    | ↰     |       | ↰     | ↰↱    |       | ↰     | ↰     |
| Traffic Volume (vph)    | 132   | 705   | 118  | 128   | 911   | 130   | 5     | 0     | 13    | 40    | 1     | 10    |
| Future Volume (vph)     | 132   | 705   | 118  | 128   | 911   | 130   | 5     | 0     | 13    | 40    | 1     | 10    |
| Confl. Peds. (#/hr)     | 17    |       | 8    | 8     |       | 17    | 22    |       | 7     | 7     |       | 22    |
| Confl. Bikes (#/hr)     |       |       | 3    |       |       | 3     |       |       |       |       |       | 1     |
| Peak Hour Factor        | 0.84  | 0.84  | 0.84 | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  |
| Adj. Flow (vph)         | 157   | 839   | 140  | 152   | 1085  | 155   | 6     | 0     | 15    | 48    | 1     | 12    |
| Shared Lane Traffic (%) |       |       |      |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)   | 157   | 979   | 0    | 152   | 1085  | 155   | 0     | 6     | 15    | 0     | 49    | 12    |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    | Perm  | Perm  | NA    | Perm  | Perm  | NA    | Perm  |
| Protected Phases        | 5     | 2     |      | 1     | 6     |       |       | 8     |       |       | 4     |       |
| Permitted Phases        | 2     |       |      | 6     |       | 6     | 8     |       | 8     | 4     |       | 4     |
| Detector Phase          | 5     | 2     |      | 1     | 6     | 6     | 8     | 8     | 8     | 4     | 4     | 4     |
| Switch Phase            |       |       |      |       |       |       |       |       |       |       |       |       |
| Minimum Initial (s)     | 1.0   | 10.0  |      | 1.0   | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  |
| Minimum Split (s)       | 6.0   | 22.0  |      | 6.0   | 28.0  | 28.0  | 22.0  | 22.0  | 22.0  | 28.0  | 28.0  | 28.0  |
| Total Split (s)         | 20.0  | 70.0  |      | 20.0  | 70.0  | 70.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  |
| Total Split (%)         | 16.7% | 58.3% |      | 16.7% | 58.3% | 58.3% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   | 5.0   |       | 5.0   | 5.0   |       | 5.0   | 5.0   |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   | Lag   |       |       |       |       |       |       |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   | Yes   |       |       |       |       |       |       |
| Recall Mode             | None  | C-Max |      | None  | C-Max | C-Max | Max   | Max   | Max   | Max   | Max   | Max   |
| Act Effect Green (s)    | 80.1  | 71.2  |      | 79.9  | 71.1  | 71.1  |       | 25.0  | 25.0  |       | 25.0  | 25.0  |
| Actuated g/C Ratio      | 0.67  | 0.59  |      | 0.67  | 0.59  | 0.59  |       | 0.21  | 0.21  |       | 0.21  | 0.21  |
| v/c Ratio               | 0.45  | 0.48  |      | 0.39  | 0.52  | 0.17  |       | 0.02  | 0.04  |       | 0.17  | 0.03  |
| Control Delay           | 18.2  | 8.8   |      | 11.0  | 16.5  | 5.6   |       | 38.2  | 0.2   |       | 40.9  | 0.2   |
| Queue Delay             | 0.0   | 0.1   |      | 0.0   | 0.2   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Total Delay             | 18.2  | 8.9   |      | 11.0  | 16.7  | 5.6   |       | 38.2  | 0.2   |       | 40.9  | 0.2   |
| LOS                     | B     | A     |      | B     | B     | A     |       | D     | A     |       | D     | A     |
| Approach Delay          |       | 10.2  |      |       | 14.8  |       |       | 11.1  |       |       | 32.9  |       |
| Approach LOS            |       | B     |      |       | B     |       |       | B     |       |       | C     |       |
| Queue Length 50th (ft)  | 39    | 86    |      | 33    | 295   | 16    |       | 4     | 0     |       | 31    | 0     |
| Queue Length 95th (ft)  | 93    | 124   |      | 42    | 344   | 23    |       | 15    | 0     |       | 62    | 0     |
| Internal Link Dist (ft) |       | 377   |      |       | 273   |       |       | 337   |       |       | 212   |       |
| Turn Bay Length (ft)    | 160   |       |      | 100   |       | 100   |       |       | 100   |       |       |       |
| Base Capacity (vph)     | 433   | 2051  |      | 473   | 2096  | 912   |       | 272   | 371   |       | 290   | 365   |
| Starvation Cap Reductn  | 0     | 293   |      | 0     | 329   | 0     |       | 0     | 0     |       | 0     | 0     |
| Spillback Cap Reductn   | 0     | 79    |      | 0     | 0     | 0     |       | 0     | 1     |       | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Reduced v/c Ratio       | 0.36  | 0.56  |      | 0.32  | 0.61  | 0.17  |       | 0.02  | 0.04  |       | 0.17  | 0.03  |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 65

6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.52

Intersection Signal Delay: 13.2

Intersection LOS: B

Intersection Capacity Utilization 71.0%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 6: Brazos St & Martin Luther King Jr. Blvd



7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑    |      | ↓     | ↑↑    |      |      |      |      | ↓     | ↑↑    | ↓     |
| Traffic Volume (vph)    | 0    | 652   | 140  | 312   | 1133  | 0    | 0    | 0    | 0    | 34    | 48    | 52    |
| Future Volume (vph)     | 0    | 652   | 140  | 312   | 1133  | 0    | 0    | 0    | 0    | 34    | 48    | 52    |
| Confl. Peds. (#/hr)     |      |       | 50   | 50    |       |      |      |      |      | 7     |       | 45    |
| Confl. Bikes (#/hr)     |      |       | 2    |       |       |      |      |      |      |       |       | 27    |
| Peak Hour Factor        | 0.93 | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93 | 0.93 | 0.93 | 0.93  | 0.93  | 0.93  |
| Adj. Flow (vph)         | 0    | 701   | 151  | 335   | 1218  | 0    | 0    | 0    | 0    | 37    | 52    | 56    |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 852   | 0    | 335   | 1218  | 0    | 0    | 0    | 0    | 37    | 52    | 56    |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1 9   | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1 9   | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 5.0   |      |       | 10.0  |      |      |      |      | 10.0  | 10.0  | 10.0  |
| Minimum Split (s)       |      | 30.0  |      |       | 30.0  |      |      |      |      | 28.0  | 28.0  | 28.0  |
| Total Split (s)         |      | 62.0  |      |       | 92.0  |      |      |      |      | 28.0  | 28.0  | 28.0  |
| Total Split (%)         |      | 51.7% |      |       | 76.7% |      |      |      |      | 23.3% | 23.3% | 23.3% |
| Yellow Time (s)         |      | 4.0   |      |       | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      |       | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      |       | 0.0   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      |       | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      |       |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      |       |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      |       | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effect Green (s)    |      | 57.0  |      | 87.0  | 87.0  |      |      |      |      | 23.0  | 23.0  | 23.0  |
| Actuated g/C Ratio      |      | 0.48  |      | 0.72  | 0.72  |      |      |      |      | 0.19  | 0.19  | 0.19  |
| v/c Ratio               |      | 0.52  |      | 0.63  | 0.47  |      |      |      |      | 0.11  | 0.08  | 0.16  |
| Control Delay           |      | 21.7  |      | 16.5  | 10.2  |      |      |      |      | 41.2  | 40.3  | 0.9   |
| Queue Delay             |      | 0.2   |      | 14.4  | 1.3   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             |      | 21.9  |      | 30.9  | 11.5  |      |      |      |      | 41.2  | 40.3  | 0.9   |
| LOS                     |      | C     |      | C     | B     |      |      |      |      | D     | D     | A     |
| Approach Delay          |      | 21.9  |      |       | 15.7  |      |      |      |      |       | 25.3  |       |
| Approach LOS            |      | C     |      |       | B     |      |      |      |      |       | C     |       |
| Queue Length 50th (ft)  |      | 201   |      | 96    | 186   |      |      |      |      | 24    | 17    | 0     |
| Queue Length 95th (ft)  |      | 273   |      | 168   | 280   |      |      |      |      | 55    | 35    | 1     |
| Internal Link Dist (ft) |      | 273   |      |       | 321   |      |      | 343  |      |       | 244   |       |
| Turn Bay Length (ft)    |      |       |      | 120   |       |      |      |      |      | 100   |       | 100   |
| Base Capacity (vph)     |      | 1627  |      | 528   | 2565  |      |      |      |      | 335   | 678   | 358   |
| Starvation Cap Reductn  |      | 207   |      | 174   | 1060  |      |      |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 293   |      |      |      |      | 0     | 0     | 8     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       |      | 0.60  |      | 0.95  | 0.81  |      |      |      |      | 0.11  | 0.08  | 0.16  |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 80

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Lane Group              | 01   | 09   |
|-------------------------|------|------|
| Lane Configurations     |      |      |
| Traffic Volume (vph)    |      |      |
| Future Volume (vph)     |      |      |
| Confl. Peds. (#/hr)     |      |      |
| Confl. Bikes (#/hr)     |      |      |
| Peak Hour Factor        |      |      |
| Adj. Flow (vph)         |      |      |
| Shared Lane Traffic (%) |      |      |
| Lane Group Flow (vph)   |      |      |
| Turn Type               |      |      |
| Protected Phases        | 1    | 9    |
| Permitted Phases        |      |      |
| Detector Phase          |      |      |
| Switch Phase            |      |      |
| Minimum Initial (s)     | 1.0  | 5.0  |
| Minimum Split (s)       | 6.0  | 10.0 |
| Total Split (s)         | 15.0 | 15.0 |
| Total Split (%)         | 13%  | 13%  |
| Yellow Time (s)         | 4.0  | 4.0  |
| All-Red Time (s)        | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |
| Total Lost Time (s)     |      |      |
| Lead/Lag                | Lead |      |
| Lead-Lag Optimize?      | Yes  |      |
| Recall Mode             | None | None |
| Act Effect Green (s)    |      |      |
| Actuated g/C Ratio      |      |      |
| v/c Ratio               |      |      |
| Control Delay           |      |      |
| Queue Delay             |      |      |
| Total Delay             |      |      |
| LOS                     |      |      |
| Approach Delay          |      |      |
| Approach LOS            |      |      |
| Queue Length 50th (ft)  |      |      |
| Queue Length 95th (ft)  |      |      |
| Internal Link Dist (ft) |      |      |
| Turn Bay Length (ft)    |      |      |
| Base Capacity (vph)     |      |      |
| Starvation Cap Reductn  |      |      |
| Spillback Cap Reductn   |      |      |
| Storage Cap Reductn     |      |      |
| Reduced v/c Ratio       |      |      |

Intersection Summary

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 18.3

Intersection LOS: B

Intersection Capacity Utilization 78.5%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 7: San Jacinto Blvd & Martin Luther King Jr. Blvd



8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↩     | ↩↩    |      |      | ↩↩    |      | ↩     | ↩     | ↩     |      | ↓    | ↩    |
| Traffic Volume (vph)    | 143   | 474   | 0    | 0    | 1399  | 55   | 35    | 79    | 52    | 0    | 0    | 0    |
| Future Volume (vph)     | 143   | 474   | 0    | 0    | 1399  | 55   | 35    | 79    | 52    | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     |       |       | 33   |      |       | 55   | 32    |       | 26    |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       | 4    |       |       | 4     |      |      |      |
| Peak Hour Factor        | 0.89  | 0.89  | 0.89 | 0.89 | 0.89  | 0.89 | 0.89  | 0.89  | 0.89  | 0.89 | 0.89 | 0.89 |
| Adj. Flow (vph)         | 161   | 533   | 0    | 0    | 1572  | 62   | 39    | 89    | 58    | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       | 10%  |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 161   | 533   | 0    | 0    | 1634  | 0    | 35    | 93    | 58    | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 1.0   | 10.0  |      |      | 1.0   |      | 10.0  | 10.0  | 10.0  |      |      |      |
| Minimum Split (s)       | 6.0   | 26.0  |      |      | 6.0   |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (s)         | 15.0  | 94.0  |      |      | 79.0  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (%)         | 12.5% | 78.3% |      |      | 65.8% |      | 21.7% | 21.7% | 21.7% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effct Green (s)     | 89.0  | 89.0  |      |      | 75.0  |      | 21.0  | 21.0  | 21.0  |      |      |      |
| Actuated g/C Ratio      | 0.74  | 0.74  |      |      | 0.62  |      | 0.18  | 0.18  | 0.18  |      |      |      |
| v/c Ratio               | 0.72  | 0.20  |      |      | 0.74  |      | 0.13  | 0.30  | 0.19  |      |      |      |
| Control Delay           | 35.5  | 0.8   |      |      | 17.3  |      | 39.3  | 41.8  | 10.9  |      |      |      |
| Queue Delay             | 0.0   | 0.3   |      |      | 2.3   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Delay             | 35.5  | 1.0   |      |      | 19.5  |      | 39.3  | 41.8  | 10.9  |      |      |      |
| LOS                     | D     | A     |      |      | B     |      | D     | D     | B     |      |      |      |
| Approach Delay          |       | 9.0   |      |      | 19.5  |      |       | 31.7  |       |      |      |      |
| Approach LOS            |       | A     |      |      | B     |      |       | C     |       |      |      |      |
| Queue Length 50th (ft)  | 29    | 2     |      |      | 654   |      | 25    | 75    | 5     |      |      |      |
| Queue Length 95th (ft)  | #92   | 2     |      |      | 726   |      | m48   | m125  | m23   |      |      |      |
| Internal Link Dist (ft) |       | 321   |      |      | 685   |      |       | 350   |       |      | 106  |      |
| Turn Bay Length (ft)    | 120   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 237   | 2624  |      |      | 2194  |      | 278   | 308   | 313   |      |      |      |
| Starvation Cap Reductn  | 0     | 1363  |      |      | 406   |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.68  | 0.42  |      |      | 0.91  |      | 0.13  | 0.30  | 0.19  |      |      |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 27 (23%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 80

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 17.5

Intersection LOS: B

Intersection Capacity Utilization 78.5%

ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Trinity St & Martin Luther King Jr. Blvd



18: Guadalupe St & E. 17th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

|                         | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations     |      | ↑    | ↑    |      |      |      |      |      |      |      | ↑↑   |      |
| Traffic Volume (vph)    | 0    | 37   | 132  | 0    | 0    | 0    | 0    | 0    | 0    | 37   | 913  | 0    |
| Future Volume (vph)     | 0    | 37   | 132  | 0    | 0    | 0    | 0    | 0    | 0    | 37   | 913  | 0    |
| Confl. Peds. (#/hr)     |      |      | 17   |      |      |      |      |      |      |      | 42   |      |
| Peak Hour Factor        | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Parking (#/hr)          |      | 0    |      |      |      |      |      |      |      |      |      |      |
| Adj. Flow (vph)         | 0    | 40   | 143  | 0    | 0    | 0    | 0    | 0    | 0    | 40   | 992  | 0    |
| Shared Lane Traffic (%) |      |      |      |      |      |      |      |      |      |      |      |      |
| Lane Group Flow (vph)   | 0    | 40   | 143  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1032 | 0    |
| Turn Type               |      | NA   | Perm |      |      |      |      |      |      |      | Perm | NA   |
| Protected Phases        |      | 4 12 |      |      |      |      |      |      |      |      | 2 10 |      |
| Permitted Phases        |      |      | 4 12 |      |      |      |      |      |      |      | 2 10 |      |
| Minimum Split (s)       |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (s)         |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (%)         |      |      |      |      |      |      |      |      |      |      |      |      |
| Yellow Time (s)         |      |      |      |      |      |      |      |      |      |      |      |      |
| All-Red Time (s)        |      |      |      |      |      |      |      |      |      |      |      |      |
| Lost Time Adjust (s)    |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Lost Time (s)     |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead/Lag                |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead-Lag Optimize?      |      |      |      |      |      |      |      |      |      |      |      |      |
| Act Effct Green (s)     |      | 54.0 | 54.0 |      |      |      |      |      |      |      | 42.0 |      |
| Actuated g/C Ratio      |      | 0.45 | 0.45 |      |      |      |      |      |      |      | 0.35 |      |
| v/c Ratio               |      | 0.05 | 0.19 |      |      |      |      |      |      |      | 0.80 |      |
| Control Delay           |      | 9.5  | 5.1  |      |      |      |      |      |      |      | 23.3 |      |
| Queue Delay             |      | 0.0  | 0.0  |      |      |      |      |      |      |      | 0.0  |      |
| Total Delay             |      | 9.5  | 5.1  |      |      |      |      |      |      |      | 23.3 |      |
| LOS                     |      | A    | A    |      |      |      |      |      |      |      | C    |      |
| Approach Delay          |      | 6.0  |      |      |      |      |      |      |      |      | 23.3 |      |
| Approach LOS            |      | A    |      |      |      |      |      |      |      |      | C    |      |
| Queue Length 50th (ft)  |      | 8    | 12   |      |      |      |      |      |      |      | 208  |      |
| Queue Length 95th (ft)  |      | 18   | 31   |      |      |      |      |      |      |      | 260  |      |
| Internal Link Dist (ft) |      | 177  |      |      | 244  |      |      | 271  |      |      | 262  |      |
| Turn Bay Length (ft)    |      |      |      |      |      |      |      |      |      |      |      |      |
| Base Capacity (vph)     |      | 754  | 741  |      |      |      |      |      |      |      | 1286 |      |
| Starvation Cap Reductn  |      | 0    | 0    |      |      |      |      |      |      |      | 0    |      |
| Spillback Cap Reductn   |      | 0    | 0    |      |      |      |      |      |      |      | 0    |      |
| Storage Cap Reductn     |      | 0    | 0    |      |      |      |      |      |      |      | 0    |      |
| Reduced v/c Ratio       |      | 0.05 | 0.19 |      |      |      |      |      |      |      | 0.80 |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green

Natural Cycle: 85

Control Type: Pretimed

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 20.7

Intersection LOS: C

Intersection Capacity Utilization 48.8%

ICU Level of Service A

18: Guadalupe St & E. 17th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Lane Group              | Ø2   | Ø4   | Ø10  | Ø12  |
|-------------------------|------|------|------|------|
| Lane Configurations     |      |      |      |      |
| Traffic Volume (vph)    |      |      |      |      |
| Future Volume (vph)     |      |      |      |      |
| Confl. Peds. (#/hr)     |      |      |      |      |
| Peak Hour Factor        |      |      |      |      |
| Parking (#/hr)          |      |      |      |      |
| Adj. Flow (vph)         |      |      |      |      |
| Shared Lane Traffic (%) |      |      |      |      |
| Lane Group Flow (vph)   |      |      |      |      |
| Turn Type               |      |      |      |      |
| Protected Phases        | 2    | 4    | 10   | 12   |
| Permitted Phases        |      |      |      |      |
| Minimum Split (s)       | 21.0 | 21.0 | 21.0 | 21.0 |
| Total Split (s)         | 26.0 | 43.0 | 28.0 | 23.0 |
| Total Split (%)         | 22%  | 36%  | 23%  | 19%  |
| Yellow Time (s)         | 4.0  | 4.0  | 4.0  | 4.0  |
| All-Red Time (s)        | 2.0  | 2.0  | 2.0  | 2.0  |
| Lost Time Adjust (s)    |      |      |      |      |
| Total Lost Time (s)     |      |      |      |      |
| Lead/Lag                | Lead | Lag  |      |      |
| Lead-Lag Optimize?      | Yes  | Yes  |      |      |
| Act Effect Green (s)    |      |      |      |      |
| Actuated g/C Ratio      |      |      |      |      |
| v/c Ratio               |      |      |      |      |
| Control Delay           |      |      |      |      |
| Queue Delay             |      |      |      |      |
| Total Delay             |      |      |      |      |
| LOS                     |      |      |      |      |
| Approach Delay          |      |      |      |      |
| Approach LOS            |      |      |      |      |
| Queue Length 50th (ft)  |      |      |      |      |
| Queue Length 95th (ft)  |      |      |      |      |
| Internal Link Dist (ft) |      |      |      |      |
| Turn Bay Length (ft)    |      |      |      |      |
| Base Capacity (vph)     |      |      |      |      |
| Starvation Cap Reductn  |      |      |      |      |
| Spillback Cap Reductn   |      |      |      |      |
| Storage Cap Reductn     |      |      |      |      |
| Reduced v/c Ratio       |      |      |      |      |
| Intersection Summary    |      |      |      |      |

18: Guadalupe St & E. 17th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

Analysis Period (min) 15

Splits and Phases: 18: Guadalupe St & E. 17th St

















## 19: Lavaca St &amp; E. 17th St

## TIA for Texas Capital Complex Master Plan 2018 Update

## Existing Conditions

Timing Plan: AM

|                         |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |   |
| Lane Configurations     |   |  |   |   |   |   |   |  |   |   |   |   |   |
| Traffic Volume (vph)    | 12  | 51  | 0   | 0   | 0   | 0   | 0   | 522   | 138   | 0   | 0   | 0   |   |
| Future Volume (vph)     | 12  | 51  | 0   | 0   | 0   | 0   | 0   | 522   | 138   | 0   | 0   | 0   |   |
| Confl. Peds. (#/hr)     | 29  |   |   |   |   |   |   |   | 31  |   |   |   |   |
| Peak Hour Factor        | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  |   |
| Parking (#/hr)          |   | 0   |   |   |   |   |   |   |   |   |   |   |   |
| Adj. Flow (vph)         | 14  | 61  | 0   | 0   | 0   | 0   | 0   | 629   | 166   | 0   | 0   | 0   |   |
| Shared Lane Traffic (%) |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)   | 0   | 75  | 0   | 0   | 0   | 0   | 0   | 795   | 0   | 0   | 0   | 0   |   |
| Turn Type               | Perm  | NA  |   |   |   |   |   | NA  |   |   |   |   |   |
| Protected Phases        |   | 4 12  |   |   |   |   |   | 2 10  |   |   |   |   |   |
| Permitted Phases        | 4 12  |   |   |   |   |   |   |   |   |   |   |   |   |
| Detector Phase          | 4 12  | 4 12  |   |   |   |   |   | 2 10  |   |   |   |   |   |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Split (s)       |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (s)         |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (%)         |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Yellow Time (s)         |   |   |   |   |   |   |   |   |   |   |   |   |   |
| All-Red Time (s)        |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lost Time Adjust (s)    |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Lost Time (s)     |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead/Lag                |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?      |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Recall Mode             |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Act Effect Green (s)    |   | 20.4  |   |   |   |   |   | 84.3  |   |   |   |   |   |
| Actuated g/C Ratio      |   | 0.17  |   |   |   |   |   | 0.70  |   |   |   |   |   |
| v/c Ratio               |   | 0.22  |   |   |   |   |   | 0.19  |   |   |   |   |   |
| Control Delay           |   | 12.7  |   |   |   |   |   | 3.8   |   |   |   |   |   |
| Queue Delay             |   | 0.0   |   |   |   |   |   | 0.0   |   |   |   |   |   |
| Total Delay             |   | 12.7  |   |   |   |   |   | 3.8   |   |   |   |   |   |
| LOS                     |   | B   |   |   |   |   |   | A   |   |   |   |   |   |
| Approach Delay          |   | 12.7  |   |   |   |   |   | 3.8   |   |   |   |   |   |
| Approach LOS            |   | B   |   |   |   |   |   | A   |   |   |   |   |   |
| Queue Length 50th (ft)  |   | 4   |   |   |   |   |   | 29  |   |   |   |   |   |
| Queue Length 95th (ft)  |   | m19   |   |   |   |   |   | 52  |   |   |   |   |   |
| Internal Link Dist (ft) |   | 244   |   |   |   | 319   |   | 272   |   |   | 254   |   |   |
| Turn Bay Length (ft)    |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Base Capacity (vph)     |   | 616   |   |   |   |   |   | 4718  |   |   |   |   |   |
| Starvation Cap Reductn  |   | 0   |   |   |   |   |   | 0   |   |   |   |   |   |
| Spillback Cap Reductn   |   | 0   |   |   |   |   |   | 0   |   |   |   |   |   |
| Storage Cap Reductn     |   | 0   |   |   |   |   |   | 0   |   |   |   |   |   |
| Reduced v/c Ratio       |   | 0.12  |   |   |   |   |   | 0.17  |   |   |   |   |   |

## Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green

Natural Cycle: 100

09/29/2016

MS

Synchro 9 Report

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## 19: Lavaca St &amp; E. 17th St

## TIA for Texas Capital Complex Master Plan 2018 Update

## Existing Conditions

Timing Plan: AM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 26.0  | 28.0 | 23.0 | 23.0 |
| Total Split (s)         | 38.0  | 29.0 | 27.0 | 26.0 |
| Total Split (%)         | 32%   | 24%  | 23%  | 22%  |
| Yellow Time (s)         | 4.0   | 4.0  | 4.0  | 4.0  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effect Green (s)    |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |

## Intersection Summary

09/29/2016

MS

Synchro 9 Report

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19: Lavaca St & E. 17th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.22

Intersection Signal Delay: 4.6

Intersection LOS: A

Intersection Capacity Utilization 39.2%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 19: Lavaca St & E. 17th St



28: Lavaca St & E. 16th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

|   | ←    | →    | ↙    | ↘    | ←    | →    | ↙    | ↘    | ←    | →    | ↙    | ↘    |
|---|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Group  | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations                                       |      |      |      |      | ↔    |      |      | ↔    |      |      |      |      |
| Traffic Volume (vph)                                      | 0    | 0    | 0    | 0    | 25   | 13   | 213  | 636  | 0    | 0    | 0    | 0    |
| Future Volume (vph)                                       | 0    | 0    | 0    | 0    | 25   | 13   | 213  | 636  | 0    | 0    | 0    | 0    |
| Confl. Peds. (#/hr)                                       |      |      |      |      |      | 10   | 55   |      |      |      |      |      |
| Confl. Bikes (#/hr)                                       |      |      |      |      |      | 2    |      |      |      |      |      |      |
| Peak Hour Factor  | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 |
| Parking (#/hr)  |      |      |      |      | 0    |      |      |      |      |      |      |      |
| Adj. Flow (vph)   | 0    | 0    | 0    | 0    | 30   | 15   | 254  | 757  | 0    | 0    | 0    | 0    |
| Shared Lane Traffic (%)                                   |      |      |      |      |      |      |      |      |      |      |      |      |
| Lane Group Flow (vph)                                     | 0    | 0    | 0    | 0    | 45   | 0    | 0    | 1011 | 0    | 0    | 0    | 0    |
| Turn Type   |      |      |      |      | NA   |      | Perm | NA   |      |      |      |      |
| Protected Phases  |      |      |      |      | 4 12 |      |      | 2 10 |      |      |      |      |
| Permitted Phases  |      |      |      |      |      |      |      | 2 10 |      |      |      |      |
| Detector Phase  |      |      |      |      | 4 12 |      |      | 2 10 |      |      |      |      |
| Switch Phase  |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Initial (s)                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Split (s)   |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (s)   |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (%)   |      |      |      |      |      |      |      |      |      |      |      |      |
| Yellow Time (s)   |      |      |      |      |      |      |      |      |      |      |      |      |
| All-Red Time (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Lost Time Adjust (s)                                      |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Lost Time (s)                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead/Lag  |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead-Lag Optimize?  |      |      |      |      |      |      |      |      |      |      |      |      |
| Recall Mode   |      |      |      |      |      |      |      |      |      |      |      |      |
| Act Effct Green (s)                                       |      |      |      |      | 13.3 |      |      | 91.3 |      |      |      |      |
| Actuated g/C Ratio  |      |      |      |      | 0.11 |      |      | 0.76 |      |      |      |      |
| v/c Ratio   |      |      |      |      | 0.24 |      |      | 0.22 |      |      |      |      |
| Control Delay   |      |      |      |      | 21.1 |      |      | 6.6  |      |      |      |      |
| Queue Delay   |      |      |      |      | 0.0  |      |      | 0.1  |      |      |      |      |
| Total Delay   |      |      |      |      | 21.1 |      |      | 6.7  |      |      |      |      |
| LOS   |      |      |      |      | C    |      |      | A    |      |      |      |      |
| Approach Delay  |      |      |      |      | 21.1 |      |      | 6.7  |      |      |      |      |
| Approach LOS  |      |      |      |      | C    |      |      | A    |      |      |      |      |
| Queue Length 50th (ft)                                    |      |      |      |      | 12   |      |      | 129  |      |      |      |      |
| Queue Length 95th (ft)                                    |      |      |      |      | m31  |      |      | 114  |      |      |      |      |
| Internal Link Dist (ft)                                   |      |      |      |      |      |      |      | 281  |      |      |      | 272  |
| Turn Bay Length (ft)                                      |      |      |      |      |      |      |      |      |      |      |      |      |
| Base Capacity (vph)                                       |      |      |      |      | 597  |      |      | 4724 |      |      |      |      |
| Starvation Cap Reductn                                    |      |      |      |      | 0    |      |      | 1878 |      |      |      |      |
| Spillback Cap Reductn                                     |      |      |      |      | 0    |      |      | 0    |      |      |      |      |
| Storage Cap Reductn                                       |      |      |      |      | 0    |      |      | 0    |      |      |      |      |
| Reduced v/c Ratio   |      |      |      |      | 0.08 |      |      | 0.36 |      |      |      |      |
| <b>Intersection Summary</b>                               |      |      |      |      |      |      |      |      |      |      |      |      |
| Cycle Length: 120   |      |      |      |      |      |      |      |      |      |      |      |      |
| Actuated Cycle Length: 120                                |      |      |      |      |      |      |      |      |      |      |      |      |
| Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green |      |      |      |      |      |      |      |      |      |      |      |      |

28: Lavaca St & E. 16th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Confl. Bikes (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 1.0  | 5.0  | 5.0  |
| Minimum Split (s)       | 28.0  | 6.0  | 21.0 | 23.0 |
| Total Split (s)         | 42.0  | 32.0 | 21.0 | 25.0 |
| Total Split (%)         | 35%   | 27%  | 18%  | 21%  |
| Yellow Time (s)         | 4.0   | 4.0  | 4.0  | 4.0  |
| All-Red Time (s)        | 2.0   | 1.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effect Green (s)    |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

28: Lavaca St & E. 16th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

Natural Cycle: 80  
Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 0.24  
Intersection Signal Delay: 7.3  
Intersection LOS: A  
Intersection Capacity Utilization 25.0%  
ICU Level of Service A  
Analysis Period (min) 15  
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 28: Lavaca St & E. 16th St



34: Guadalupe St & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑↑   |      | ↑     | ↑↑↑   |      |      |      |      |       | ↑↑↑   | ↑     |
| Traffic Volume (vph)    | 0    | 1429  | 305  | 187   | 910   | 0    | 0    | 0    | 0    | 97    | 636   | 50    |
| Future Volume (vph)     | 0    | 1429  | 305  | 187   | 910   | 0    | 0    | 0    | 0    | 97    | 636   | 50    |
| Confl. Peds. (#/hr)     |      |       | 30   | 30    |       |      |      |      |      | 28    |       | 35    |
| Confl. Bikes (#/hr)     |      |       |      |       |       | 1    |      |      |      |       |       | 19    |
| Peak Hour Factor        | 0.98 | 0.98  | 0.98 | 0.98  | 0.98  | 0.98 | 0.98 | 0.98 | 0.98 | 0.98  | 0.98  | 0.98  |
| Adj. Flow (vph)         | 0    | 1458  | 311  | 191   | 929   | 0    | 0    | 0    | 0    | 99    | 649   | 51    |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 1769  | 0    | 191   | 929   | 0    | 0    | 0    | 0    | 0     | 748   | 51    |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1 3   | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1 3   | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      |       | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       |      | 25.0  |      |       | 25.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (s)         |      | 56.0  |      |       | 84.0  |      |      |      |      | 36.0  | 36.0  | 36.0  |
| Total Split (%)         |      | 46.7% |      |       | 70.0% |      |      |      |      | 30.0% | 30.0% | 30.0% |
| Yellow Time (s)         |      | 4.0   |      |       | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      |       | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      |       | 0.0   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      |       | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      |       |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      |       |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      |       | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effect Green (s)    |      | 51.2  |      | 79.0  | 79.0  |      |      |      |      | 31.0  | 31.0  | 31.0  |
| Actuated g/C Ratio      |      | 0.43  |      | 0.66  | 0.66  |      |      |      |      | 0.26  | 0.26  | 0.26  |
| v/c Ratio               |      | 0.84  |      | 0.59  | 0.28  |      |      |      |      | 0.58  | 0.11  | 0.11  |
| Control Delay           |      | 34.2  |      | 29.8  | 3.6   |      |      |      |      | 35.6  | 3.5   | 3.5   |
| Queue Delay             |      | 0.0   |      | 8.7   | 0.1   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             |      | 34.2  |      | 38.5  | 3.7   |      |      |      |      | 35.6  | 3.5   | 3.5   |
| LOS                     |      | C     |      | D     | A     |      |      |      |      | D     | A     | A     |
| Approach Delay          |      | 34.2  |      |       | 9.6   |      |      |      |      | 33.6  |       |       |
| Approach LOS            |      | C     |      |       | A     |      |      |      |      | C     |       |       |
| Queue Length 50th (ft)  |      | 431   |      | 82    | 32    |      |      |      |      | 136   | 1     | 1     |
| Queue Length 95th (ft)  |      | 497   |      | 165   | 37    |      |      |      |      | 184   | m6    | m6    |
| Internal Link Dist (ft) |      | 262   |      |       | 240   |      |      | 197  |      | 285   |       |       |
| Turn Bay Length (ft)    |      |       |      | 50    |       |      |      |      |      |       |       | 100   |
| Base Capacity (vph)     |      | 2116  |      | 327   | 3347  |      |      |      |      | 1298  | 460   | 460   |
| Starvation Cap Reductn  |      | 0     |      | 100   | 970   |      |      |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       |      | 0.84  |      | 0.84  | 0.39  |      |      |      |      | 0.58  | 0.11  | 0.11  |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 90

34: Guadalupe St & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Lane Group              | Ø1   | Ø3   |
|-------------------------|------|------|
| Lane Configurations     |      |      |
| Traffic Volume (vph)    |      |      |
| Future Volume (vph)     |      |      |
| Confl. Peds. (#/hr)     |      |      |
| Confl. Bikes (#/hr)     |      |      |
| Peak Hour Factor        |      |      |
| Adj. Flow (vph)         |      |      |
| Shared Lane Traffic (%) |      |      |
| Lane Group Flow (vph)   |      |      |
| Turn Type               |      |      |
| Protected Phases        | 1    | 3    |
| Permitted Phases        |      |      |
| Detector Phase          |      |      |
| Switch Phase            |      |      |
| Minimum Initial (s)     | 8.0  | 5.0  |
| Minimum Split (s)       | 13.0 | 10.0 |
| Total Split (s)         | 14.0 | 14.0 |
| Total Split (%)         | 12%  | 12%  |
| Yellow Time (s)         | 4.0  | 4.0  |
| All-Red Time (s)        | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |
| Total Lost Time (s)     |      |      |
| Lead/Lag                | Lead |      |
| Lead-Lag Optimize?      | Yes  |      |
| Recall Mode             | Min  | None |
| Act Effect Green (s)    |      |      |
| Actuated g/C Ratio      |      |      |
| v/c Ratio               |      |      |
| Control Delay           |      |      |
| Queue Delay             |      |      |
| Total Delay             |      |      |
| LOS                     |      |      |
| Approach Delay          |      |      |
| Approach LOS            |      |      |
| Queue Length 50th (ft)  |      |      |
| Queue Length 95th (ft)  |      |      |
| Internal Link Dist (ft) |      |      |
| Turn Bay Length (ft)    |      |      |
| Base Capacity (vph)     |      |      |
| Starvation Cap Reductn  |      |      |
| Spillback Cap Reductn   |      |      |
| Storage Cap Reductn     |      |      |
| Reduced v/c Ratio       |      |      |

Intersection Summary

34: Guadalupe St & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 26.6

Intersection LOS: C

Intersection Capacity Utilization 80.2%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 34: Guadalupe St & W. 15th St



35: Lavaca St & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR  | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|------|------|------|------|
| Lane Configurations     | ↰     | ↰↰↰   |      |      | ↰↰↰   |      |       | ↰↰↰   |      |      | ↰    | ↰    |
| Traffic Volume (vph)    | 114   | 1342  | 0    | 0    | 984   | 122  | 123   | 582   | 149  | 0    | 0    | 0    |
| Future Volume (vph)     | 114   | 1342  | 0    | 0    | 984   | 122  | 123   | 582   | 149  | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 35    |       |      |      |       | 35   | 16    |       | 44   |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       |      |       |       | 10   |      |      |      |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94 | 0.94 | 0.94  | 0.94 | 0.94  | 0.94  | 0.94 | 0.94 | 0.94 | 0.94 |
| Adj. Flow (vph)         | 121   | 1428  | 0    | 0    | 1047  | 130  | 131   | 619   | 159  | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       |      |      |      |      |
| Lane Group Flow (vph)   | 121   | 1428  | 0    | 0    | 1177  | 0    | 0     | 909   | 0    | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    |      |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |      |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       |      |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     |      |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |      |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   |      |      |      |      |
| Minimum Split (s)       | 8.0   | 28.0  |      |      | 28.0  |      | 33.0  | 33.0  |      |      |      |      |
| Total Split (s)         | 19.0  | 79.0  |      |      | 60.0  |      | 41.0  | 41.0  |      |      |      |      |
| Total Split (%)         | 15.8% | 65.8% |      |      | 50.0% |      | 34.2% | 34.2% |      |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   |      |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 2.0   | 2.0   |      |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      |       | 0.0   |      |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      |       | 6.0   |      |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |      |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |      |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   |      |      |      |      |
| Act Effct Green (s)     | 74.0  | 74.0  |      |      | 60.1  |      |       | 35.0  |      |      |      |      |
| Actuated g/C Ratio      | 0.62  | 0.62  |      |      | 0.50  |      |       | 0.29  |      |      |      |      |
| v/c Ratio               | 0.41  | 0.46  |      |      | 0.47  |      |       | 0.50  |      |      |      |      |
| Control Delay           | 13.7  | 2.2   |      |      | 13.6  |      |       | 34.5  |      |      |      |      |
| Queue Delay             | 0.0   | 0.2   |      |      | 0.1   |      |       | 0.0   |      |      |      |      |
| Total Delay             | 13.7  | 2.4   |      |      | 13.7  |      |       | 34.5  |      |      |      |      |
| LOS                     | B     | A     |      |      | B     |      |       | C     |      |      |      |      |
| Approach Delay          |       | 3.3   |      |      | 13.7  |      |       | 34.5  |      |      |      |      |
| Approach LOS            |       | A     |      |      | B     |      |       | C     |      |      |      |      |
| Queue Length 50th (ft)  | 7     | 32    |      |      | 64    |      |       | 161   |      |      |      |      |
| Queue Length 95th (ft)  | m20   | 38    |      |      | 152   |      |       | 195   |      |      |      |      |
| Internal Link Dist (ft) |       | 240   |      |      | 335   |      |       | 116   |      |      | 281  |      |
| Turn Bay Length (ft)    | 50    |       |      |      |       |      |       |       |      |      |      |      |
| Base Capacity (vph)     | 356   | 3135  |      |      | 2499  |      |       | 1809  |      |      |      |      |
| Starvation Cap Reductn  | 0     | 811   |      |      | 243   |      |       | 0     |      |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      |       | 0     |      |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      |       | 0     |      |      |      |      |
| Reduced v/c Ratio       | 0.34  | 0.61  |      |      | 0.52  |      |       | 0.50  |      |      |      |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 70

### 35: Lavaca St & W. 15th St

#### TIA for Texas Capital Complex Master Plan 2018 Update

### Existing Conditions

Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.50

Intersection Signal Delay: 14.5

Intersection LOS: B

Intersection Capacity Utilization 80.2%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 35: Lavaca St & W. 15th St



### 36: Colorado St & W. 15th St

#### TIA for Texas Capital Complex Master Plan 2018 Update

### Existing Conditions

Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|-------|
| Lane Group              | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR   |
| Lane Configurations     | ↔     | ↔     | ↔    | ↔     | ↔     | ↔    | ↔     | ↔     | ↔    | ↔     | ↔     | ↔     |
| Traffic Volume (vph)    | 177   | 1299  | 49   | 67    | 1044  | 131  | 1     | 20    | 20   | 5     | 18    | 19    |
| Future Volume (vph)     | 177   | 1299  | 49   | 67    | 1044  | 131  | 1     | 20    | 20   | 5     | 18    | 19    |
| Confl. Peds. (#/hr)     | 6     | 77    | 77   | 77    | 77    | 6    | 4     | 32    | 32   | 32    | 32    | 4     |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94 | 0.94  | 0.94  | 0.94 | 0.94  | 0.94  | 0.94 | 0.94  | 0.94  | 0.94  |
| Adj. Flow (vph)         | 188   | 1382  | 52   | 71    | 1111  | 139  | 1     | 21    | 21   | 5     | 19    | 20    |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |      |       |       |       |
| Lane Group Flow (vph)   | 188   | 1434  | 0    | 71    | 1250  | 0    | 0     | 43    | 0    | 0     | 24    | 20    |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | Perm  | NA    |      | Perm  | NA    | Perm  |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |       | 4     |      |       | 8     |       |
| Permitted Phases        | 2     |       |      | 6     |       |      | 4     |       |      | 8     |       | 8     |
| Detector Phase          | 5     | 2     |      | 1     | 6     |      | 4     | 4     |      | 8     | 8     | 8     |
| Switch Phase            |       |       |      |       |       |      |       |       |      |       |       |       |
| Minimum Initial (s)     | 5.0   | 15.0  |      | 5.0   | 15.0  |      | 5.0   | 5.0   |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       | 10.0  | 22.0  |      | 10.0  | 30.0  |      | 32.0  | 32.0  |      | 32.0  | 32.0  | 32.0  |
| Total Split (s)         | 15.0  | 72.0  |      | 15.0  | 72.0  |      | 33.0  | 33.0  |      | 33.0  | 33.0  | 33.0  |
| Total Split (%)         | 12.5% | 60.0% |      | 12.5% | 60.0% |      | 27.5% | 27.5% |      | 27.5% | 27.5% | 27.5% |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      | 5.0   | 5.0   |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   |      |       |       |      |       |       |       |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |       |       |      |       |       |       |
| Recall Mode             | None  | C-Max |      | None  | C-Max |      | Max   | Max   |      | Max   | Max   | Max   |
| Act Effct Green (s)     | 79.9  | 72.1  |      | 74.8  | 67.7  |      |       | 28.0  |      |       | 28.0  | 28.0  |
| Actuated g/C Ratio      | 0.67  | 0.60  |      | 0.62  | 0.56  |      |       | 0.23  |      |       | 0.23  | 0.23  |
| v/c Ratio               | 0.60  | 0.48  |      | 0.28  | 0.44  |      |       | 0.10  |      |       | 0.06  | 0.05  |
| Control Delay           | 24.9  | 5.1   |      | 11.7  | 7.0   |      |       | 22.9  |      |       | 36.3  | 0.2   |
| Queue Delay             | 0.0   | 0.1   |      | 0.0   | 0.0   |      |       | 0.0   |      |       | 0.0   | 0.0   |
| Total Delay             | 24.9  | 5.2   |      | 11.7  | 7.0   |      |       | 22.9  |      |       | 36.3  | 0.2   |
| LOS                     | C     | A     |      | B     | A     |      |       | C     |      |       | D     | A     |
| Approach Delay          |       | 7.5   |      |       | 7.3   |      |       | 22.9  |      |       | 19.9  |       |
| Approach LOS            |       | A     |      |       | A     |      |       | C     |      |       | B     |       |
| Queue Length 50th (ft)  | 32    | 79    |      | 9     | 56    |      |       | 13    |      |       | 15    | 0     |
| Queue Length 95th (ft)  | 102   | 90    |      | 38    | 63    |      |       | 44    |      |       | 38    | 0     |
| Internal Link Dist (ft) |       | 335   |      |       | 362   |      |       | 155   |      |       | 280   |       |
| Turn Bay Length (ft)    | 90    |       |      | 90    |       |      |       |       |      |       |       | 100   |
| Base Capacity (vph)     | 324   | 3010  |      | 295   | 2823  |      |       | 410   |      |       | 415   | 412   |
| Starvation Cap Reductn  | 0     | 434   |      | 0     | 154   |      |       | 0     |      |       | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 0     |      |       | 0     |      |       | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      |       | 0     |      |       | 0     | 0     |
| Reduced v/c Ratio       | 0.58  | 0.56  |      | 0.24  | 0.47  |      |       | 0.10  |      |       | 0.06  | 0.05  |

#### Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

36: Colorado St & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 7.8

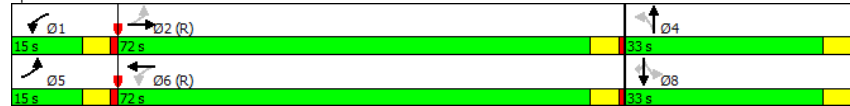
Intersection LOS: A

Intersection Capacity Utilization 80.7%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 36: Colorado St & W. 15th St



37: N. Congress Ave & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT   | NBR  | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|------|-------|-------|------|------|-------|------|-------|-------|-------|
| Lane Configurations     | ↰ ↱   | ↰ ↱   | ↰    | ↰ ↱   | ↰ ↱   | ↰    | ↰    | ↰     | ↰    | ↰     | ↰     | ↰     |
| Traffic Volume (vph)    | 169   | 1130  | 26   | 17    | 1245  | 80   | 0    | 0     | 1    | 22    | 4     | 32    |
| Future Volume (vph)     | 169   | 1130  | 26   | 17    | 1245  | 80   | 0    | 0     | 1    | 22    | 4     | 32    |
| Confl. Peds. (#/hr)     | 1     |       | 28   | 28    |       | 1    | 12   |       | 19   | 19    |       | 12    |
| Confl. Bikes (#/hr)     |       |       |      |       |       |      |      |       | 12   |       |       | 8     |
| Peak Hour Factor        | 0.98  | 0.98  | 0.98 | 0.98  | 0.98  | 0.98 | 0.98 | 0.98  | 0.98 | 0.98  | 0.98  | 0.98  |
| Adj. Flow (vph)         | 172   | 1153  | 27   | 17    | 1270  | 82   | 0    | 0     | 1    | 22    | 4     | 33    |
| Shared Lane Traffic (%) |       |       |      |       |       |      |      |       |      |       |       |       |
| Lane Group Flow (vph)   | 172   | 1180  | 0    | 17    | 1352  | 0    | 0    | 1     | 0    | 0     | 26    | 33    |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |      | 4     |      |       | 8     |       |
| Permitted Phases        | 2     |       |      | 6     |       |      |      |       |      | 8     |       | 8     |
| Detector Phase          | 5     | 2     |      | 1     | 6     |      |      | 4     |      | 8     | 8     | 8     |
| Switch Phase            |       |       |      |       |       |      |      |       |      |       |       |       |
| Minimum Initial (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      |      | 5.0   |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       | 10.0  | 25.0  |      | 10.0  | 25.0  |      |      | 33.0  |      | 33.0  | 33.0  | 33.0  |
| Total Split (s)         | 20.0  | 75.0  |      | 10.0  | 65.0  |      |      | 35.0  |      | 35.0  | 35.0  | 35.0  |
| Total Split (%)         | 16.7% | 62.5% |      | 8.3%  | 54.2% |      |      | 29.2% |      | 29.2% | 29.2% | 29.2% |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      |      | 5.0   |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                | Lead  | Lead  |      | Lag   | Lag   |      |      |       |      |       |       |       |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |      |       |      |       |       |       |
| Recall Mode             | None  | C-Max |      | None  | Max   |      |      | Max   |      | Max   | Max   | Max   |
| Act Effct Green (s)     | 76.0  | 76.0  |      | 64.4  | 64.4  |      |      | 30.0  |      | 30.0  | 30.0  | 30.0  |
| Actuated g/C Ratio      | 0.63  | 0.63  |      | 0.54  | 0.54  |      |      | 0.25  |      | 0.25  | 0.25  | 0.25  |
| v/c Ratio               | 0.61  | 0.37  |      | 0.06  | 0.50  |      |      | 0.00  |      | 0.07  | 0.07  | 0.07  |
| Control Delay           | 30.4  | 1.3   |      | 1.9   | 3.0   |      |      | 0.0   |      | 35.1  | 0.3   | 0.3   |
| Queue Delay             | 0.0   | 0.1   |      | 0.0   | 0.1   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |
| Total Delay             | 30.4  | 1.3   |      | 1.9   | 3.1   |      |      | 0.0   |      | 35.1  | 0.3   | 0.3   |
| LOS                     | C     | A     |      | A     | A     |      |      | A     |      | D     | A     | A     |
| Approach Delay          |       | 5.0   |      |       | 3.1   |      |      |       |      | 15.6  |       |       |
| Approach LOS            |       | A     |      |       | A     |      |      |       |      | B     |       |       |
| Queue Length 50th (ft)  | 38    | 4     |      | 1     | 53    |      |      | 0     |      | 15    | 0     | 0     |
| Queue Length 95th (ft)  | 100   | 17    |      | m5    | 123   |      |      | 0     |      | 40    | 0     | 0     |
| Internal Link Dist (ft) |       | 362   |      |       | 356   |      |      | 125   |      | 278   |       |       |
| Turn Bay Length (ft)    | 60    |       |      | 100   |       |      |      |       |      |       | 130   |       |
| Base Capacity (vph)     | 340   | 3208  |      | 280   | 2705  |      |      | 490   |      | 381   | 464   |       |
| Starvation Cap Reductn  | 0     | 505   |      | 0     | 253   |      |      | 0     |      | 0     | 0     |       |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 0     |      |      | 0     |      | 0     | 0     |       |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      |      | 0     |      | 0     | 0     |       |
| Reduced v/c Ratio       | 0.51  | 0.44  |      | 0.06  | 0.55  |      |      | 0.00  |      | 0.07  | 0.07  |       |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 70

37: N. Congress Ave & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 4.3

Intersection LOS: A

Intersection Capacity Utilization 71.0%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 37: N. Congress Ave & W. 15th St



38: Brazos St & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR  |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations     | ↰     | ↰↰    | ↰    | ↰     | ↰↰    | ↰    | ↰     | ↰     | ↰    | ↰     | ↰     | ↰    |
| Traffic Volume (vph)    | 74    | 1046  | 45   | 25    | 1345  | 78   | 4     | 2     | 7    | 2     | 0     | 4    |
| Future Volume (vph)     | 74    | 1046  | 45   | 25    | 1345  | 78   | 4     | 2     | 7    | 2     | 0     | 4    |
| Confl. Peds. (#/hr)     | 1     |       | 9    | 9     |       | 1    | 9     |       | 4    | 4     |       | 9    |
| Confl. Bikes (#/hr)     |       |       |      |       |       | 1    |       |       |      |       |       | 16   |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97 |
| Adj. Flow (vph)         | 76    | 1078  | 46   | 26    | 1387  | 80   | 4     | 2     | 7    | 2     | 0     | 4    |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |      |       |       |      |
| Lane Group Flow (vph)   | 76    | 1124  | 0    | 26    | 1467  | 0    | 4     | 9     | 0    | 0     | 6     | 0    |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | Perm  | NA    |      | Perm  | NA    |      |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |       | 4     |      |       | 8     |      |
| Permitted Phases        | 2     |       |      | 6     |       |      | 4     |       |      | 8     |       |      |
| Detector Phase          | 5     | 2     |      | 1     | 6     |      | 4     | 4     |      | 8     | 8     |      |
| Switch Phase            |       |       |      |       |       |      |       |       |      |       |       |      |
| Minimum Initial (s)     | 5.0   | 15.0  |      | 5.0   | 15.0  |      | 10.0  | 10.0  |      | 10.0  | 10.0  |      |
| Minimum Split (s)       | 10.0  | 22.0  |      | 10.0  | 22.0  |      | 32.0  | 32.0  |      | 32.0  | 32.0  |      |
| Total Split (s)         | 15.0  | 78.0  |      | 10.0  | 73.0  |      | 32.0  | 32.0  |      | 32.0  | 32.0  |      |
| Total Split (%)         | 12.5% | 65.0% |      | 8.3%  | 60.8% |      | 26.7% | 26.7% |      | 26.7% | 26.7% |      |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   |      |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   |      |       | 0.0   |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      | 5.0   | 5.0   |      |       | 5.0   |      |
| Lead/Lag                | Lead  | Lead  |      | Lag   | Lag   |      |       |       |      |       |       |      |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |       |       |      |       |       |      |
| Recall Mode             | None  | C-Max |      | None  | C-Max |      | Max   | Max   |      | Max   | Max   |      |
| Act Effct Green (s)     | 77.0  | 77.0  |      | 72.6  | 72.6  |      | 27.0  | 27.0  |      |       | 27.0  |      |
| Actuated g/C Ratio      | 0.64  | 0.64  |      | 0.60  | 0.60  |      | 0.22  | 0.22  |      |       | 0.22  |      |
| v/c Ratio               | 0.32  | 0.35  |      | 0.08  | 0.48  |      | 0.01  | 0.02  |      |       | 0.01  |      |
| Control Delay           | 15.8  | 10.0  |      | 4.5   | 4.2   |      | 36.5  | 23.1  |      |       | 0.0   |      |
| Queue Delay             | 0.0   | 0.1   |      | 0.0   | 0.1   |      | 0.0   | 0.0   |      |       | 0.0   |      |
| Total Delay             | 15.8  | 10.1  |      | 4.5   | 4.2   |      | 36.5  | 23.1  |      |       | 0.0   |      |
| LOS                     | B     | B     |      | A     | A     |      | D     | C     |      |       | A     |      |
| Approach Delay          |       | 10.5  |      |       | 4.2   |      |       | 27.2  |      |       |       |      |
| Approach LOS            |       | B     |      |       | A     |      |       | C     |      |       |       |      |
| Queue Length 50th (ft)  | 20    | 104   |      | 4     | 80    |      | 2     | 1     |      |       | 0     |      |
| Queue Length 95th (ft)  | 50    | 135   |      | m9    | 86    |      | 12    | 15    |      |       | m0    |      |
| Internal Link Dist (ft) |       | 356   |      |       | 297   |      |       | 199   |      |       | 273   |      |
| Turn Bay Length (ft)    | 100   |       |      | 40    |       |      | 40    |       |      |       |       |      |
| Base Capacity (vph)     | 270   | 3240  |      | 325   | 3054  |      | 312   | 370   |      |       | 441   |      |
| Starvation Cap Reductn  | 0     | 581   |      | 0     | 359   |      | 0     | 0     |      |       | 0     |      |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 0     |      | 0     | 0     |      |       | 0     |      |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      | 0     | 0     |      |       | 0     |      |
| Reduced v/c Ratio       | 0.28  | 0.42  |      | 0.08  | 0.54  |      | 0.01  | 0.02  |      |       | 0.01  |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 65

38: Brazos St & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.48

Intersection Signal Delay: 7.1

Intersection LOS: A

Intersection Capacity Utilization 66.9%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 38: Brazos St & W. 15th St



39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

|                         | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR  |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|------|
| Lane Configurations     |      | ↑↑↑   |      | ↑     | ↑↑↑   |      |      |      |      |       | ↑↑↑   |      |
| Traffic Volume (vph)    | 0    | 655   | 330  | 151   | 1421  | 0    | 0    | 0    | 0    | 35    | 159   | 33   |
| Future Volume (vph)     | 0    | 655   | 330  | 151   | 1421  | 0    | 0    | 0    | 0    | 35    | 159   | 33   |
| Confl. Peds. (#/hr)     |      |       |      | 21    | 21    |      |      |      |      | 9     |       | 7    |
| Peak Hour Factor        | 0.99 | 0.99  | 0.99 | 0.99  | 0.99  | 0.99 | 0.99 | 0.99 | 0.99 | 0.99  | 0.99  | 0.99 |
| Adj. Flow (vph)         | 0    | 662   | 333  | 153   | 1435  | 0    | 0    | 0    | 0    | 35    | 161   | 33   |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |      |
| Lane Group Flow (vph)   | 0    | 995   | 0    | 153   | 1435  | 0    | 0    | 0    | 0    | 0     | 229   | 0    |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    |      |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |       | 4     |      |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      |       |       |      |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4     | 4     |      |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |      |
| Minimum Initial (s)     |      | 10.0  |      | 3.0   | 10.0  |      |      |      |      | 7.0   | 7.0   |      |
| Minimum Split (s)       |      | 28.0  |      | 8.0   | 28.0  |      |      |      |      | 32.0  | 32.0  |      |
| Total Split (s)         |      | 68.0  |      | 20.0  | 88.0  |      |      |      |      | 32.0  | 32.0  |      |
| Total Split (%)         |      | 56.7% |      | 16.7% | 73.3% |      |      |      |      | 26.7% | 26.7% |      |
| Yellow Time (s)         |      | 4.0   |      | 4.0   | 4.0   |      |      |      |      | 4.0   | 4.0   |      |
| All-Red Time (s)        |      | 1.0   |      | 1.0   | 1.0   |      |      |      |      | 1.0   | 1.0   |      |
| Lost Time Adjust (s)    |      | 0.0   |      | 0.0   | 0.0   |      |      |      |      |       | 0.0   |      |
| Total Lost Time (s)     |      | 5.0   |      | 5.0   | 5.0   |      |      |      |      |       | 5.0   |      |
| Lead/Lag                |      | Lag   |      | Lead  |       |      |      |      |      |       |       |      |
| Lead-Lag Optimize?      |      | Yes   |      | Yes   |       |      |      |      |      |       |       |      |
| Recall Mode             |      | C-Max |      | None  | C-Max |      |      |      |      | Max   | Max   |      |
| Act Effct Green (s)     |      | 69.0  |      | 83.0  | 83.0  |      |      |      |      |       | 27.0  |      |
| Actuated g/C Ratio      |      | 0.58  |      | 0.69  | 0.69  |      |      |      |      |       | 0.22  |      |
| v/c Ratio               |      | 0.35  |      | 0.39  | 0.41  |      |      |      |      |       | 0.20  |      |
| Control Delay           |      | 1.5   |      | 6.4   | 3.7   |      |      |      |      |       | 36.6  |      |
| Queue Delay             |      | 0.1   |      | 0.0   | 0.1   |      |      |      |      |       | 0.0   |      |
| Total Delay             |      | 1.6   |      | 6.4   | 3.8   |      |      |      |      |       | 36.6  |      |
| LOS                     |      | A     |      | A     | A     |      |      |      |      |       | D     |      |
| Approach Delay          |      | 1.6   |      |       | 4.0   |      |      |      |      |       | 36.6  |      |
| Approach LOS            |      | A     |      |       | A     |      |      |      |      |       | D     |      |
| Queue Length 50th (ft)  |      | 0     |      | 16    | 56    |      |      |      |      |       | 45    |      |
| Queue Length 95th (ft)  |      | 0     |      | 27    | 56    |      |      |      |      |       | 72    |      |
| Internal Link Dist (ft) |      | 297   |      |       | 282   |      |      | 125  |      |       | 272   |      |
| Turn Bay Length (ft)    |      |       |      | 70    |       |      |      |      |      |       |       |      |
| Base Capacity (vph)     |      | 2803  |      | 460   | 3517  |      |      |      |      |       | 1124  |      |
| Starvation Cap Reductn  |      | 596   |      | 0     | 630   |      |      |      |      |       | 0     |      |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      |       | 0     |      |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      |       | 0     |      |
| Reduced v/c Ratio       |      | 0.45  |      | 0.33  | 0.50  |      |      |      |      |       | 0.20  |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

Maximum v/c Ratio: 0.41

Intersection Signal Delay: 5.8

Intersection LOS: A

Intersection Capacity Utilization 74.4%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 39: San Jacinto Blvd & W. 15th St



40: Trinity St & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↰     | ↰↰↰   |      |      | ↰↰↰   |      | ↰     | ↰     | ↰     |      |      |      |
| Traffic Volume (vph)    | 84    | 655   | 0    | 0    | 1524  | 237  | 56    | 126   | 9     | 0    | 0    | 0    |
| Future Volume (vph)     | 84    | 655   | 0    | 0    | 1524  | 237  | 56    | 126   | 9     | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 1     |       |      |      |       | 1    | 3     |       | 6     |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       |      |       |       | 2     |      |      |      |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97 | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph)         | 87    | 675   | 0    | 0    | 1571  | 244  | 58    | 130   | 9     | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 87    | 675   | 0    | 0    | 1815  | 0    | 58    | 130   | 9     | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 28.0  |      |      | 28.0  |      | 32.0  | 32.0  | 32.0  |      |      |      |
| Total Split (s)         | 20.0  | 86.0  |      |      | 66.0  |      | 34.0  | 34.0  | 34.0  |      |      |      |
| Total Split (%)         | 16.7% | 71.7% |      |      | 55.0% |      | 28.3% | 28.3% | 28.3% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effct Green (s)     | 81.0  | 81.0  |      |      | 68.2  |      | 29.0  | 29.0  | 29.0  |      |      |      |
| Actuated g/C Ratio      | 0.68  | 0.68  |      |      | 0.57  |      | 0.24  | 0.24  | 0.24  |      |      |      |
| v/c Ratio               | 0.45  | 0.20  |      |      | 0.64  |      | 0.14  | 0.29  | 0.02  |      |      |      |
| Control Delay           | 29.9  | 4.4   |      |      | 7.3   |      | 36.8  | 39.2  | 0.1   |      |      |      |
| Queue Delay             | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Delay             | 29.9  | 4.4   |      |      | 7.3   |      | 36.8  | 39.2  | 0.1   |      |      |      |
| LOS                     | C     | A     |      |      | A     |      | D     | D     | A     |      |      |      |
| Approach Delay          |       | 7.3   |      |      | 7.3   |      |       | 36.7  |       |      |      |      |
| Approach LOS            |       | A     |      |      | A     |      |       | D     |       |      |      |      |
| Queue Length 50th (ft)  | 25    | 30    |      |      | 71    |      | 35    | 83    | 0     |      |      |      |
| Queue Length 95th (ft)  | 75    | 37    |      |      | 150   |      | 72    | 140   | 0     |      |      |      |
| Internal Link Dist (ft) |       | 282   |      |      | 654   |      |       | 149   |       |      | 621  |      |
| Turn Bay Length (ft)    | 100   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 291   | 3432  |      |      | 2841  |      | 426   | 450   | 422   |      |      |      |
| Starvation Cap Reductn  | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.30  | 0.20  |      |      | 0.64  |      | 0.14  | 0.29  | 0.02  |      |      |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 70

40: Trinity St & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 0.64  
Intersection Signal Delay: 9.4  
Intersection Capacity Utilization 74.4%  
Analysis Period (min) 15

Intersection LOS: A  
ICU Level of Service D

Splits and Phases: 40: Trinity St & W. 15th St



80: Red River St & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR   | NBL   | NBT   | NBR  | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|
| Lane Configurations     | ↩     | ↩↩    |      | ↩     | ↩↩    | ↩     | ↩     | ↩     | ↩    | ↩     | ↩↩    | ↩     |
| Traffic Volume (vph)    | 131   | 422   | 42   | 63    | 1404  | 117   | 28    | 136   | 28   | 51    | 262   | 203   |
| Future Volume (vph)     | 131   | 422   | 42   | 63    | 1404  | 117   | 28    | 136   | 28   | 51    | 262   | 203   |
| Peak Hour Factor        | 0.92  | 0.92  | 0.92 | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92 | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)         | 142   | 459   | 46   | 68    | 1526  | 127   | 30    | 148   | 30   | 55    | 285   | 221   |
| Shared Lane Traffic (%) |       |       |      |       |       |       |       |       |      |       |       |       |
| Lane Group Flow (vph)   | 142   | 505   | 0    | 68    | 1526  | 127   | 30    | 178   | 0    | 55    | 285   | 221   |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    | Perm  | pm+pt | NA    |      | pm+pt | NA    | Perm  |
| Protected Phases        | 5     | 2     |      | 1     | 6     |       | 3     | 8     |      | 7     | 4     |       |
| Permitted Phases        | 2     |       |      | 6     |       | 6     | 8     |       |      | 4     |       | 4     |
| Detector Phase          | 5     | 2     |      | 1     | 6     | 6     | 3     | 8     |      | 7     | 4     | 4     |
| Switch Phase            |       |       |      |       |       |       |       |       |      |       |       |       |
| Minimum Initial (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       | 10.0  | 23.0  |      | 10.0  | 23.0  | 23.0  | 10.0  | 23.0  |      | 10.0  | 23.0  | 23.0  |
| Total Split (s)         | 15.0  | 63.0  |      | 15.0  | 63.0  | 63.0  | 12.0  | 30.0  |      | 12.0  | 30.0  | 30.0  |
| Total Split (%)         | 12.5% | 52.5% |      | 12.5% | 52.5% | 52.5% | 10.0% | 25.0% |      | 10.0% | 25.0% | 25.0% |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   | Lag   | Lead  | Lag   |      | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   | Yes   | Yes   | Yes   |      | Yes   | Yes   | Yes   |
| Recall Mode             | None  | C-Max |      | None  | C-Max | C-Max | None  | None  |      | None  | None  | None  |
| Act Effct Green (s)     | 82.3  | 73.8  |      | 76.0  | 68.9  | 68.9  | 22.1  | 16.6  |      | 23.2  | 19.0  | 19.0  |
| Actuated g/C Ratio      | 0.69  | 0.62  |      | 0.63  | 0.57  | 0.57  | 0.18  | 0.14  |      | 0.19  | 0.16  | 0.16  |
| v/c Ratio               | 0.64  | 0.23  |      | 0.11  | 0.75  | 0.13  | 0.14  | 0.69  |      | 0.28  | 0.51  | 0.51  |
| Control Delay           | 43.2  | 13.6  |      | 7.6   | 24.6  | 6.3   | 42.5  | 64.3  |      | 38.0  | 49.2  | 9.9   |
| Queue Delay             | 0.0   | 0.0   |      | 0.0   | 1.3   | 0.0   | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |
| Total Delay             | 43.2  | 13.6  |      | 7.6   | 25.9  | 6.3   | 42.6  | 64.3  |      | 38.0  | 49.2  | 9.9   |
| LOS                     | D     | B     |      | A     | C     | A     | D     | E     |      | D     | D     | A     |
| Approach Delay          |       | 20.1  |      |       | 23.7  |       |       | 61.1  |      |       | 32.6  |       |
| Approach LOS            |       | C     |      |       | C     |       |       | E     |      |       | C     |       |
| Queue Length 50th (ft)  | 78    | 98    |      | 13    | 463   | 18    | 20    | 134   |      | 34    | 110   | 0     |
| Queue Length 95th (ft)  | 144   | 105   |      | m37   | 590   | m48   | m36   | m207  |      | 65    | 147   | 67    |
| Internal Link Dist (ft) |       | 685   |      |       | 494   |       |       | 855   |      |       | 561   |       |
| Turn Bay Length (ft)    | 100   |       |      | 120   |       |       | 140   |       |      | 150   |       |       |
| Base Capacity (vph)     | 239   | 2149  |      | 645   | 2031  | 954   | 218   | 384   |      | 200   | 743   | 507   |
| Starvation Cap Reductn  | 0     | 0     |      | 0     | 287   | 0     | 0     | 0     |      | 0     | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 54    | 0     | 9     | 0     |      | 0     | 0     | 7     |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     | 0     | 0     | 0     |      | 0     | 0     | 0     |
| Reduced v/c Ratio       | 0.59  | 0.23  |      | 0.11  | 0.88  | 0.13  | 0.14  | 0.46  |      | 0.28  | 0.38  | 0.44  |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
Natural Cycle: 80  
Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 0.75

80: Red River St & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

Intersection Signal Delay: 27.0

Intersection LOS: C

Intersection Capacity Utilization 75.8%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 80: Red River St & Martin Luther King Jr. Blvd



81: I-35 SB Frontage Rd & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

|                         | EBL  | EBT   | EBR   | WBL   | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-------------------------|------|-------|-------|-------|------|------|------|------|------|------|------|------|
| Lane Configurations     |      | ↔↔    | ↔     | ↔     | ↔↔   |      |      |      |      |      | ↔↔   | ↔↔   |
| Traffic Volume (vph)    | 0    | 285   | 170   | 448   | 773  | 0    | 0    | 0    | 0    | 55   | 570  | 758  |
| Future Volume (vph)     | 0    | 285   | 170   | 448   | 773  | 0    | 0    | 0    | 0    | 55   | 570  | 758  |
| Peak Hour Factor        | 0.92 | 0.92  | 0.92  | 0.92  | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph)         | 0    | 310   | 185   | 487   | 840  | 0    | 0    | 0    | 0    | 60   | 620  | 824  |
| Shared Lane Traffic (%) |      |       |       |       |      |      |      |      |      |      |      |      |
| Lane Group Flow (vph)   | 0    | 310   | 185   | 487   | 840  | 0    | 0    | 0    | 0    | 0    | 680  | 824  |
| Turn Type               | NA   | Perm  | pm+pt | NA    |      |      |      |      |      | Perm | NA   | Perm |
| Protected Phases        |      | 2     | 1     | 2 1   |      |      |      |      |      |      | 4 12 |      |
| Permitted Phases        |      |       | 2     | 2 1   |      |      |      |      |      | 4 12 |      | 4 12 |
| Detector Phase          |      | 2     | 2     | 1     | 2 1  |      |      |      |      | 4 12 | 4 12 | 4 12 |
| Switch Phase            |      |       |       |       |      |      |      |      |      |      |      |      |
| Minimum Initial (s)     |      | 5.0   | 5.0   | 5.0   |      |      |      |      |      |      |      |      |
| Minimum Split (s)       |      | 24.0  | 24.0  | 24.0  |      |      |      |      |      |      |      |      |
| Total Split (s)         |      | 25.0  | 25.0  | 47.0  |      |      |      |      |      |      |      |      |
| Total Split (%)         |      | 20.8% | 20.8% | 39.2% |      |      |      |      |      |      |      |      |
| Yellow Time (s)         |      | 4.0   | 4.0   | 4.0   |      |      |      |      |      |      |      |      |
| All-Red Time (s)        |      | 2.0   | 2.0   | 2.0   |      |      |      |      |      |      |      |      |
| Lost Time Adjust (s)    |      | 0.0   | 0.0   | 0.0   |      |      |      |      |      |      |      |      |
| Total Lost Time (s)     |      | 6.0   | 6.0   | 6.0   |      |      |      |      |      |      |      |      |
| Lead/Lag                |      | Lead  | Lead  | Lag   |      |      |      |      |      |      |      |      |
| Lead-Lag Optimize?      |      | Yes   | Yes   | Yes   |      |      |      |      |      |      |      |      |
| Recall Mode             |      | C-Max | C-Max | Min   |      |      |      |      |      |      |      |      |
| Act Effct Green (s)     |      | 19.0  | 19.0  | 60.1  | 66.1 |      |      |      |      |      | 41.9 | 41.9 |
| Actuated g/C Ratio      |      | 0.16  | 0.16  | 0.50  | 0.55 |      |      |      |      |      | 0.35 | 0.35 |
| v/c Ratio               |      | 0.55  | 0.45  | 0.66  | 0.43 |      |      |      |      |      | 0.55 | 0.72 |
| Control Delay           |      | 53.6  | 22.1  | 6.0   | 1.5  |      |      |      |      |      | 33.6 | 27.0 |
| Queue Delay             |      | 0.0   | 0.0   | 1.5   | 0.5  |      |      |      |      |      | 0.0  | 0.1  |
| Total Delay             |      | 53.6  | 22.1  | 7.6   | 2.0  |      |      |      |      |      | 33.6 | 27.1 |
| LOS                     |      | D     | C     | A     | A    |      |      |      |      |      | C    | C    |
| Approach Delay          |      | 41.8  |       |       | 4.0  |      |      |      |      |      | 30.0 |      |
| Approach LOS            |      | D     |       |       | A    |      |      |      |      |      | C    |      |
| Queue Length 50th (ft)  |      | 104   | 48    | 2     | 0    |      |      |      |      |      | 222  | 220  |
| Queue Length 95th (ft)  |      | 138   | 94    | 1     | 0    |      |      |      |      |      | 283  | 304  |
| Internal Link Dist (ft) |      | 494   |       |       | 371  |      |      | 1344 |      |      | 366  |      |
| Turn Bay Length (ft)    |      |       |       |       |      |      |      |      |      |      |      |      |
| Base Capacity (vph)     |      | 560   | 411   | 737   | 1950 |      |      |      |      |      | 1230 | 1139 |
| Starvation Cap Reductn  |      | 0     | 0     | 112   | 630  |      |      |      |      |      | 0    | 0    |
| Spillback Cap Reductn   |      | 0     | 0     | 0     | 176  |      |      |      |      |      | 0    | 19   |
| Storage Cap Reductn     |      | 0     | 0     | 0     | 0    |      |      |      |      |      | 0    | 0    |
| Reduced v/c Ratio       |      | 0.55  | 0.45  | 0.78  | 0.64 |      |      |      |      |      | 0.55 | 0.74 |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

81: I-35 SB Frontage Rd & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Lane Group              | Ø4   | Ø5   | Ø6   | Ø8   | Ø12  | Ø16  |
|-------------------------|------|------|------|------|------|------|
| Lane Configurations     |      |      |      |      |      |      |
| Traffic Volume (vph)    |      |      |      |      |      |      |
| Future Volume (vph)     |      |      |      |      |      |      |
| Peak Hour Factor        |      |      |      |      |      |      |
| Adj. Flow (vph)         |      |      |      |      |      |      |
| Shared Lane Traffic (%) |      |      |      |      |      |      |
| Lane Group Flow (vph)   |      |      |      |      |      |      |
| Turn Type               |      |      |      |      |      |      |
| Protected Phases        | 4    | 5    | 6    | 8    | 12   | 16   |
| Permitted Phases        |      |      |      |      |      |      |
| Detector Phase          |      |      |      |      |      |      |
| Switch Phase            |      |      |      |      |      |      |
| Minimum Initial (s)     | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  |
| Minimum Split (s)       | 24.0 | 11.0 | 24.0 | 24.0 | 11.0 | 11.0 |
| Total Split (s)         | 36.0 | 49.0 | 35.0 | 24.0 | 12.0 | 12.0 |
| Total Split (%)         | 30%  | 41%  | 29%  | 20%  | 10%  | 10%  |
| Yellow Time (s)         | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  |
| All-Red Time (s)        | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  | 2.0  |
| Lost Time Adjust (s)    |      |      |      |      |      |      |
| Total Lost Time (s)     |      |      |      |      |      |      |
| Lead/Lag                | Lag  | Lag  | Lead | Lag  | Lead | Lead |
| Lead-Lag Optimize?      | Yes  | Yes  | Yes  | Yes  | Yes  | Yes  |
| Recall Mode             | None | Min  | None | Max  | None | None |
| Act Effct Green (s)     |      |      |      |      |      |      |
| Actuated g/C Ratio      |      |      |      |      |      |      |
| v/c Ratio               |      |      |      |      |      |      |
| Control Delay           |      |      |      |      |      |      |
| Queue Delay             |      |      |      |      |      |      |
| Total Delay             |      |      |      |      |      |      |
| LOS                     |      |      |      |      |      |      |
| Approach Delay          |      |      |      |      |      |      |
| Approach LOS            |      |      |      |      |      |      |
| Queue Length 50th (ft)  |      |      |      |      |      |      |
| Queue Length 95th (ft)  |      |      |      |      |      |      |
| Internal Link Dist (ft) |      |      |      |      |      |      |
| Turn Bay Length (ft)    |      |      |      |      |      |      |
| Base Capacity (vph)     |      |      |      |      |      |      |
| Starvation Cap Reductn  |      |      |      |      |      |      |
| Spillback Cap Reductn   |      |      |      |      |      |      |
| Storage Cap Reductn     |      |      |      |      |      |      |
| Reduced v/c Ratio       |      |      |      |      |      |      |
| Intersection Summary    |      |      |      |      |      |      |

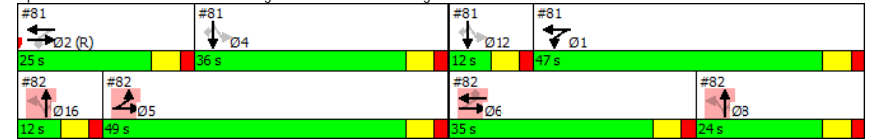
81: I-35 SB Frontage Rd & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

Intersection Signal Delay: 21.4  
Intersection Capacity Utilization 67.7%  
Analysis Period (min) 15

Intersection LOS: C  
ICU Level of Service C

Splits and Phases: 81: I-35 SB Frontage Rd & Martin Luther King Jr. Blvd



82: I-35 NB Frontage Rd & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

|                         | ←     | →    | ↙    | ↘    | ↖     | ↗     | ↖    | ↗    | ↖    | ↗    | ↖    | ↗    |
|-------------------------|-------|------|------|------|-------|-------|------|------|------|------|------|------|
| Lane Group              | EBL   | EBT  | EBR  | WBL  | WBT   | WBR   | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations     | ↖     | ↖    |      |      | ↖     | ↖     | ↖    | ↖    | ↖    |      |      |      |
| Traffic Volume (vph)    | 168   | 173  | 0    | 0    | 875   | 98    | 367  | 145  | 169  | 0    | 0    | 0    |
| Future Volume (vph)     | 168   | 173  | 0    | 0    | 875   | 98    | 367  | 145  | 169  | 0    | 0    | 0    |
| Peak Hour Factor        | 0.92  | 0.92 | 0.92 | 0.92 | 0.92  | 0.92  | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph)         | 183   | 188  | 0    | 0    | 951   | 107   | 399  | 158  | 184  | 0    | 0    | 0    |
| Shared Lane Traffic (%) | 48%   |      |      |      |       |       | 50%  |      |      |      |      |      |
| Lane Group Flow (vph)   | 95    | 276  | 0    | 0    | 951   | 107   | 199  | 358  | 184  | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA   |      |      | NA    | Perm  | Perm | NA   | Perm |      |      |      |
| Protected Phases        | 5     | 5 6  |      |      | 6     |       | 8 16 |      | 8 16 |      |      |      |
| Permitted Phases        | 5 6   |      |      |      |       | 6     | 8 16 |      | 8 16 |      |      |      |
| Detector Phase          | 5     | 5 6  |      |      | 6     | 6     | 8 16 | 8 16 | 8 16 |      |      |      |
| Switch Phase            |       |      |      |      |       |       |      |      |      |      |      |      |
| Minimum Initial (s)     | 5.0   |      |      |      | 5.0   | 5.0   |      |      |      |      |      |      |
| Minimum Split (s)       | 11.0  |      |      |      | 24.0  | 24.0  |      |      |      |      |      |      |
| Total Split (s)         | 49.0  |      |      |      | 35.0  | 35.0  |      |      |      |      |      |      |
| Total Split (%)         | 40.8% |      |      |      | 29.2% | 29.2% |      |      |      |      |      |      |
| Yellow Time (s)         | 4.0   |      |      |      | 4.0   | 4.0   |      |      |      |      |      |      |
| All-Red Time (s)        | 2.0   |      |      |      | 2.0   | 2.0   |      |      |      |      |      |      |
| Lost Time Adjust (s)    | 0.0   |      |      |      | 0.0   | 0.0   |      |      |      |      |      |      |
| Total Lost Time (s)     | 6.0   |      |      |      | 6.0   | 6.0   |      |      |      |      |      |      |
| Lead/Lag                | Lag   |      |      |      | Lead  | Lead  |      |      |      |      |      |      |
| Lead-Lag Optimize?      | Yes   |      |      |      | Yes   | Yes   |      |      |      |      |      |      |
| Recall Mode             | Min   |      |      |      | None  | None  |      |      |      |      |      |      |
| Act Effct Green (s)     | 70.2  | 70.2 |      |      | 28.4  | 28.4  | 31.8 | 31.8 | 31.8 |      |      |      |
| Actuated g/C Ratio      | 0.58  | 0.58 |      |      | 0.24  | 0.24  | 0.26 | 0.26 | 0.26 |      |      |      |
| v/c Ratio               | 0.15  | 0.17 |      |      | 0.79  | 0.21  | 0.47 | 0.41 | 0.33 |      |      |      |
| Control Delay           | 0.8   | 0.8  |      |      | 48.5  | 0.9   | 39.1 | 36.1 | 10.4 |      |      |      |
| Queue Delay             | 0.0   | 0.0  |      |      | 0.1   | 0.0   | 0.0  | 0.0  | 0.0  |      |      |      |
| Total Delay             | 0.8   | 0.8  |      |      | 48.6  | 0.9   | 39.1 | 36.1 | 10.4 |      |      |      |
| LOS                     | A     | A    |      |      | D     | A     | D    | D    | B    |      |      |      |
| Approach Delay          |       | 0.8  |      |      | 43.8  |       | 30.5 |      |      |      |      |      |
| Approach LOS            |       | A    |      |      | D     |       | C    |      |      |      |      |      |
| Queue Length 50th (ft)  | 1     | 1    |      |      | 253   | 0     | 96   | 87   | 17   |      |      |      |
| Queue Length 95th (ft)  | 0     | 0    |      |      | 305   | 0     | 169  | 137  | 78   |      |      |      |
| Internal Link Dist (ft) |       | 371  |      |      | 326   |       | 707  |      | 346  |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |       | 180   |      |      |      |      |      |      |
| Base Capacity (vph)     | 633   | 1675 |      |      | 1228  | 527   | 427  | 875  | 560  |      |      |      |
| Starvation Cap Reductn  | 0     | 0    |      |      | 0     | 0     | 0    | 0    | 0    |      |      |      |
| Spillback Cap Reductn   | 0     | 0    |      |      | 16    | 0     | 0    | 0    | 0    |      |      |      |
| Storage Cap Reductn     | 0     | 0    |      |      | 0     | 0     | 0    | 0    | 0    |      |      |      |
| Reduced v/c Ratio       | 0.15  | 0.16 |      |      | 0.78  | 0.20  | 0.47 | 0.41 | 0.33 |      |      |      |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green  
Natural Cycle: 100  
Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 0.79

82: I-35 NB Frontage Rd & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Lane Group              | Ø1   | Ø2    | Ø4   | Ø8   | Ø12  | Ø16  |
|-------------------------|------|-------|------|------|------|------|
| Lane Configurations     |      |       |      |      |      |      |
| Traffic Volume (vph)    |      |       |      |      |      |      |
| Future Volume (vph)     |      |       |      |      |      |      |
| Peak Hour Factor        |      |       |      |      |      |      |
| Adj. Flow (vph)         |      |       |      |      |      |      |
| Shared Lane Traffic (%) |      |       |      |      |      |      |
| Lane Group Flow (vph)   |      |       |      |      |      |      |
| Turn Type               |      |       |      |      |      |      |
| Protected Phases        | 1    | 2     | 4    | 8    | 12   | 16   |
| Permitted Phases        |      |       |      |      |      |      |
| Detector Phase          |      |       |      |      |      |      |
| Switch Phase            |      |       |      |      |      |      |
| Minimum Initial (s)     | 5.0  | 5.0   | 5.0  | 5.0  | 5.0  | 5.0  |
| Minimum Split (s)       | 24.0 | 24.0  | 24.0 | 24.0 | 11.0 | 11.0 |
| Total Split (s)         | 47.0 | 25.0  | 36.0 | 24.0 | 12.0 | 12.0 |
| Total Split (%)         | 39%  | 21%   | 30%  | 20%  | 10%  | 10%  |
| Yellow Time (s)         | 4.0  | 4.0   | 4.0  | 4.0  | 4.0  | 4.0  |
| All-Red Time (s)        | 2.0  | 2.0   | 2.0  | 2.0  | 2.0  | 2.0  |
| Lost Time Adjust (s)    |      |       |      |      |      |      |
| Total Lost Time (s)     |      |       |      |      |      |      |
| Lead/Lag                | Lag  | Lead  | Lag  | Lag  | Lead | Lead |
| Lead-Lag Optimize?      | Yes  | Yes   | Yes  | Yes  | Yes  | Yes  |
| Recall Mode             | Min  | C-Max | None | Max  | None | None |
| Act Effct Green (s)     |      |       |      |      |      |      |
| Actuated g/C Ratio      |      |       |      |      |      |      |
| v/c Ratio               |      |       |      |      |      |      |
| Control Delay           |      |       |      |      |      |      |
| Queue Delay             |      |       |      |      |      |      |
| Total Delay             |      |       |      |      |      |      |
| LOS                     |      |       |      |      |      |      |
| Approach Delay          |      |       |      |      |      |      |
| Approach LOS            |      |       |      |      |      |      |
| Queue Length 50th (ft)  |      |       |      |      |      |      |
| Queue Length 95th (ft)  |      |       |      |      |      |      |
| Internal Link Dist (ft) |      |       |      |      |      |      |
| Turn Bay Length (ft)    |      |       |      |      |      |      |
| Base Capacity (vph)     |      |       |      |      |      |      |
| Starvation Cap Reductn  |      |       |      |      |      |      |
| Spillback Cap Reductn   |      |       |      |      |      |      |
| Storage Cap Reductn     |      |       |      |      |      |      |
| Reduced v/c Ratio       |      |       |      |      |      |      |

Intersection Summary

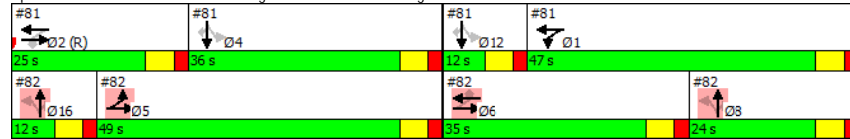
82: I-35 NB Frontage Rd & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

Intersection Signal Delay: 31.9  
Intersection Capacity Utilization 67.7%  
Analysis Period (min) 15

Intersection LOS: C  
ICU Level of Service C

Splits and Phases: 82: I-35 NB Frontage Rd & Martin Luther King Jr. Blvd



83: Red River St & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR  |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations     | ↩     | ↩↩↩   |      | ↩     | ↩↩↩   |      |       | ↩     | ↩↩↩  | ↩     | ↩↩↩   |      |
| Traffic Volume (vph)    | 142   | 541   | 82   | 250   | 2022  | 37   | 11    | 58    | 122  | 30    | 41    | 227  |
| Future Volume (vph)     | 142   | 541   | 82   | 250   | 2022  | 37   | 11    | 58    | 122  | 30    | 41    | 227  |
| Peak Hour Factor        | 0.92  | 0.92  | 0.92 | 0.92  | 0.96  | 0.92 | 0.92  | 0.92  | 0.92 | 0.92  | 0.92  | 0.96 |
| Adj. Flow (vph)         | 154   | 588   | 89   | 272   | 2106  | 40   | 12    | 63    | 133  | 33    | 45    | 236  |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |      |       |       |      |
| Lane Group Flow (vph)   | 154   | 677   | 0    | 272   | 2146  | 0    | 0     | 208   | 0    | 33    | 281   | 0    |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | Perm  | NA    |      | Perm  | NA    |      |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |       | 8     |      |       | 4     |      |
| Permitted Phases        | 2     |       |      | 6     |       |      | 8     |       |      | 4     |       |      |
| Minimum Split (s)       | 10.0  | 23.0  |      | 10.0  | 23.0  |      | 23.0  | 23.0  |      | 23.0  | 23.0  |      |
| Total Split (s)         | 20.0  | 70.0  |      | 20.0  | 70.0  |      | 30.0  | 30.0  |      | 30.0  | 30.0  |      |
| Total Split (%)         | 16.7% | 58.3% |      | 16.7% | 58.3% |      | 25.0% | 25.0% |      | 25.0% | 25.0% |      |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   |      |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      |       | 0.0   |      | 0.0   | 0.0   |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      |       | 5.0   |      | 5.0   | 5.0   |      |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   |      |       |       |      |       |       |      |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |       |       |      |       |       |      |
| Act Effct Green (s)     | 80.0  | 65.0  |      | 80.0  | 65.0  |      |       | 25.0  |      | 25.0  | 25.0  |      |
| Actuated g/C Ratio      | 0.67  | 0.54  |      | 0.67  | 0.54  |      |       | 0.21  |      | 0.21  | 0.21  |      |
| v/c Ratio               | 0.54  | 0.25  |      | 0.46  | 0.78  |      |       | 0.56  |      | 0.20  | 0.57  |      |
| Control Delay           | 41.8  | 6.4   |      | 7.4   | 25.8  |      |       | 35.1  |      | 71.0  | 46.3  |      |
| Queue Delay             | 0.0   | 0.0   |      | 0.0   | 1.1   |      |       | 0.0   |      | 0.0   | 0.0   |      |
| Total Delay             | 41.8  | 6.4   |      | 7.4   | 26.9  |      |       | 35.1  |      | 71.0  | 46.3  |      |
| LOS                     | D     | A     |      | A     | C     |      |       | D     |      | E     | D     |      |
| Approach Delay          |       | 12.9  |      |       | 24.7  |      |       | 35.1  |      |       | 48.9  |      |
| Approach LOS            |       | B     |      |       | C     |      |       | D     |      |       | D     |      |
| Queue Length 50th (ft)  | 69    | 52    |      | 45    | 589   |      |       | 98    |      | 25    | 160   |      |
| Queue Length 95th (ft)  | 139   | 65    |      | m54   | 641   |      |       | 180   |      | 61    | 232   |      |
| Internal Link Dist (ft) |       | 654   |      |       | 629   |      |       | 269   |      |       | 433   |      |
| Turn Bay Length (ft)    | 70    |       |      | 55    |       |      |       |       |      |       |       |      |
| Base Capacity (vph)     | 283   | 2716  |      | 585   | 2748  |      |       | 369   |      | 163   | 496   |      |
| Starvation Cap Reductn  | 0     | 0     |      | 0     | 339   |      |       | 0     |      | 0     | 0     |      |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 0     |      |       | 0     |      | 0     | 0     |      |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      |       | 0     |      | 0     | 0     |      |
| Reduced v/c Ratio       | 0.54  | 0.25  |      | 0.46  | 0.89  |      |       | 0.56  |      | 0.20  | 0.57  |      |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
Natural Cycle: 65  
Control Type: Pretimed  
Maximum v/c Ratio: 0.78  
Intersection Signal Delay: 24.7  
Intersection Capacity Utilization 80.7%  
Analysis Period (min) 15  
m Volume for 95th percentile queue is metered by upstream signal.

83: Red River St & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

Splits and Phases: 83: Red River St & W. 15th St



84: I-35 SB Frontage Rd & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

|  | EBL  | EBT   | EBR   | WBL   | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR   |
|--|------|-------|-------|-------|------|------|------|------|------|------|------|-------|
| Lane Configurations  |      | ↔↔    | ↔     |       | ↔↔   |      |      |      |      |      | ↔↔↔  | ↔     |
| Traffic Volume (vph)                                       | 0    | 351   | 261   | 4     | 908  | 0    | 0    | 0    | 0    | 0    | 1260 | 1152  |
| Future Volume (vph)  | 0    | 351   | 261   | 4     | 908  | 0    | 0    | 0    | 0    | 0    | 1260 | 1152  |
| Peak Hour Factor   | 0.92 | 0.92  | 0.92  | 0.92  | 0.92 | 0.92 | 0.98 | 0.98 | 0.98 | 0.96 | 0.96 | 0.96  |
| Adj. Flow (vph)  | 0    | 382   | 284   | 4     | 987  | 0    | 0    | 0    | 0    | 0    | 1313 | 1200  |
| Shared Lane Traffic (%)                                    |      |       |       |       |      |      |      |      |      |      |      |       |
| Lane Group Flow (vph)                                      | 0    | 382   | 284   | 0     | 991  | 0    | 0    | 0    | 0    | 0    | 1313 | 1200  |
| Turn Type  |      | NA    | Perm  | pm+pt | NA   |      |      |      |      |      | NA   | Free  |
| Protected Phases   |      | 2     |       | 1     | 2 1  |      |      |      |      |      | 4 12 |       |
| Permitted Phases   |      |       | 2     | 2 1   |      |      |      |      |      | 4 12 |      | Free  |
| Detector Phase   |      | 2     | 2     | 1     | 2 1  |      |      |      |      | 4 12 | 4 12 |       |
| Switch Phase   |      |       |       |       |      |      |      |      |      |      |      |       |
| Minimum Initial (s)  |      | 5.0   | 5.0   | 5.0   |      |      |      |      |      |      |      |       |
| Minimum Split (s)  |      | 23.0  | 23.0  | 10.0  |      |      |      |      |      |      |      |       |
| Total Split (s)  |      | 32.0  | 32.0  | 23.0  |      |      |      |      |      |      |      |       |
| Total Split (%)  |      | 26.7% | 26.7% | 19.2% |      |      |      |      |      |      |      |       |
| Yellow Time (s)  |      | 4.0   | 4.0   | 4.0   |      |      |      |      |      |      |      |       |
| All-Red Time (s)   |      | 1.0   | 1.0   | 1.0   |      |      |      |      |      |      |      |       |
| Lost Time Adjust (s)                                       |      | 0.0   | 0.0   |       |      |      |      |      |      |      |      |       |
| Total Lost Time (s)  |      | 5.0   | 5.0   |       |      |      |      |      |      |      |      |       |
| Lead/Lag   |      | Lead  | Lead  | Lag   |      |      |      |      |      |      |      |       |
| Lead-Lag Optimize?   |      | Yes   | Yes   | Yes   |      |      |      |      |      |      |      |       |
| Recall Mode  |      | C-Max | C-Max | None  |      |      |      |      |      |      |      |       |
| Act Effct Green (s)  |      | 28.7  | 28.7  |       | 50.3 |      |      |      |      |      | 54.7 | 120.0 |
| Actuated g/C Ratio   |      | 0.24  | 0.24  |       | 0.42 |      |      |      |      |      | 0.46 | 1.00  |
| v/c Ratio  |      | 0.45  | 0.48  |       | 0.69 |      |      |      |      |      | 0.57 | 0.76  |
| Control Delay  |      | 50.8  | 16.3  |       | 17.9 |      |      |      |      |      | 22.7 | 4.9   |
| Queue Delay  |      | 0.0   | 0.0   |       | 5.4  |      |      |      |      |      | 0.0  | 0.2   |
| Total Delay  |      | 50.8  | 16.3  |       | 23.3 |      |      |      |      |      | 22.7 | 5.1   |
| LOS  |      | D     | B     |       | C    |      |      |      |      |      | C    | A     |
| Approach Delay   |      | 36.1  |       |       | 23.3 |      |      |      |      |      | 14.3 |       |
| Approach LOS   |      | D     |       |       | C    |      |      |      |      |      | B    |       |
| Queue Length 50th (ft)                                     |      | 127   | 40    |       | 380  |      |      |      |      |      | 231  | 94    |
| Queue Length 95th (ft)                                     |      | 168   | 100   |       | 494  |      |      |      |      |      | 250  | 209   |
| Internal Link Dist (ft)                                    |      | 629   |       |       | 163  |      |      | 271  |      |      | 1344 |       |
| Turn Bay Length (ft)                                       |      |       |       |       |      |      |      |      |      |      |      |       |
| Base Capacity (vph)  |      | 846   | 594   |       | 1446 |      |      |      |      |      | 2346 | 1583  |
| Starvation Cap Reductn                                     |      | 0     | 0     |       | 388  |      |      |      |      |      | 0    | 0     |
| Spillback Cap Reductn                                      |      | 2     | 0     |       | 0    |      |      |      |      |      | 0    | 41    |
| Storage Cap Reductn  |      | 0     | 0     |       | 0    |      |      |      |      |      | 0    | 0     |
| Reduced v/c Ratio  |      | 0.45  | 0.48  |       | 0.94 |      |      |      |      |      | 0.56 | 0.78  |
| <b>Intersection Summary</b>                                |      |       |       |       |      |      |      |      |      |      |      |       |
| Cycle Length: 120  |      |       |       |       |      |      |      |      |      |      |      |       |
| Actuated Cycle Length: 120                                 |      |       |       |       |      |      |      |      |      |      |      |       |
| Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green |      |       |       |       |      |      |      |      |      |      |      |       |
| Natural Cycle: 70  |      |       |       |       |      |      |      |      |      |      |      |       |
| Control Type: Actuated-Coordinated                         |      |       |       |       |      |      |      |      |      |      |      |       |
| Maximum v/c Ratio: 0.76                                    |      |       |       |       |      |      |      |      |      |      |      |       |

84: I-35 SB Frontage Rd & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Lane Group              | Ø4   | Ø5   | Ø8   | Ø12  | Ø16  |
|-------------------------|------|------|------|------|------|
| Lane Configurations     |      |      |      |      |      |
| Traffic Volume (vph)    |      |      |      |      |      |
| Future Volume (vph)     |      |      |      |      |      |
| Peak Hour Factor        |      |      |      |      |      |
| Adj. Flow (vph)         |      |      |      |      |      |
| Shared Lane Traffic (%) |      |      |      |      |      |
| Lane Group Flow (vph)   |      |      |      |      |      |
| Turn Type               |      |      |      |      |      |
| Protected Phases        | 4    | 5    | 8    | 12   | 16   |
| Permitted Phases        |      |      |      |      |      |
| Detector Phase          |      |      |      |      |      |
| Switch Phase            |      |      |      |      |      |
| Minimum Initial (s)     | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  |
| Minimum Split (s)       | 23.0 | 23.0 | 23.0 | 10.0 | 10.0 |
| Total Split (s)         | 55.0 | 77.0 | 33.0 | 10.0 | 10.0 |
| Total Split (%)         | 46%  | 64%  | 28%  | 8%   | 8%   |
| Yellow Time (s)         | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  |
| All-Red Time (s)        | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |      |      |      |
| Total Lost Time (s)     |      |      |      |      |      |
| Lead/Lag                | Lag  | Lag  |      | Lead | Lead |
| Lead-Lag Optimize?      | Yes  | Yes  |      | Yes  | Yes  |
| Recall Mode             | None | Min  | None | None | None |
| Act Effect Green (s)    |      |      |      |      |      |
| Actuated g/C Ratio      |      |      |      |      |      |
| v/c Ratio               |      |      |      |      |      |
| Control Delay           |      |      |      |      |      |
| Queue Delay             |      |      |      |      |      |
| Total Delay             |      |      |      |      |      |
| LOS                     |      |      |      |      |      |
| Approach Delay          |      |      |      |      |      |
| Approach LOS            |      |      |      |      |      |
| Queue Length 50th (ft)  |      |      |      |      |      |
| Queue Length 95th (ft)  |      |      |      |      |      |
| Internal Link Dist (ft) |      |      |      |      |      |
| Turn Bay Length (ft)    |      |      |      |      |      |
| Base Capacity (vph)     |      |      |      |      |      |
| Starvation Cap Reductn  |      |      |      |      |      |
| Spillback Cap Reductn   |      |      |      |      |      |
| Storage Cap Reductn     |      |      |      |      |      |
| Reduced v/c Ratio       |      |      |      |      |      |
| Intersection Summary    |      |      |      |      |      |

84: I-35 SB Frontage Rd & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

Intersection Signal Delay: 19.9  
Intersection Capacity Utilization 78.2%  
Analysis Period (min) 15

Intersection LOS: B  
ICU Level of Service D

Splits and Phases: 84: I-35 SB Frontage Rd & W. 15th St



85: I-35 NB Frontage Rd & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

|                         | EBL   | EBR  | NBL  | NBT  | SBT  | SBR  | 01   | 02    | 04   | 08   | 012  | 016  |
|-------------------------|-------|------|------|------|------|------|------|-------|------|------|------|------|
| Lane Configurations     | ↰↱    |      | ↰↱   | ↰↱↱  | ↰    | ↱    |      |       |      |      |      |      |
| Traffic Volume (vph)    | 339   | 0    | 833  | 498  | 0    | 0    |      |       |      |      |      |      |
| Future Volume (vph)     | 339   | 0    | 833  | 498  | 0    | 0    |      |       |      |      |      |      |
| Peak Hour Factor        | 0.92  | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |      |       |      |      |      |      |
| Adj. Flow (vph)         | 368   | 0    | 905  | 541  | 0    | 0    |      |       |      |      |      |      |
| Shared Lane Traffic (%) |       |      | 50%  |      |      |      |      |       |      |      |      |      |
| Lane Group Flow (vph)   | 368   | 0    | 452  | 994  | 0    | 0    |      |       |      |      |      |      |
| Turn Type               | Prot  |      | Perm | NA   |      |      |      |       |      |      |      |      |
| Protected Phases        | 5     |      | 8 16 |      |      |      | 1    | 2     | 4    | 8    | 12   | 16   |
| Permitted Phases        |       |      | 8 16 |      |      |      |      |       |      |      |      |      |
| Detector Phase          | 5     |      | 8 16 | 8 16 |      |      |      |       |      |      |      |      |
| Switch Phase            |       |      |      |      |      |      |      |       |      |      |      |      |
| Minimum Initial (s)     | 5.0   |      |      |      |      |      | 5.0  | 5.0   | 5.0  | 5.0  | 5.0  | 5.0  |
| Minimum Split (s)       | 23.0  |      |      |      |      |      | 10.0 | 23.0  | 23.0 | 23.0 | 10.0 | 10.0 |
| Total Split (s)         | 77.0  |      |      |      |      |      | 23.0 | 32.0  | 55.0 | 33.0 | 10.0 | 10.0 |
| Total Split (%)         | 64.2% |      |      |      |      |      | 19%  | 27%   | 46%  | 28%  | 8%   | 8%   |
| Yellow Time (s)         | 4.0   |      |      |      |      |      | 4.0  | 4.0   | 4.0  | 4.0  | 4.0  | 4.0  |
| All-Red Time (s)        | 1.0   |      |      |      |      |      | 1.0  | 1.0   | 1.0  | 1.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    | 0.0   |      |      |      |      |      |      |       |      |      |      |      |
| Total Lost Time (s)     | 5.0   |      |      |      |      |      |      |       |      |      |      |      |
| Lead/Lag                | Lag   |      |      |      |      |      | Lag  | Lead  | Lag  |      | Lead | Lead |
| Lead-Lag Optimize?      | Yes   |      |      |      |      |      | Yes  | Yes   | Yes  |      | Yes  | Yes  |
| Recall Mode             | Min   |      |      |      |      |      | None | C-Max | None | None | None | None |
| Act Effct Green (s)     | 58.6  |      | 51.4 | 51.4 |      |      |      |       |      |      |      |      |
| Actuated g/C Ratio      | 0.49  |      | 0.43 | 0.43 |      |      |      |       |      |      |      |      |
| v/c Ratio               | 0.22  |      | 0.69 | 0.49 |      |      |      |       |      |      |      |      |
| Control Delay           | 5.3   |      | 36.0 | 26.6 |      |      |      |       |      |      |      |      |
| Queue Delay             | 0.3   |      | 42.8 | 0.1  |      |      |      |       |      |      |      |      |
| Total Delay             | 5.7   |      | 78.7 | 26.7 |      |      |      |       |      |      |      |      |
| LOS                     | A     |      | E    | C    |      |      |      |       |      |      |      |      |
| Approach Delay          | 5.7   |      |      | 43.0 |      |      |      |       |      |      |      |      |
| Approach LOS            | A     |      |      | D    |      |      |      |       |      |      |      |      |
| Queue Length 50th (ft)  | 0     |      | 324  | 212  |      |      |      |       |      |      |      |      |
| Queue Length 95th (ft)  | 0     |      | #554 | 283  |      |      |      |       |      |      |      |      |
| Internal Link Dist (ft) | 163   |      |      | 243  | 696  |      |      |       |      |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |      |      |      |       |      |      |      |      |
| Base Capacity (vph)     | 2059  |      | 651  | 2012 |      |      |      |       |      |      |      |      |
| Starvation Cap Reductn  | 1128  |      | 0    | 0    |      |      |      |       |      |      |      |      |
| Spillback Cap Reductn   | 0     |      | 228  | 234  |      |      |      |       |      |      |      |      |
| Storage Cap Reductn     | 0     |      | 0    | 0    |      |      |      |       |      |      |      |      |
| Reduced v/c Ratio       | 0.40  |      | 1.07 | 0.56 |      |      |      |       |      |      |      |      |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green  
Natural Cycle: 70  
Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 0.76

85: I-35 NB Frontage Rd & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

Intersection Signal Delay: 35.4  
Intersection Capacity Utilization 41.1%  
Analysis Period (min) 15  
# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Splits and Phases: 85: I-35 NB Frontage Rd & W. 15th St



11: Colorado St & W. 18th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Intersection              |     |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 8.3 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | A   |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      |      |      |      |      | ↔    |      |      |      | ↔    |      |
| Traffic Vol, veh/h  | 0    | 0    | 0    | 0    | 0    | 20   | 10   | 3    | 0    | 12   | 23   | 0    |
| Future Vol, veh/h   | 0    | 0    | 0    | 0    | 0    | 20   | 10   | 3    | 0    | 12   | 23   | 0    |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 0    | 0    | 0    | 23   | 11   | 3    | 0    | 14   | 26   | 0    |
| Number of Lanes     | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | WB  | NB  |
|----------------------------|-----|-----|
| Opposing Approach          |     | SB  |
| Opposing Lanes             | 0   | 1   |
| Conflicting Approach Left  | NB  |     |
| Conflicting Lanes Left     | 1   | 0   |
| Conflicting Approach Right | SB  | WB  |
| Conflicting Lanes Right    | 1   | 1   |
| HCM Control Delay          | 7.8 | 7.5 |
| HCM LOS                    | A   | A   |

| Lane                   | NBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, %            | 34%   | 61%   | 0%    |
| Vol Thru, %            | 66%   | 30%   | 91%   |
| Vol Right, %           | 0%    | 9%    | 9%    |
| Sign Control           | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 35    | 33    | 214   |
| LT Vol                 | 12    | 20    | 0     |
| Through Vol            | 23    | 10    | 195   |
| RT Vol                 | 0     | 3     | 19    |
| Lane Flow Rate         | 40    | 38    | 243   |
| Geometry Grp           | 1     | 1     | 1     |
| Degree of Util (X)     | 0.047 | 0.048 | 0.269 |
| Departure Headway (Hd) | 4.251 | 4.61  | 3.975 |
| Convergence, Y/N       | Yes   | Yes   | Yes   |
| Cap                    | 832   | 782   | 900   |
| Service Time           | 2.327 | 2.61  | 2.015 |
| HCM Lane V/C Ratio     | 0.048 | 0.049 | 0.27  |
| HCM Control Delay      | 7.5   | 7.8   | 8.5   |
| HCM Lane LOS           | A     | A     | A     |
| HCM 95th-tile Q        | 0.1   | 0.2   | 1.1   |

11: Colorado St & W. 18th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↔    |      |
| Traffic Vol, veh/h  | 0    | 0    | 195  | 19   |
| Future Vol, veh/h   | 0    | 0    | 195  | 19   |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 222  | 22   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB  |
|----------------------------|-----|
| Opposing Approach          | NB  |
| Opposing Lanes             | 1   |
| Conflicting Approach Left  | WB  |
| Conflicting Lanes Left     | 1   |
| Conflicting Approach Right |     |
| Conflicting Lanes Right    | 0   |
| HCM Control Delay          | 8.5 |
| HCM LOS                    | A   |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Intersection              |     |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 7.7 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | A   |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      |      |      |      |      | ↔    |      |      |      | ↔    |      |
| Traffic Vol, veh/h  | 0    | 0    | 0    | 0    | 0    | 10   | 23   | 5    | 0    | 43   | 53   | 0    |
| Future Vol, veh/h   | 0    | 0    | 0    | 0    | 0    | 10   | 23   | 5    | 0    | 43   | 53   | 0    |
| Peak Hour Factor    | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 0    | 0    | 0    | 11   | 26   | 6    | 0    | 49   | 61   | 0    |
| Number of Lanes     | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | WB  | NB  |
|----------------------------|-----|-----|
| Opposing Approach          |     | SB  |
| Opposing Lanes             | 0   | 1   |
| Conflicting Approach Left  | NB  |     |
| Conflicting Lanes Left     | 1   | 0   |
| Conflicting Approach Right | SB  | WB  |
| Conflicting Lanes Right    | 1   | 1   |
| HCM Control Delay          | 7.7 | 7.9 |
| HCM LOS                    | A   | A   |

| Lane                   | NBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, %            | 45%   | 26%   | 0%    |
| Vol Thru, %            | 55%   | 61%   | 53%   |
| Vol Right, %           | 0%    | 13%   | 47%   |
| Sign Control           | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 96    | 38    | 133   |
| LT Vol                 | 43    | 10    | 0     |
| Through Vol            | 53    | 23    | 70    |
| RT Vol                 | 0     | 5     | 63    |
| Lane Flow Rate         | 110   | 44    | 153   |
| Geometry Grp           | 1     | 1     | 1     |
| Degree of Util (X)     | 0.129 | 0.054 | 0.162 |
| Departure Headway (Hd) | 4.216 | 4.462 | 3.81  |
| Convergence, Y/N       | Yes   | Yes   | Yes   |
| Cap                    | 845   | 808   | 934   |
| Service Time           | 2.269 | 2.462 | 1.866 |
| HCM Lane V/C Ratio     | 0.13  | 0.054 | 0.164 |
| HCM Control Delay      | 7.9   | 7.7   | 7.6   |
| HCM Lane LOS           | A     | A     | A     |
| HCM 95th-ile Q         | 0.4   | 0.2   | 0.6   |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↔    |      |
| Traffic Vol, veh/h  | 0    | 0    | 70   | 63   |
| Future Vol, veh/h   | 0    | 0    | 70   | 63   |
| Peak Hour Factor    | 0.87 | 0.87 | 0.87 | 0.87 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 80   | 72   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB  |
|----------------------------|-----|
| Opposing Approach          | NB  |
| Opposing Lanes             | 1   |
| Conflicting Approach Left  | WB  |
| Conflicting Lanes Left     | 1   |
| Conflicting Approach Right |     |
| Conflicting Lanes Right    | 0   |
| HCM Control Delay          | 7.6 |
| HCM LOS                    | A   |

14: Brazos St & W. 18th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Intersection              |     |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 8.7 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | A   |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      |      |      |      |      | ↔    |      |      |      | ↔    |      |
| Traffic Vol, veh/h  | 0    | 0    | 0    | 0    | 0    | 16   | 18   | 7    | 0    | 8    | 15   | 0    |
| Future Vol, veh/h   | 0    | 0    | 0    | 0    | 0    | 16   | 18   | 7    | 0    | 8    | 15   | 0    |
| Peak Hour Factor    | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 0    | 0    | 0    | 20   | 23   | 9    | 0    | 10   | 19   | 0    |
| Number of Lanes     | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | WB  | NB  |
|----------------------------|-----|-----|
| Opposing Approach          |     | SB  |
| Opposing Lanes             | 0   | 1   |
| Conflicting Approach Left  | NB  |     |
| Conflicting Lanes Left     | 1   | 0   |
| Conflicting Approach Right | SB  | WB  |
| Conflicting Lanes Right    | 1   | 1   |
| HCM Control Delay          | 7.9 | 7.6 |
| HCM LOS                    | A   | A   |

| Lane                   | NBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, %            | 35%   | 39%   | 0%    |
| Vol Thru, %            | 65%   | 44%   | 93%   |
| Vol Right, %           | 0%    | 17%   | 7%    |
| Sign Control           | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 23    | 41    | 231   |
| LT Vol                 | 8     | 16    | 0     |
| Through Vol            | 15    | 18    | 215   |
| RT Vol                 | 0     | 7     | 16    |
| Lane Flow Rate         | 29    | 52    | 292   |
| Geometry Grp           | 1     | 1     | 1     |
| Degree of Util (X)     | 0.035 | 0.066 | 0.325 |
| Departure Headway (Hd) | 4.316 | 4.605 | 4.005 |
| Convergence, Y/N       | Yes   | Yes   | Yes   |
| Cap                    | 816   | 783   | 892   |
| Service Time           | 2.414 | 2.605 | 2.053 |
| HCM Lane V/C Ratio     | 0.036 | 0.066 | 0.327 |
| HCM Control Delay      | 7.6   | 7.9   | 9     |
| HCM Lane LOS           | A     | A     | A     |
| HCM 95th-ile Q         | 0.1   | 0.2   | 1.4   |

14: Brazos St & W. 18th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↔    |      |
| Traffic Vol, veh/h  | 0    | 0    | 215  | 16   |
| Future Vol, veh/h   | 0    | 0    | 215  | 16   |
| Peak Hour Factor    | 0.79 | 0.79 | 0.79 | 0.79 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 272  | 20   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB |
|----------------------------|----|
| Opposing Approach          | NB |
| Opposing Lanes             | 1  |
| Conflicting Approach Left  | WB |
| Conflicting Lanes Left     | 1  |
| Conflicting Approach Right |    |
| Conflicting Lanes Right    | 0  |
| HCM Control Delay          | 9  |
| HCM LOS                    | A  |

20: Colorado St & E. 17th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Intersection              |     |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 8.9 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | A   |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↔    |      |      |      |      |      |      |      | ↔    |      |
| Traffic Vol, veh/h  | 0    | 10   | 74   | 98   | 0    | 0    | 0    | 0    | 0    | 0    | 27   | 25   |
| Future Vol, veh/h   | 0    | 10   | 74   | 98   | 0    | 0    | 0    | 0    | 0    | 0    | 27   | 25   |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 11   | 84   | 111  | 0    | 0    | 0    | 0    | 0    | 0    | 31   | 28   |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB  | NB  |
|----------------------------|-----|-----|
| Opposing Approach          |     | SB  |
| Opposing Lanes             | 0   | 1   |
| Conflicting Approach Left  | SB  | EB  |
| Conflicting Lanes Left     | 1   | 1   |
| Conflicting Approach Right | NB  |     |
| Conflicting Lanes Right    | 1   | 0   |
| HCM Control Delay          | 8.7 | 7.7 |
| HCM LOS                    | A   | A   |

| Lane                   | NBLn1 | EBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, %            | 0%    | 5%    | 3%    |
| Vol Thru, %            | 52%   | 41%   | 97%   |
| Vol Right, %           | 48%   | 54%   | 0%    |
| Sign Control           | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 52    | 182   | 208   |
| LT Vol                 | 0     | 10    | 6     |
| Through Vol            | 27    | 74    | 202   |
| RT Vol                 | 25    | 98    | 0     |
| Lane Flow Rate         | 59    | 207   | 236   |
| Geometry Grp           | 1     | 1     | 1     |
| Degree of Util (X)     | 0.072 | 0.247 | 0.294 |
| Departure Headway (Hd) | 4.378 | 4.3   | 4.472 |
| Convergence, Y/N       | Yes   | Yes   | Yes   |
| Cap                    | 818   | 836   | 804   |
| Service Time           | 2.406 | 2.321 | 2.495 |
| HCM Lane V/C Ratio     | 0.072 | 0.248 | 0.294 |
| HCM Control Delay      | 7.7   | 8.7   | 9.4   |
| HCM Lane LOS           | A     | A     | A     |
| HCM 95th-tile Q        | 0.2   | 1     | 1.2   |

20: Colorado St & E. 17th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↔    |      |
| Traffic Vol, veh/h  | 0    | 6    | 202  | 0    |
| Future Vol, veh/h   | 0    | 6    | 202  | 0    |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 7    | 230  | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB  |
|----------------------------|-----|
| Opposing Approach          | NB  |
| Opposing Lanes             | 1   |
| Conflicting Approach Left  |     |
| Conflicting Lanes Left     | 0   |
| Conflicting Approach Right | EB  |
| Conflicting Lanes Right    | 1   |
| HCM Control Delay          | 9.4 |
| HCM LOS                    | A   |

22: N. Congress Ave & E. 17th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Intersection              |     |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 8.6 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | A   |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↔    |      |      |      |      |      |      |      | ↔    |      |
| Traffic Vol, veh/h  | 0    | 14   | 80   | 14   | 0    | 0    | 0    | 0    | 0    | 0    | 79   | 159  |
| Future Vol, veh/h   | 0    | 14   | 80   | 14   | 0    | 0    | 0    | 0    | 0    | 0    | 79   | 159  |
| Peak Hour Factor    | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 | 0.85 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 16   | 94   | 16   | 0    | 0    | 0    | 0    | 0    | 0    | 93   | 187  |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB  | NB  |
|----------------------------|-----|-----|
| Opposing Approach          |     | SB  |
| Opposing Lanes             | 0   | 1   |
| Conflicting Approach Left  | SB  | EB  |
| Conflicting Lanes Left     | 1   | 1   |
| Conflicting Approach Right | NB  |     |
| Conflicting Lanes Right    | 1   | 0   |
| HCM Control Delay          | 8.6 | 8.7 |
| HCM LOS                    | A   | A   |

| Lane                   | NBLn1 | EBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, %            | 0%    | 13%   | 20%   |
| Vol Thru, %            | 33%   | 74%   | 80%   |
| Vol Right, %           | 67%   | 13%   | 0%    |
| Sign Control           | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 238   | 108   | 87    |
| LT Vol                 | 0     | 14    | 17    |
| Through Vol            | 79    | 80    | 70    |
| RT Vol                 | 159   | 14    | 0     |
| Lane Flow Rate         | 280   | 127   | 102   |
| Geometry Grp           | 1     | 1     | 1     |
| Degree of Util (X)     | 0.308 | 0.165 | 0.13  |
| Departure Headway (Hd) | 3.961 | 4.684 | 4.557 |
| Convergence, Y/N       | Yes   | Yes   | Yes   |
| Cap                    | 910   | 766   | 788   |
| Service Time           | 1.974 | 2.71  | 2.577 |
| HCM Lane V/C Ratio     | 0.308 | 0.166 | 0.129 |
| HCM Control Delay      | 8.7   | 8.6   | 8.3   |
| HCM Lane LOS           | A     | A     | A     |
| HCM 95th-tile Q        | 1.3   | 0.6   | 0.4   |

22: N. Congress Ave & E. 17th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↔    |      |
| Traffic Vol, veh/h  | 0    | 17   | 70   | 0    |
| Future Vol, veh/h   | 0    | 17   | 70   | 0    |
| Peak Hour Factor    | 0.85 | 0.85 | 0.85 | 0.85 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 20   | 82   | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB  |
|----------------------------|-----|
| Opposing Approach          | NB  |
| Opposing Lanes             | 1   |
| Conflicting Approach Left  |     |
| Conflicting Lanes Left     | 0   |
| Conflicting Approach Right | EB  |
| Conflicting Lanes Right    | 1   |
| HCM Control Delay          | 8.3 |
| HCM LOS                    | A   |

4: Colorado St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.1  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑↑   |      | ↑    | ↑↑   | ↑    |      |
| Traffic Vol, veh/h       | 940  | 88   | 138  | 718  | 0    | 20   |
| Future Vol, veh/h        | 940  | 88   | 138  | 718  | 0    | 20   |
| Conflicting Peds, #/hr   | 0    | 1    | 1    | 0    | 0    | 5    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | 40   | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 87   | 87   | 87   | 87   | 87   | 87   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 1080 | 101  | 159  | 825  | 0    | 23   |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |      |
|----------------------|--------|---|--------|---|--------|------|
| Conflicting Flow All | 0      | 0 | 1183   | 0 | 1862   | 597  |
| Stage 1              | -      | - | -      | - | 1132   | -    |
| Stage 2              | -      | - | -      | - | 730    | -    |
| Critical Hdwy        | -      | - | 4.14   | - | 6.84   | 6.94 |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.84   | -    |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.84   | -    |
| Follow-up Hdwy       | -      | - | 2.22   | - | 3.52   | 3.32 |
| Pot Cap-1 Maneuver   | -      | - | 586    | - | 65     | 446  |
| Stage 1              | -      | - | -      | - | 270    | -    |
| Stage 2              | -      | - | -      | - | 438    | -    |
| Platoon blocked, %   | -      | - | -      | - | -      | -    |
| Mov Cap-1 Maneuver   | -      | - | 583    | - | 47     | 443  |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 47     | -    |
| Stage 1              | -      | - | -      | - | 270    | -    |
| Stage 2              | -      | - | -      | - | 319    | -    |

| Approach             | EB |  | WB  |  | NB   |  |
|----------------------|----|--|-----|--|------|--|
| HCM Control Delay, s | 0  |  | 2.2 |  | 13.6 |  |
| HCM LOS              |    |  |     |  | B    |  |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 443   | -   | -   | 583   | -   |
| HCM Lane V/C Ratio    | 0.052 | -   | -   | 0.272 | -   |
| HCM Control Delay (s) | 13.6  | -   | -   | 13.5  | -   |
| HCM Lane LOS          | B     | -   | -   | B     | -   |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | 1.1   | -   |

9: Guadalupe St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.1  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      | ↑    |      | ↑    |      |      |      |      | ↑↑   |      |      |
| Traffic Vol, veh/h       | 0    | 0    | 7    | 41   | 18   | 0    | 0    | 0    | 0    | 0    | 942  | 30   |
| Future Vol, veh/h        | 0    | 0    | 7    | 41   | 18   | 0    | 0    | 0    | 0    | 0    | 942  | 30   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 12   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 35   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 0    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 0    | 7    | 43   | 19   | 0    | 0    | 0    | 0    | 0    | 992  | 32   |

| Major/Minor          | Minor2 |   |      | Minor1 |      |   | Major2 |   |   |
|----------------------|--------|---|------|--------|------|---|--------|---|---|
| Conflicting Flow All | -      | - | 559  | 508    | 1058 | - | -      | - | 0 |
| Stage 1              | -      | - | -    | 0      | 0    | - | -      | - | - |
| Stage 2              | -      | - | -    | 508    | 1058 | - | -      | - | - |
| Critical Hdwy        | -      | - | 6.94 | 7.54   | 6.54 | - | -      | - | - |
| Critical Hdwy Stg 1  | -      | - | -    | -      | -    | - | -      | - | - |
| Critical Hdwy Stg 2  | -      | - | -    | 6.54   | 5.54 | - | -      | - | - |
| Follow-up Hdwy       | -      | - | 3.32 | 3.52   | 4.02 | - | -      | - | - |
| Pot Cap-1 Maneuver   | 0      | 0 | 472  | 448    | 223  | 0 | 0      | - | - |
| Stage 1              | 0      | 0 | -    | -      | -    | 0 | 0      | - | - |
| Stage 2              | 0      | 0 | -    | 516    | 300  | 0 | 0      | - | - |
| Platoon blocked, %   | -      | - | -    | -      | -    | - | -      | - | - |
| Mov Cap-1 Maneuver   | -      | - | 456  | 441    | 216  | - | -      | - | - |
| Mov Cap-2 Maneuver   | -      | - | -    | 441    | 216  | - | -      | - | - |
| Stage 1              | -      | - | -    | -      | -    | - | -      | - | - |
| Stage 2              | -      | - | -    | 508    | 290  | - | -      | - | - |

| Approach             | EB |  |  | WB   |  |  | SB |  |  |
|----------------------|----|--|--|------|--|--|----|--|--|
| HCM Control Delay, s | 13 |  |  | 18.2 |  |  | 0  |  |  |
| HCM LOS              | B  |  |  | C    |  |  |    |  |  |

| Minor Lane/Major Mvmt | EBLn1 | WBLn1 | SBT | SBR |
|-----------------------|-------|-------|-----|-----|
| Capacity (veh/h)      | 456   | 335   | -   | -   |
| HCM Lane V/C Ratio    | 0.016 | 0.185 | -   | -   |
| HCM Control Delay (s) | 13    | 18.2  | -   | -   |
| HCM Lane LOS          | B     | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0     | 0.7   | -   | -   |

10: Lavaca St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.3  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      |      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 0    | 0    | 0    | 0    | 22   | 22   | 32   | 511  | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 0    | 0    | 0    | 0    | 22   | 22   | 32   | 511  | 0    | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 27   | 16   | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | -    | -    | -    | 0    | -    | -    | 0    | -    | -    | -    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 94   | 94   | 94   | 94   | 94   | 94   | 94   | 94   | 94   | 94   | 94   | 94   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 0    | 0    | 0    | 23   | 23   | 34   | 544  | 0    | 0    | 0    | 0    |

| Major/Minor          | Minor1 |      |      | Major1 |   |   |
|----------------------|--------|------|------|--------|---|---|
| Conflicting Flow All | -      | 628  | 299  | 16     | 0 | - |
| Stage 1              | -      | 612  | -    | -      | - | - |
| Stage 2              | -      | 16   | -    | -      | - | - |
| Critical Hdwy        | -      | 6.54 | 7.14 | 5.34   | - | - |
| Critical Hdwy Stg 1  | -      | 5.54 | -    | -      | - | - |
| Critical Hdwy Stg 2  | -      | -    | -    | -      | - | - |
| Follow-up Hdwy       | -      | 4.02 | 3.92 | 3.12   | - | - |
| Pot Cap-1 Maneuver   | 0      | 398  | 595  | 1135   | - | 0 |
| Stage 1              | 0      | 482  | -    | -      | - | 0 |
| Stage 2              | 0      | -    | -    | -      | - | 0 |
| Platoon blocked, %   | -      | -    | -    | -      | - | - |
| Mov Cap-1 Maneuver   | -      | 0    | 595  | 1135   | - | - |
| Mov Cap-2 Maneuver   | -      | 0    | -    | -      | - | - |
| Stage 1              | -      | 0    | -    | -      | - | - |
| Stage 2              | -      | 0    | -    | -      | - | - |

| Approach             | WB   | NB  |
|----------------------|------|-----|
| HCM Control Delay, s | 11.6 | 0.5 |
| HCM LOS              | B    |     |

| Minor Lane/Major Mvmt | NBL  | NBTWBLn1 |
|-----------------------|------|----------|
| Capacity (veh/h)      | 1135 | - 595    |
| HCM Lane V/C Ratio    | 0.03 | - 0.079  |
| HCM Control Delay (s) | 8.3  | - 11.6   |
| HCM Lane LOS          | A    | - B      |
| HCM 95th %tile Q(veh) | 0.1  | - 0.3    |

24: E. 17th St & Brazos St  
TIA for Texas Capitol Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 4.8  |      |      |      |      |      |
| Movement                 | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
| Lane Configurations      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 127  | 111  | 0    | 0    | 23   | 0    |
| Future Vol, veh/h        | 127  | 111  | 0    | 0    | 23   | 0    |
| Conflicting Peds, #/hr   | 19   | 0    | 0    | 0    | 38   | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | 0    | -    | 0    | -    |
| Peak Hour Factor         | 88   | 88   | 88   | 88   | 88   | 88   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 144  | 126  | 0    | 0    | 26   | 0    |

| Major/Minor          | Major1 |   | Minor2 |   |
|----------------------|--------|---|--------|---|
| Conflicting Flow All | 19     | 0 | 472    | - |
| Stage 1              | -      | - | 19     | - |
| Stage 2              | -      | - | 453    | - |
| Critical Hdwy        | 4.12   | - | 6.42   | - |
| Critical Hdwy Stg 1  | -      | - | -      | - |
| Critical Hdwy Stg 2  | -      | - | 5.42   | - |
| Follow-up Hdwy       | 2.218  | - | 3.518  | - |
| Pot Cap-1 Maneuver   | 1597   | - | 551    | 0 |
| Stage 1              | -      | - | -      | 0 |
| Stage 2              | -      | - | 640    | 0 |
| Platoon blocked, %   | -      | - | -      | - |
| Mov Cap-1 Maneuver   | 1597   | - | 480    | - |
| Mov Cap-2 Maneuver   | -      | - | 480    | - |
| Stage 1              | -      | - | -      | - |
| Stage 2              | -      | - | 567    | - |

| Approach             | EB | SB   |
|----------------------|----|------|
| HCM Control Delay, s | 4  | 12.9 |
| HCM LOS              |    | B    |

| Minor Lane/Major Mvmt | EBL  | EBT SBLn1 |
|-----------------------|------|-----------|
| Capacity (veh/h)      | 1597 | - 480     |
| HCM Lane V/C Ratio    | 0.09 | - 0.054   |
| HCM Control Delay (s) | 7.5  | 0 12.9    |
| HCM Lane LOS          | A    | A B       |
| HCM 95th %tile Q(veh) | 0.3  | - 0.2     |

25: San Jacinto Blvd & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.5  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    | ↑    |      |      |      |      |      |      | ↑↑   | ↑    |      |
| Traffic Vol, veh/h       | 0    | 17   | 127  | 0    | 0    | 0    | 0    | 0    | 0    | 44   | 468  | 0    |
| Future Vol, veh/h        | 0    | 17   | 127  | 0    | 0    | 0    | 0    | 0    | 0    | 44   | 468  | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 21   | 0    | 0    | 0    | 0    | 0    | 0    | 4    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 40   | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | -    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 18   | 138  | 0    | 0    | 0    | 0    | 0    | 0    | 48   | 509  | 0    |

| Major/Minor          | Minor2 |      | Major2 |      |
|----------------------|--------|------|--------|------|
| Conflicting Flow All | -      | 608  | 275    | 4    |
| Stage 1              | -      | 604  | -      | -    |
| Stage 2              | -      | 4    | -      | -    |
| Critical Hdwy        | -      | 6.54 | 6.94   | 4.14 |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    |
| Critical Hdwy Stg 2  | -      | -    | -      | -    |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 2.22 |
| Pot Cap-1 Maneuver   | 0      | 409  | 722    | 1616 |
| Stage 1              | 0      | 486  | -      | -    |
| Stage 2              | 0      | -    | -      | 0    |
| Platoon blocked, %   | -      | -    | -      | -    |
| Mov Cap-1 Maneuver   | -      | 0    | 722    | 1616 |
| Mov Cap-2 Maneuver   | -      | 0    | -      | -    |
| Stage 1              | -      | 0    | -      | -    |
| Stage 2              | -      | 0    | -      | -    |

| Approach             | EB | SB  |
|----------------------|----|-----|
| HCM Control Delay, s |    | 0.7 |
| HCM LOS              | -  |     |

| Minor Lane/Major Mvmt | EBLn1 | EBLn2 | SBL  | SBT |
|-----------------------|-------|-------|------|-----|
| Capacity (veh/h)      | -     | 722   | 1616 | -   |
| HCM Lane V/C Ratio    | -     | 0.191 | 0.03 | -   |
| HCM Control Delay (s) | -     | 11.2  | 7.3  | 0.1 |
| HCM Lane LOS          | -     | B     | A    | A   |
| HCM 95th %tile Q(veh) | -     | 0.7   | 0.1  | -   |

26: Trinity St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1    |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | ↓    |      | ↑↑↑  | ↑    |      |      |
| Traffic Vol, veh/h       | 39   | 0    | 0    | 358  | 0    | 0    |
| Future Vol, veh/h        | 39   | 0    | 0    | 358  | 0    | 0    |
| Conflicting Peds, #/hr   | 3    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | -    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 87   | 87   | 87   | 87   | 87   | 87   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 45   | 0    | 0    | 411  | 0    | 0    |

| Major/Minor          | Minor2 | Major1 |   |
|----------------------|--------|--------|---|
| Conflicting Flow All | 168    | -      | 0 |
| Stage 1              | 0      | -      | - |
| Stage 2              | 168    | -      | - |
| Critical Hdwy        | 5.74   | -      | - |
| Critical Hdwy Stg 1  | -      | -      | - |
| Critical Hdwy Stg 2  | 6.04   | -      | - |
| Follow-up Hdwy       | 3.82   | -      | - |
| Pot Cap-1 Maneuver   | 787    | 0      | 0 |
| Stage 1              | -      | 0      | 0 |
| Stage 2              | 776    | 0      | 0 |
| Platoon blocked, %   | -      | -      | - |
| Mov Cap-1 Maneuver   | 787    | -      | - |
| Mov Cap-2 Maneuver   | 787    | -      | - |
| Stage 1              | -      | -      | - |
| Stage 2              | 776    | -      | - |

| Approach             | EB  | NB |
|----------------------|-----|----|
| HCM Control Delay, s | 9.9 | 0  |
| HCM LOS              | A   |    |

| Minor Lane/Major Mvmt | NBT EBLn1 |
|-----------------------|-----------|
| Capacity (veh/h)      | - 787     |
| HCM Lane V/C Ratio    | - 0.057   |
| HCM Control Delay (s) | - 9.9     |
| HCM Lane LOS          | - A       |
| HCM 95th %tile Q(veh) | - 0.2     |

27: Guadalupe St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.1  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      |      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 0    | 0    | 0    | 76   | 8    | 0    | 0    | 0    | 0    | 0    | 1023 | 21   |
| Future Vol, veh/h        | 0    | 0    | 0    | 76   | 8    | 0    | 0    | 0    | 0    | 0    | 1023 | 21   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 19   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 23   |
| Sign Control             | Free | Free | Free | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0    |
| Veh in Median Storage, # | -    | -    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 0    | 0    | 83   | 9    | 0    | 0    | 0    | 0    | 0    | 1112 | 23   |

| Major/Minor          | Minor1 |      |   | Major2 |   |   |
|----------------------|--------|------|---|--------|---|---|
| Conflicting Flow All | 575    | 1135 | - | -      | - | 0 |
| Stage 1              | 0      | 0    | - | -      | - | - |
| Stage 2              | 575    | 1135 | - | -      | - | - |
| Critical Hdwy        | 6.84   | 6.54 | - | -      | - | - |
| Critical Hdwy Stg 1  | -      | -    | - | -      | - | - |
| Critical Hdwy Stg 2  | 5.84   | 5.54 | - | -      | - | - |
| Follow-up Hdwy       | 3.52   | 4.02 | - | -      | - | - |
| Pot Cap-1 Maneuver   | 448    | 201  | 0 | 0      | - | - |
| Stage 1              | -      | -    | 0 | 0      | - | - |
| Stage 2              | 526    | 275  | 0 | 0      | - | - |
| Platoon blocked, %   | -      | -    | - | -      | - | - |
| Mov Cap-1 Maneuver   | 448    | 0    | - | -      | - | - |
| Mov Cap-2 Maneuver   | 448    | 0    | - | -      | - | - |
| Stage 1              | -      | 0    | - | -      | - | - |
| Stage 2              | 526    | 0    | - | -      | - | - |

| Approach             | WB   | SB |
|----------------------|------|----|
| HCM Control Delay, s | 15.1 | 0  |
| HCM LOS              | C    |    |

| Minor Lane/Major Mvmt | WBLn1 | SBT | SBR |
|-----------------------|-------|-----|-----|
| Capacity (veh/h)      | 448   | -   | -   |
| HCM Lane V/C Ratio    | 0.204 | -   | -   |
| HCM Control Delay (s) | 15.1  | -   | -   |
| HCM Lane LOS          | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.8   | -   | -   |

29: Colorado St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.5  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      |      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 0    | 0    | 0    | 7    | 11   | 12   | 30   | 261  | 0    | 0    | 44   | 26   |
| Future Vol, veh/h        | 0    | 0    | 0    | 7    | 11   | 12   | 30   | 261  | 0    | 0    | 44   | 26   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 14   | 3    | 0    | 0    | 0    | 0    | 3    |
| Sign Control             | Free | Free | Free | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | -    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 0    | 0    | 9    | 14   | 15   | 38   | 330  | 0    | 0    | 56   | 33   |

| Major/Minor          | Minor1 |       |       | Major1 |   |   | Major2 |   |   |
|----------------------|--------|-------|-------|--------|---|---|--------|---|---|
| Conflicting Flow All | 478    | 498   | 344   | 92     | 0 | - | -      | - | 0 |
| Stage 1              | 406    | 406   | -     | -      | - | - | -      | - | - |
| Stage 2              | 72     | 92    | -     | -      | - | - | -      | - | - |
| Critical Hdwy        | 6.42   | 6.52  | 6.22  | 4.12   | - | - | -      | - | - |
| Critical Hdwy Stg 1  | 5.42   | 5.52  | -     | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | 5.42   | 5.52  | -     | -      | - | - | -      | - | - |
| Follow-up Hdwy       | 3.518  | 4.018 | 3.318 | 2.218  | - | - | -      | - | - |
| Pot Cap-1 Maneuver   | 546    | 474   | 699   | 1503   | - | 0 | 0      | - | - |
| Stage 1              | 673    | 598   | -     | -      | - | 0 | 0      | - | - |
| Stage 2              | 951    | 819   | -     | -      | - | 0 | 0      | - | - |
| Platoon blocked, %   | -      | -     | -     | -      | - | - | -      | - | - |
| Mov Cap-1 Maneuver   | 529    | 0     | 690   | 1503   | - | - | -      | - | - |
| Mov Cap-2 Maneuver   | 529    | 0     | -     | -      | - | - | -      | - | - |
| Stage 1              | 652    | 0     | -     | -      | - | - | -      | - | - |
| Stage 2              | 951    | 0     | -     | -      | - | - | -      | - | - |

| Approach             | WB   | NB  | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 11.2 | 0.8 | 0  |
| HCM LOS              | B    |     |    |

| Minor Lane/Major Mvmt | NBL   | NBTWBLn1 | SBT   | SBR |
|-----------------------|-------|----------|-------|-----|
| Capacity (veh/h)      | 1503  | -        | 620   | -   |
| HCM Lane V/C Ratio    | 0.025 | -        | 0.061 | -   |
| HCM Control Delay (s) | 7.5   | 0        | 11.2  | -   |
| HCM Lane LOS          | A     | A        | B     | -   |
| HCM 95th %tile Q(veh) | 0.1   | -        | 0.2   | -   |

30: N. Congress Ave & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.8  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      |      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 0    | 0    | 0    | 2    | 7    | 6    | 15   | 253  | 0    | 0    | 45   | 16   |
| Future Vol, veh/h        | 0    | 0    | 0    | 2    | 7    | 6    | 15   | 253  | 0    | 0    | 45   | 16   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 10   | 0    | 10   | 11   | 0    | 0    | 0    | 0    | 11   |
| Sign Control             | Free | Free | Free | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | -    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 0    | 0    | 2    | 8    | 7    | 16   | 275  | 0    | 0    | 49   | 17   |

| Major/Minor          | Minor1 |       |       | Major1 |   |   | Major2 |   |   |
|----------------------|--------|-------|-------|--------|---|---|--------|---|---|
| Conflicting Flow All | 376    | 385   | 285   | 77     | 0 | - | -      | - | 0 |
| Stage 1              | 308    | 308   | -     | -      | - | - | -      | - | - |
| Stage 2              | 68     | 77    | -     | -      | - | - | -      | - | - |
| Critical Hdwy        | 6.42   | 6.52  | 6.22  | 4.12   | - | - | -      | - | - |
| Critical Hdwy Stg 1  | 5.42   | 5.52  | -     | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | 5.42   | 5.52  | -     | -      | - | - | -      | - | - |
| Follow-up Hdwy       | 3.518  | 4.018 | 3.318 | 2.218  | - | - | -      | - | - |
| Pot Cap-1 Maneuver   | 625    | 549   | 754   | 1522   | - | 0 | 0      | - | - |
| Stage 1              | 745    | 660   | -     | -      | - | 0 | 0      | - | - |
| Stage 2              | 955    | 831   | -     | -      | - | 0 | 0      | - | - |
| Platoon blocked, %   |        |       |       |        |   |   |        |   |   |
| Mov Cap-1 Maneuver   | 611    | 0     | 747   | 1508   | - | - | -      | - | - |
| Mov Cap-2 Maneuver   | 611    | 0     | -     | -      | - | - | -      | - | - |
| Stage 1              | 735    | 0     | -     | -      | - | - | -      | - | - |
| Stage 2              | 946    | 0     | -     | -      | - | - | -      | - | - |

| Approach             | WB   | NB  | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 10.2 | 0.4 | 0  |
| HCM LOS              | B    |     |    |

| Minor Lane/Major Mvmt | NBL   | NBTWBLn1 | SBT   | SBR |
|-----------------------|-------|----------|-------|-----|
| Capacity (veh/h)      | 1508  | -        | 708   | -   |
| HCM Lane V/C Ratio    | 0.011 | -        | 0.023 | -   |
| HCM Control Delay (s) | 7.4   | 0        | 10.2  | -   |
| HCM Lane LOS          | A     | A        | B     | -   |
| HCM 95th %tile Q(veh) | 0     | -        | 0.1   | -   |

31: Brazos St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 4.2  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 0    | 0    | 3    | 17   | 13   | 0    |
| Future Vol, veh/h        | 0    | 0    | 3    | 17   | 13   | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 24   | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | -    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 83   | 83   | 83   | 83   | 83   | 83   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 0    | 4    | 20   | 16   | 0    |

| Major/Minor          | Major2 |   | Minor1 |   |
|----------------------|--------|---|--------|---|
| Conflicting Flow All | 24     | 0 | 52     | - |
| Stage 1              | -      | - | 24     | - |
| Stage 2              | -      | - | 28     | - |
| Critical Hdwy        | 4.12   | - | 6.42   | - |
| Critical Hdwy Stg 1  | -      | - | -      | - |
| Critical Hdwy Stg 2  | -      | - | 5.42   | - |
| Follow-up Hdwy       | 2.218  | - | 3.518  | - |
| Pot Cap-1 Maneuver   | 1591   | - | 957    | 0 |
| Stage 1              | -      | - | -      | 0 |
| Stage 2              | -      | - | 995    | 0 |
| Platoon blocked, %   |        |   |        |   |
| Mov Cap-1 Maneuver   | 1591   | - | 932    | - |
| Mov Cap-2 Maneuver   | -      | - | 932    | - |
| Stage 1              | -      | - | -      | - |
| Stage 2              | -      | - | 992    | - |

| Approach             | WB  | NB  |
|----------------------|-----|-----|
| HCM Control Delay, s | 1.1 | 8.9 |
| HCM LOS              |     | A   |

| Minor Lane/Major Mvmt | NBLn1 | WBL   | WBT |
|-----------------------|-------|-------|-----|
| Capacity (veh/h)      | 932   | 1591  | -   |
| HCM Lane V/C Ratio    | 0.017 | 0.002 | -   |
| HCM Control Delay (s) | 8.9   | 7.3   | 0   |
| HCM Lane LOS          | A     | A     | A   |
| HCM 95th %tile Q(veh) | 0.1   | 0     | -   |

1: Martin Luther King Jr. Blvd & Guadalupe ST  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR   | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|------|-------|-------|-------|------|------|------|-------|-------|-------|
| Lane Configurations     | ↰     | ↰↱    | ↱    |       | ↰↱    | ↰     |      |      |      | ↰     | ↰↱    | ↱     |
| Traffic Volume (vph)    | 143   | 338   | 95   | 4     | 932   | 596   | 0    | 0    | 0    | 170   | 595   | 219   |
| Future Volume (vph)     | 143   | 338   | 95   | 4     | 932   | 596   | 0    | 0    | 0    | 170   | 595   | 219   |
| Confl. Peds. (#/hr)     | 28    |       | 65   | 65    |       | 28    |      |      |      | 39    |       | 65    |
| Confl. Bikes (#/hr)     |       |       | 1    |       |       | 6     |      |      |      |       |       | 3     |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94 | 0.94  | 0.94  | 0.94  | 0.94 | 0.94 | 0.94 | 0.94  | 0.94  | 0.94  |
| Adj. Flow (vph)         | 152   | 360   | 101  | 4     | 991   | 634   | 0    | 0    | 0    | 181   | 633   | 233   |
| Shared Lane Traffic (%) |       |       |      |       |       |       |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 152   | 461   | 0    | 0     | 995   | 634   | 0    | 0    | 0    | 181   | 633   | 233   |
| Turn Type               | Prot  | NA    |      | Perm  | NA    | pm+ov |      |      |      | pm+pt | NA    | Perm  |
| Protected Phases        | 5     | 2     |      |       | 6     | 7     |      |      |      | 7     | 4     |       |
| Permitted Phases        |       |       |      | 6     |       | 6     |      |      |      | 4     |       | 4     |
| Detector Phase          | 5     | 2     |      | 6     | 6     | 7     |      |      |      | 7     | 4     | 4     |
| Switch Phase            |       |       |      |       |       |       |      |      |      |       |       |       |
| Minimum Initial (s)     | 2.0   | 15.0  |      | 15.0  | 15.0  | 10.0  |      |      |      | 10.0  | 5.0   | 5.0   |
| Minimum Split (s)       | 7.0   | 27.0  |      | 34.0  | 34.0  | 15.0  |      |      |      | 15.0  | 32.0  | 32.0  |
| Total Split (s)         | 25.0  | 92.0  |      | 67.0  | 67.0  | 43.0  |      |      |      | 43.0  | 43.0  | 43.0  |
| Total Split (%)         | 18.5% | 68.1% |      | 49.6% | 49.6% | 31.9% |      |      |      | 31.9% | 31.9% | 31.9% |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |       | 0.0   | 0.0   |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   | 5.0   |      |       | 5.0   | 5.0   |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                | Lag   |       |      | Lead  | Lead  |       |      |      |      |       |       |       |
| Lead-Lag Optimize?      | Yes   |       |      | Yes   | Yes   |       |      |      |      |       |       |       |
| Recall Mode             | None  | C-Max |      | C-Max | C-Max | None  |      |      |      | None  | Max   | Max   |
| Act Effect Green (s)    | 20.0  | 87.0  |      |       | 62.0  | 100.0 |      |      |      | 38.0  | 38.0  | 38.0  |
| Actuated g/C Ratio      | 0.15  | 0.64  |      |       | 0.46  | 0.74  |      |      |      | 0.28  | 0.28  | 0.28  |
| v/c Ratio               | 0.58  | 0.21  |      |       | 0.64  | 0.54  |      |      |      | 0.36  | 0.64  | 0.46  |
| Control Delay           | 63.4  | 9.5   |      |       | 22.3  | 1.7   |      |      |      | 41.4  | 45.9  | 17.4  |
| Queue Delay             | 0.0   | 0.0   |      |       | 1.6   | 0.1   |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             | 63.4  | 9.5   |      |       | 23.9  | 1.8   |      |      |      | 41.4  | 45.9  | 17.4  |
| LOS                     | E     | A     |      |       | C     | A     |      |      |      | D     | D     | B     |
| Approach Delay          |       | 22.9  |      |       | 15.3  |       |      |      |      |       | 38.8  |       |
| Approach LOS            |       | C     |      |       | B     |       |      |      |      |       | D     |       |
| Queue Length 50th (ft)  | 126   | 76    |      |       | 280   | 10    |      |      |      | 127   | 256   | 55    |
| Queue Length 95th (ft)  | 201   | 102   |      |       | 332   | 16    |      |      |      | 198   | 323   | 137   |
| Internal Link Dist (ft) |       | 228   |      |       | 45    |       | 159  |      |      |       | 210   |       |
| Turn Bay Length (ft)    | 160   |       |      |       |       |       |      |      |      | 130   |       | 120   |
| Base Capacity (vph)     | 262   | 2152  |      |       | 1550  | 1184  |      |      |      | 498   | 996   | 505   |
| Starvation Cap Reductn  | 0     | 0     |      |       | 360   | 71    |      |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |      |       | 0     | 0     |      |      |      | 0     | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |      |       | 0     | 0     |      |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       | 0.58  | 0.21  |      |       | 0.84  | 0.57  |      |      |      | 0.36  | 0.64  | 0.46  |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 75

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1: Martin Luther King Jr. Blvd & Guadalupe ST  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 24.2

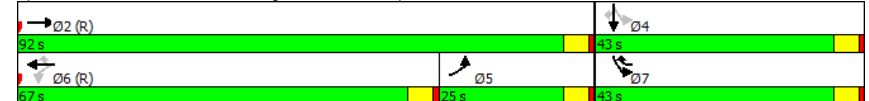
Intersection LOS: C

Intersection Capacity Utilization 79.2%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: Martin Luther King Jr. Blvd & Guadalupe ST



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Page 2

3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

|   | →     | ↖    | ↗    | ←     | ↖     | ↗     |
|---|-------|------|------|-------|-------|-------|
| Lane Group  | EBT   | EBR  | WBL  | WBT   | NBL   | NBR   |
| Lane Configurations                                       | ↑↑    |      |      | ↑↑    | ↖↗    | ↖     |
| Traffic Volume (vph)                                      | 488   | 0    | 0    | 1153  | 684   | 229   |
| Future Volume (vph)                                       | 488   | 0    | 0    | 1153  | 684   | 229   |
| Confl. Peds. (#/hr)                                       |       |      |      |       |       | 76    |
| Peak Hour Factor  | 0.91  | 0.91 | 0.91 | 0.91  | 0.91  | 0.91  |
| Adj. Flow (vph)   | 536   | 0    | 0    | 1267  | 752   | 252   |
| Shared Lane Traffic (%)                                   |       |      |      |       |       |       |
| Lane Group Flow (vph)                                     | 536   | 0    | 0    | 1267  | 752   | 252   |
| Turn Type   | NA    |      |      | NA    | Prot  | Perm  |
| Protected Phases  | 2     |      |      | 6     | 8     |       |
| Permitted Phases  |       |      |      |       |       | 3     |
| Detector Phase  | 2     |      |      | 6     | 8     | 3     |
| Switch Phase  |       |      |      |       |       |       |
| Minimum Initial (s)                                       | 10.0  |      |      | 10.0  | 5.0   | 5.0   |
| Minimum Split (s)   | 30.0  |      |      | 15.0  | 10.0  | 10.0  |
| Total Split (s)   | 86.0  |      |      | 86.0  | 49.0  | 49.0  |
| Total Split (%)   | 63.7% |      |      | 63.7% | 36.3% | 36.3% |
| Yellow Time (s)   | 4.0   |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)  | 1.0   |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)                                      | 0.0   |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)                                       | 5.0   |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag  |       |      |      |       |       |       |
| Lead-Lag Optimize?  |       |      |      |       |       |       |
| Recall Mode   | C-Max |      |      | None  | Max   | Max   |
| Act Effct Green (s)                                       | 81.0  |      |      | 81.0  | 44.0  | 44.0  |
| Actuated g/C Ratio  | 0.60  |      |      | 0.60  | 0.33  | 0.33  |
| v/c Ratio   | 0.25  |      |      | 0.60  | 0.67  | 0.39  |
| Control Delay   | 13.8  |      |      | 11.9  | 62.6  | 24.8  |
| Queue Delay   | 0.0   |      |      | 0.1   | 0.0   | 0.0   |
| Total Delay   | 13.8  |      |      | 12.0  | 62.6  | 24.8  |
| LOS   | B     |      |      | B     | E     | C     |
| Approach Delay  | 13.8  |      |      | 12.0  | 53.1  |       |
| Approach LOS  | B     |      |      | B     | D     |       |
| Queue Length 50th (ft)                                    | 112   |      |      | 203   | 355   | 123   |
| Queue Length 95th (ft)                                    | 138   |      |      | 214   | 412   | 133   |
| Internal Link Dist (ft)                                   | 272   |      |      | 277   | 337   |       |
| Turn Bay Length (ft)                                      |       |      |      |       |       |       |
| Base Capacity (vph)                                       | 2123  |      |      | 2123  | 1118  | 644   |
| Starvation Cap Reductn                                    | 0     |      |      | 112   | 0     | 0     |
| Spillback Cap Reductn                                     | 0     |      |      | 27    | 0     | 0     |
| Storage Cap Reductn                                       | 0     |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio   | 0.25  |      |      | 0.63  | 0.67  | 0.39  |
| <b>Intersection Summary</b>                               |       |      |      |       |       |       |
| Cycle Length: 135   |       |      |      |       |       |       |
| Actuated Cycle Length: 135                                |       |      |      |       |       |       |
| Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green |       |      |      |       |       |       |
| Natural Cycle: 50   |       |      |      |       |       |       |
| Control Type: Actuated-Coordinated                        |       |      |      |       |       |       |

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3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

Maximum v/c Ratio: 0.67

Intersection Signal Delay: 27.0

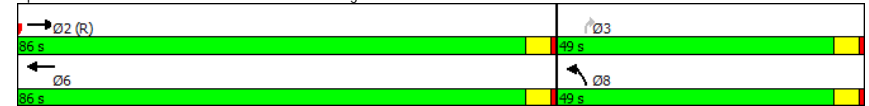
Intersection LOS: C

Intersection Capacity Utilization 59.7%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 3: Lavaca St & Martin Luther King Jr. Blvd



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5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

|                         | →     | ↖    | ↗     | ←     | ↖     | ↗     |
|-------------------------|-------|------|-------|-------|-------|-------|
| Lane Group              | EBT   | EBR  | WBL   | WBT   | NBL   | NBR   |
| Lane Configurations     | ↔↔    |      | ↖     | ↔↔    | ↖↖    | ↖     |
| Traffic Volume (vph)    | 663   | 36   | 87    | 1036  | 145   | 140   |
| Future Volume (vph)     | 663   | 36   | 87    | 1036  | 145   | 140   |
| Confl. Peds. (#/hr)     |       | 31   | 31    |       | 33    |       |
| Confl. Bikes (#/hr)     |       | 4    |       |       |       |       |
| Peak Hour Factor        | 0.94  | 0.94 | 0.94  | 0.94  | 0.94  | 0.94  |
| Adj. Flow (vph)         | 705   | 38   | 93    | 1102  | 154   | 149   |
| Shared Lane Traffic (%) |       |      |       |       |       |       |
| Lane Group Flow (vph)   | 743   | 0    | 93    | 1102  | 154   | 149   |
| Turn Type               | NA    |      | pm+pt | NA    | Prot  | Perm  |
| Protected Phases        | 2     |      | 1     | 6     | 4     |       |
| Permitted Phases        |       |      | 6     |       |       | 4     |
| Detector Phase          | 2     |      | 1     | 6     | 4     | 4     |
| Switch Phase            |       |      |       |       |       |       |
| Minimum Initial (s)     | 15.0  |      | 3.0   | 15.0  | 15.0  | 15.0  |
| Minimum Split (s)       | 34.0  |      | 8.0   | 20.0  | 29.0  | 29.0  |
| Total Split (s)         | 91.0  |      | 15.0  | 106.0 | 29.0  | 29.0  |
| Total Split (%)         | 67.4% |      | 11.1% | 78.5% | 21.5% | 21.5% |
| Yellow Time (s)         | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   |      | 5.0   | 5.0   | 5.0   | 5.0   |
| Lead/Lag                | Lead  |      | Lag   |       |       |       |
| Lead-Lag Optimize?      | Yes   |      | Yes   |       |       |       |
| Recall Mode             | C-Max |      | None  | C-Max | Max   | Max   |
| Act Effect Green (s)    | 86.0  |      | 101.0 | 101.0 | 24.0  | 24.0  |
| Actuated g/C Ratio      | 0.64  |      | 0.75  | 0.75  | 0.18  | 0.18  |
| v/c Ratio               | 0.33  |      | 0.17  | 0.42  | 0.25  | 0.37  |
| Control Delay           | 6.9   |      | 2.9   | 2.5   | 49.1  | 9.9   |
| Queue Delay             | 0.0   |      | 0.0   | 0.1   | 0.0   | 0.0   |
| Total Delay             | 6.9   |      | 2.9   | 2.7   | 49.1  | 9.9   |
| LOS                     | A     |      | A     | A     | D     | A     |
| Approach Delay          | 6.9   |      |       | 2.7   | 29.8  |       |
| Approach LOS            | A     |      |       | A     | C     |       |
| Queue Length 50th (ft)  | 78    |      | 6     | 40    | 60    | 0     |
| Queue Length 95th (ft)  | 118   |      | 17    | 73    | 93    | 61    |
| Internal Link Dist (ft) | 366   |      |       | 377   | 331   |       |
| Turn Bay Length (ft)    |       |      | 115   |       | 120   |       |
| Base Capacity (vph)     | 2228  |      | 542   | 2647  | 610   | 403   |
| Starvation Cap Reductn  | 0     |      | 0     | 519   | 0     | 0     |
| Spillback Cap Reductn   | 0     |      | 0     | 0     | 0     | 0     |
| Storage Cap Reductn     | 0     |      | 0     | 0     | 0     | 0     |
| Reduced v/c Ratio       | 0.33  |      | 0.17  | 0.52  | 0.25  | 0.37  |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 75

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.42

Intersection Signal Delay: 7.8

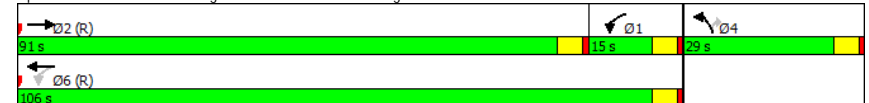
Intersection LOS: A

Intersection Capacity Utilization 54.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 5: N. Congress Ave & Martin Luther King Jr. Blvd



6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations     | ↰     | ↰     | ↰    | ↰     | ↰     | ↰     | ↰     | ↰     | ↰     | ↰     | ↰     | ↰     |
| Traffic Volume (vph)    | 84    | 702   | 11   | 14    | 836   | 126   | 26    | 22    | 149   | 92    | 24    | 234   |
| Future Volume (vph)     | 84    | 702   | 11   | 14    | 836   | 126   | 26    | 22    | 149   | 92    | 24    | 234   |
| Confl. Peds. (#/hr)     | 41    |       | 7    | 7     |       | 41    | 21    |       | 22    | 22    |       | 21    |
| Confl. Bikes (#/hr)     |       |       | 4    |       |       | 3     |       |       |       |       |       |       |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  |
| Adj. Flow (vph)         | 87    | 724   | 11   | 14    | 862   | 130   | 27    | 23    | 154   | 95    | 25    | 241   |
| Shared Lane Traffic (%) |       |       |      |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)   | 87    | 735   | 0    | 14    | 862   | 130   | 0     | 50    | 154   | 0     | 120   | 241   |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    | Perm  | Perm  | NA    | Perm  | Perm  | NA    | Perm  |
| Protected Phases        | 5     | 2     |      | 1     | 6     |       |       | 8     |       |       | 4     |       |
| Permitted Phases        | 2     |       |      | 6     |       | 6     | 8     |       | 8     | 4     |       | 4     |
| Detector Phase          | 5     | 2     |      | 1     | 6     | 6     | 8     | 8     | 8     | 4     | 4     | 4     |
| Switch Phase            |       |       |      |       |       |       |       |       |       |       |       |       |
| Minimum Initial (s)     | 3.0   | 10.0  |      | 3.0   | 10.0  | 10.0  | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       | 8.0   | 22.0  |      | 8.0   | 28.0  | 28.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  |
| Total Split (s)         | 15.0  | 89.0  |      | 15.0  | 89.0  | 89.0  | 31.0  | 31.0  | 31.0  | 31.0  | 31.0  | 31.0  |
| Total Split (%)         | 11.1% | 65.9% |      | 11.1% | 65.9% | 65.9% | 23.0% | 23.0% | 23.0% | 23.0% | 23.0% | 23.0% |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   | 5.0   |       | 5.0   | 5.0   |       | 5.0   | 5.0   |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   | Lag   |       |       |       |       |       |       |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   | Yes   |       |       |       |       |       |       |
| Recall Mode             | None  | C-Max |      | None  | C-Max | C-Max | Max   | Max   | Max   | Max   | Max   | Max   |
| Act Effect Green (s)    | 97.9  | 94.6  |      | 92.4  | 86.6  | 86.6  |       | 26.0  | 26.0  |       | 26.0  | 26.0  |
| Actuated g/C Ratio      | 0.73  | 0.70  |      | 0.68  | 0.64  | 0.64  |       | 0.19  | 0.19  |       | 0.19  | 0.19  |
| v/c Ratio               | 0.20  | 0.30  |      | 0.03  | 0.38  | 0.14  |       | 0.17  | 0.37  |       | 0.47  | 0.50  |
| Control Delay           | 3.6   | 3.8   |      | 1.6   | 4.8   | 1.8   |       | 47.5  | 9.5   |       | 55.2  | 9.3   |
| Queue Delay             | 0.0   | 0.1   |      | 0.0   | 0.3   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Total Delay             | 3.6   | 4.0   |      | 1.6   | 5.1   | 1.8   |       | 47.5  | 9.5   |       | 55.2  | 9.3   |
| LOS                     | A     | A     |      | A     | A     | A     |       | D     | A     |       | E     | A     |
| Approach Delay          |       | 3.9   |      |       | 4.6   |       |       | 18.8  |       |       | 24.6  |       |
| Approach LOS            |       | A     |      |       | A     |       |       | B     |       |       | C     |       |
| Queue Length 50th (ft)  | 8     | 38    |      | 1     | 87    | 2     |       | 37    | 0     |       | 94    | 0     |
| Queue Length 95th (ft)  | 12    | 65    |      | m2    | 128   | 15    |       | 76    | 60    |       | 160   | 75    |
| Internal Link Dist (ft) |       | 377   |      |       | 273   |       |       | 337   |       |       | 212   |       |
| Turn Bay Length (ft)    | 160   |       |      | 100   |       | 100   |       |       | 100   |       |       |       |
| Base Capacity (vph)     | 452   | 2473  |      | 562   | 2271  | 910   |       | 289   | 414   |       | 257   | 485   |
| Starvation Cap Reductn  | 0     | 736   |      | 0     | 722   | 0     |       | 0     | 0     |       | 0     | 0     |
| Spillback Cap Reductn   | 0     | 12    |      | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Reduced v/c Ratio       | 0.19  | 0.42  |      | 0.02  | 0.56  | 0.14  |       | 0.17  | 0.37  |       | 0.47  | 0.50  |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 70

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6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.50

Intersection Signal Delay: 8.6

Intersection LOS: A

Intersection Capacity Utilization 77.3%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Brazos St & Martin Luther King Jr. Blvd



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7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑    |      | ↑     | ↑↑    |      |      |      |      | ↓     | ↑↑    | ↑     |
| Traffic Volume (vph)    | 0    | 882   | 21   | 284   | 925   | 0    | 0    | 0    | 0    | 36    | 188   | 133   |
| Future Volume (vph)     | 0    | 882   | 21   | 284   | 925   | 0    | 0    | 0    | 0    | 36    | 188   | 133   |
| Confl. Peds. (#/hr)     |      |       | 35   | 35    |       |      |      |      |      | 68    |       | 16    |
| Confl. Bikes (#/hr)     |      |       | 7    |       |       |      |      |      |      |       |       | 13    |
| Peak Hour Factor        | 0.93 | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93 | 0.93 | 0.93 | 0.93  | 0.93  | 0.93  |
| Adj. Flow (vph)         | 0    | 948   | 23   | 305   | 995   | 0    | 0    | 0    | 0    | 39    | 202   | 143   |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 971   | 0    | 305   | 995   | 0    | 0    | 0    | 0    | 39    | 202   | 143   |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      | 3.0   | 10.0  |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       |      | 32.0  |      | 8.0   | 30.0  |      |      |      |      | 30.0  | 30.0  | 30.0  |
| Total Split (s)         |      | 78.0  |      | 25.0  | 103.0 |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (%)         |      | 57.8% |      | 18.5% | 76.3% |      |      |      |      | 23.7% | 23.7% | 23.7% |
| Yellow Time (s)         |      | 4.0   |      | 4.0   | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      | 1.0   | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      | 0.0   | 0.0   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      | 5.0   | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      | Lead  |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      | Yes   |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      | None  | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effect Green (s)    |      | 79.1  |      | 98.0  | 98.0  |      |      |      |      | 27.0  | 27.0  | 27.0  |
| Actuated g/C Ratio      |      | 0.59  |      | 0.73  | 0.73  |      |      |      |      | 0.20  | 0.20  | 0.20  |
| v/c Ratio               |      | 0.47  |      | 0.71  | 0.39  |      |      |      |      | 0.12  | 0.29  | 0.35  |
| Control Delay           |      | 11.4  |      | 29.1  | 4.8   |      |      |      |      | 45.7  | 47.1  | 9.3   |
| Queue Delay             |      | 0.5   |      | 0.3   | 0.2   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             |      | 11.8  |      | 29.4  | 4.9   |      |      |      |      | 45.7  | 47.1  | 9.3   |
| LOS                     |      | B     |      | C     | A     |      |      |      |      | D     | D     | A     |
| Approach Delay          |      | 11.8  |      |       | 10.7  |      |      |      |      |       | 32.9  |       |
| Approach LOS            |      | B     |      |       | B     |      |      |      |      |       | C     |       |
| Queue Length 50th (ft)  |      | 166   |      | 103   | 85    |      |      |      |      | 28    | 80    | 0     |
| Queue Length 95th (ft)  |      | 222   |      | 194   | 110   |      |      |      |      | 62    | 118   | 58    |
| Internal Link Dist (ft) |      | 273   |      |       | 321   |      |      | 343  |      |       | 244   |       |
| Turn Bay Length (ft)    |      |       |      | 120   |       |      |      |      |      | 100   |       | 100   |
| Base Capacity (vph)     |      | 2064  |      | 493   | 2569  |      |      |      |      | 315   | 707   | 414   |
| Starvation Cap Reductn  |      | 583   |      | 20    | 627   |      |      |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       |      | 0.66  |      | 0.64  | 0.51  |      |      |      |      | 0.12  | 0.29  | 0.35  |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 75

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7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 14.3

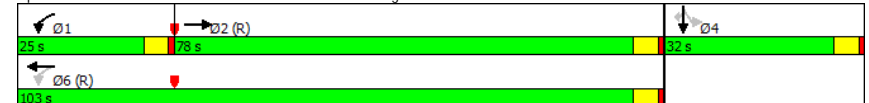
Intersection LOS: B

Intersection Capacity Utilization 74.2%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 7: San Jacinto Blvd & Martin Luther King Jr. Blvd



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8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↩     | ↩↩    |      |      | ↩↩    |      | ↩     | ↩     | ↩     |      | ↓    | ↩    |
| Traffic Volume (vph)    | 80    | 912   | 0    | 0    | 1069  | 49   | 88    | 302   | 197   | 0    | 0    | 0    |
| Future Volume (vph)     | 80    | 912   | 0    | 0    | 1069  | 49   | 88    | 302   | 197   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     |       |       | 32   |      |       | 84   | 16    |       | 142   |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       | 4    |       |       | 12    |      |      |      |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97 | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph)         | 82    | 940   | 0    | 0    | 1102  | 51   | 91    | 311   | 203   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      | 10%   |       |       |      |      |      |
| Lane Group Flow (vph)   | 82    | 940   | 0    | 0    | 1153  | 0    | 82    | 320   | 203   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 26.0  |      |      | 26.0  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (s)         | 15.0  | 104.0 |      |      | 89.0  |      | 31.0  | 31.0  | 31.0  |      |      |      |
| Total Split (%)         | 11.1% | 77.0% |      |      | 65.9% |      | 23.0% | 23.0% | 23.0% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 99.0  | 99.0  |      |      | 86.8  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Actuated g/C Ratio      | 0.73  | 0.73  |      |      | 0.64  |      | 0.19  | 0.19  | 0.19  |      |      |      |
| v/c Ratio               | 0.25  | 0.36  |      |      | 0.52  |      | 0.26  | 0.94  | 0.56  |      |      |      |
| Control Delay           | 3.5   | 1.5   |      |      | 6.7   |      | 63.0  | 102.6 | 28.7  |      |      |      |
| Queue Delay             | 0.0   | 0.0   |      |      | 0.3   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Delay             | 3.5   | 1.6   |      |      | 7.0   |      | 63.0  | 102.6 | 28.7  |      |      |      |
| LOS                     | A     | A     |      |      | A     |      | E     | F     | C     |      |      |      |
| Approach Delay          |       | 1.7   |      |      | 7.0   |      |       | 72.4  |       |      |      |      |
| Approach LOS            |       | A     |      |      | A     |      |       | E     |       |      |      |      |
| Queue Length 50th (ft)  | 4     | 22    |      |      | 100   |      | 70    | 303   | 50    |      |      |      |
| Queue Length 95th (ft)  | 11    | 25    |      |      | 120   |      | m118  | #495  | m0    |      |      |      |
| Internal Link Dist (ft) |       | 321   |      |      | 665   |      |       | 350   |       |      | 106  |      |
| Turn Bay Length (ft)    | 120   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 351   | 2595  |      |      | 2232  |      | 313   | 340   | 363   |      |      |      |
| Starvation Cap Reductn  | 0     | 308   |      |      | 424   |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.23  | 0.41  |      |      | 0.64  |      | 0.26  | 0.94  | 0.56  |      |      |      |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green  
Natural Cycle: 60

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay: 19.3

Intersection LOS: B

Intersection Capacity Utilization 74.2%

ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.













m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Trinity St & Martin Luther King Jr. Blvd



18: Guadalupe St & E. 17th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

|  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group   | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations  |   | ↑   | ↑   |   |   |   |   |   |   |   | ↑↑  |   |
| Traffic Volume (vph)                                       | 0   | 57  | 33  | 0   | 0   | 0   | 0   | 0   | 0   | 76  | 944   | 0   |
| Future Volume (vph)  | 0   | 57  | 33  | 0   | 0   | 0   | 0   | 0   | 0   | 76  | 944   | 0   |
| Confl. Peds. (#/hr)  |   |   | 64  |   |   |   |   |   |   |   | 41  |   |
| Confl. Bikes (#/hr)  |   |   |   |   |   |   |   |   | 2   |   |   |   |
| Peak Hour Factor   | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  |
| Parking (#/hr)   |   | 0   |   |   |   |   |   |   |   |   |   |   |
| Adj. Flow (vph)  | 0   | 59  | 34  | 0   | 0   | 0   | 0   | 0   | 0   | 79  | 983   | 0   |
| Shared Lane Traffic (%)                                    |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)                                      | 0   | 59  | 34  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1062  | 0   |
| Turn Type  | NA  | Perm  |   |   |   |   |   |   |   | Perm  | NA  |   |
| Protected Phases   |   | 4 12  |   |   |   |   |   |   |   |   | 2 10  |   |
| Permitted Phases   |   |   | 4 12  |   |   |   |   |   |   | 2 10  |   |   |
| Detector Phase   |   | 4 12  | 4 12  |   |   |   |   |   |   | 2 10  | 2 10  |   |
| Switch Phase   |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (%)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Yellow Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| All-Red Time (s)   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lost Time Adjust (s)                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Lost Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead/Lag   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?   |   |   |   |   |   |   |   |   |   |   |   |   |
| Recall Mode  |   |   |   |   |   |   |   |   |   |   |   |   |
| Act Effect Green (s)                                       |   | 31.2  | 31.2  |   |   |   |   |   |   |   | 91.8  |   |
| Actuated g/C Ratio   |   | 0.23  | 0.23  |   |   |   |   |   |   |   | 0.68  |   |
| v/c Ratio  |   | 0.15  | 0.09  |   |   |   |   |   |   |   | 0.44  |   |
| Control Delay  |   | 24.9  | 0.4   |   |   |   |   |   |   |   | 6.7   |   |
| Queue Delay  |   | 0.0   | 0.0   |   |   |   |   |   |   |   | 0.0   |   |
| Total Delay  |   | 24.9  | 0.4   |   |   |   |   |   |   |   | 6.7   |   |
| LOS  |   | C   | A   |   |   |   |   |   |   |   | A   |   |
| Approach Delay   |   | 16.0  |   |   |   |   |   |   |   |   | 6.7   |   |
| Approach LOS   |   | B   |   |   |   |   |   |   |   |   | A   |   |
| Queue Length 50th (ft)                                     |   | 28  | 0   |   |   |   |   |   |   |   | 106   |   |
| Queue Length 95th (ft)                                     |   | 51  | 1   |   |   |   |   |   |   |   | 130   |   |
| Internal Link Dist (ft)                                    |   | 177   |   |   | 244   |   |   | 271   |   |   | 262   |   |
| Turn Bay Length (ft)                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Base Capacity (vph)  |   | 528   | 514   |   |   |   |   |   |   |   | 2397  |   |
| Starvation Cap Reductn                                     |   | 0   | 0   |   |   |   |   |   |   |   | 0   |   |
| Spillback Cap Reductn                                      |   | 0   | 0   |   |   |   |   |   |   |   | 0   |   |
| Storage Cap Reductn  |   | 0   | 0   |   |   |   |   |   |   |   | 0   |   |
| Reduced v/c Ratio  |   | 0.11  | 0.07  |   |   |   |   |   |   |   | 0.44  |   |
| <b>Intersection Summary</b>                                |   |   |   |   |   |   |   |   |   |   |   |   |
| Cycle Length: 135  |   |   |   |   |   |   |   |   |   |   |   |   |
| Actuated Cycle Length: 135                                 |   |   |   |   |   |   |   |   |   |   |   |   |
| Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green |   |   |   |   |   |   |   |   |   |   |   |   |

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18: Guadalupe St & E. 17th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Lane Group                  | 02    | 04   | 010  | 012  |
|-----------------------------|-------|------|------|------|
| Lane Configurations         |       |      |      |      |
| Traffic Volume (vph)        |       |      |      |      |
| Future Volume (vph)         |       |      |      |      |
| Confl. Peds. (#/hr)         |       |      |      |      |
| Confl. Bikes (#/hr)         |       |      |      |      |
| Peak Hour Factor            |       |      |      |      |
| Parking (#/hr)              |       |      |      |      |
| Adj. Flow (vph)             |       |      |      |      |
| Shared Lane Traffic (%)     |       |      |      |      |
| Lane Group Flow (vph)       |       |      |      |      |
| Turn Type                   |       |      |      |      |
| Protected Phases            | 2     | 4    | 10   | 12   |
| Permitted Phases            |       |      |      |      |
| Detector Phase              |       |      |      |      |
| Switch Phase                |       |      |      |      |
| Minimum Initial (s)         | 15.0  | 15.0 | 15.0 | 15.0 |
| Minimum Split (s)           | 21.0  | 21.0 | 21.0 | 21.0 |
| Total Split (s)             | 56.0  | 29.0 | 24.0 | 26.0 |
| Total Split (%)             | 41%   | 21%  | 18%  | 19%  |
| Yellow Time (s)             | 4.0   | 4.0  | 4.0  | 4.0  |
| All-Red Time (s)            | 2.0   | 2.0  | 2.0  | 2.0  |
| Lost Time Adjust (s)        |       |      |      |      |
| Total Lost Time (s)         |       |      |      |      |
| Lead/Lag                    | Lead  | Lag  |      |      |
| Lead-Lag Optimize?          | Yes   | Yes  |      |      |
| Recall Mode                 | C-Max | None | None | None |
| Act Effect Green (s)        |       |      |      |      |
| Actuated g/C Ratio          |       |      |      |      |
| v/c Ratio                   |       |      |      |      |
| Control Delay               |       |      |      |      |
| Queue Delay                 |       |      |      |      |
| Total Delay                 |       |      |      |      |
| LOS                         |       |      |      |      |
| Approach Delay              |       |      |      |      |
| Approach LOS                |       |      |      |      |
| Queue Length 50th (ft)      |       |      |      |      |
| Queue Length 95th (ft)      |       |      |      |      |
| Internal Link Dist (ft)     |       |      |      |      |
| Turn Bay Length (ft)        |       |      |      |      |
| Base Capacity (vph)         |       |      |      |      |
| Starvation Cap Reductn      |       |      |      |      |
| Spillback Cap Reductn       |       |      |      |      |
| Storage Cap Reductn         |       |      |      |      |
| Reduced v/c Ratio           |       |      |      |      |
| <b>Intersection Summary</b> |       |      |      |      |

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18: Guadalupe St & E. 17th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.44

Intersection Signal Delay: 7.5

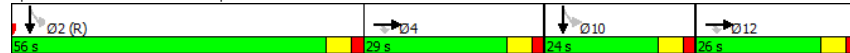
Intersection LOS: A

Intersection Capacity Utilization 50.8%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 18: Guadalupe St & E. 17th St



19: Lavaca St & E. 17th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

|                         | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations     |      | ↑    |      |      |      |      |      | ↑↑↑  |      |      |      |      |
| Traffic Volume (vph)    | 30   | 125  | 0    | 0    | 0    | 0    | 0    | 960  | 149  | 0    | 0    | 0    |
| Future Volume (vph)     | 30   | 125  | 0    | 0    | 0    | 0    | 0    | 960  | 149  | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 32   |      |      |      |      |      |      |      | 44   |      |      |      |
| Peak Hour Factor        | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Parking (#/hr)          |      | 0    |      |      |      |      |      |      |      |      |      |      |
| Adj. Flow (vph)         | 33   | 136  | 0    | 0    | 0    | 0    | 0    | 1043 | 162  | 0    | 0    | 0    |
| Shared Lane Traffic (%) |      |      |      |      |      |      |      |      |      |      |      |      |
| Lane Group Flow (vph)   | 0    | 169  | 0    | 0    | 0    | 0    | 0    | 1205 | 0    | 0    | 0    | 0    |
| Turn Type               | Perm | NA   |      |      |      |      |      | NA   |      |      |      |      |
| Protected Phases        |      | 4 12 |      |      |      |      |      | 2 10 |      |      |      |      |
| Permitted Phases        | 4 12 |      |      |      |      |      |      |      |      |      |      |      |
| Detector Phase          | 4 12 | 4 12 |      |      |      |      |      | 2 10 |      |      |      |      |
| Switch Phase            |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Initial (s)     |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Split (s)       |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (s)         |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (%)         |      |      |      |      |      |      |      |      |      |      |      |      |
| Yellow Time (s)         |      |      |      |      |      |      |      |      |      |      |      |      |
| All-Red Time (s)        |      |      |      |      |      |      |      |      |      |      |      |      |
| Lost Time Adjust (s)    |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Lost Time (s)     |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead/Lag                |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead-Lag Optimize?      |      |      |      |      |      |      |      |      |      |      |      |      |
| Recall Mode             |      |      |      |      |      |      |      |      |      |      |      |      |
| Act Effect Green (s)    |      | 25.1 |      |      |      |      |      | 85.9 |      |      |      |      |
| Actuated g/C Ratio      |      | 0.19 |      |      |      |      |      | 0.64 |      |      |      |      |
| v/c Ratio               |      | 0.47 |      |      |      |      |      | 0.31 |      |      |      |      |
| Control Delay           |      | 20.9 |      |      |      |      |      | 9.5  |      |      |      |      |
| Queue Delay             |      | 0.0  |      |      |      |      |      | 0.0  |      |      |      |      |
| Total Delay             |      | 20.9 |      |      |      |      |      | 9.5  |      |      |      |      |
| LOS                     |      | C    |      |      |      |      |      | A    |      |      |      |      |
| Approach Delay          |      | 20.9 |      |      |      |      |      | 9.5  |      |      |      |      |
| Approach LOS            |      | C    |      |      |      |      |      | A    |      |      |      |      |
| Queue Length 50th (ft)  |      | 46   |      |      |      |      |      | 121  |      |      |      |      |
| Queue Length 95th (ft)  |      | 65   |      |      |      |      |      | 89   |      |      |      |      |
| Internal Link Dist (ft) |      | 244  |      |      | 319  |      |      | 272  |      |      | 254  |      |
| Turn Bay Length (ft)    |      |      |      |      |      |      |      |      |      |      |      |      |
| Base Capacity (vph)     |      | 578  |      |      |      |      |      | 4048 |      |      |      |      |
| Starvation Cap Reductn  |      | 2    |      |      |      |      |      | 818  |      |      |      |      |
| Spillback Cap Reductn   |      | 0    |      |      |      |      |      | 0    |      |      |      |      |
| Storage Cap Reductn     |      | 0    |      |      |      |      |      | 0    |      |      |      |      |
| Reduced v/c Ratio       |      | 0.29 |      |      |      |      |      | 0.37 |      |      |      |      |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green

Natural Cycle: 100

19: Lavaca St & E. 17th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 26.0  | 28.0 | 23.0 | 23.0 |
| Total Split (s)         | 54.0  | 28.0 | 25.0 | 28.0 |
| Total Split (%)         | 40%   | 21%  | 19%  | 21%  |
| Yellow Time (s)         | 4.0   | 4.0  | 4.0  | 4.0  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effect Green (s)    |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

19: Lavaca St & E. 17th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.47

Intersection Signal Delay: 10.9

Intersection LOS: B

Intersection Capacity Utilization 39.4%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 19: Lavaca St & E. 17th St



28: Lavaca St & E. 16th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Lane Group   | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |  |  |  |
|--|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|
| Lane Configurations  |      |      |      |      |      |      |      |      |      |      |      |      |  |  |  |
| Traffic Volume (vph)                                       | 0    | 0    | 0    | 0    | 77   | 48   | 69   | 1079 | 0    | 0    | 0    | 0    |  |  |  |
| Future Volume (vph)  | 0    | 0    | 0    | 0    | 77   | 48   | 69   | 1079 | 0    | 0    | 0    | 0    |  |  |  |
| Confl. Peds. (#/hr)  |      |      |      |      |      | 157  | 82   |      |      |      |      |      |  |  |  |
| Confl. Bikes (#/hr)  |      |      |      |      |      | 2    |      |      |      |      |      |      |  |  |  |
| Peak Hour Factor   | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |  |  |  |
| Parking (#/hr)   |      |      |      |      | 0    |      |      |      |      |      |      |      |  |  |  |
| Adj. Flow (vph)  | 0    | 0    | 0    | 0    | 81   | 51   | 73   | 1136 | 0    | 0    | 0    | 0    |  |  |  |
| Shared Lane Traffic (%)                                    |      |      |      |      |      |      |      |      |      |      |      |      |  |  |  |
| Lane Group Flow (vph)                                      | 0    | 0    | 0    | 0    | 132  | 0    | 0    | 1209 | 0    | 0    | 0    | 0    |  |  |  |
| Turn Type  |      |      |      |      | NA   |      | Perm | NA   |      |      |      |      |  |  |  |
| Protected Phases   |      |      |      |      | 4 12 |      |      | 2 10 |      |      |      |      |  |  |  |
| Permitted Phases   |      |      |      |      |      |      |      | 2 10 |      |      |      |      |  |  |  |
| Detector Phase   |      |      |      |      | 4 12 |      |      | 2 10 |      |      |      |      |  |  |  |
| Switch Phase   |      |      |      |      |      |      |      |      |      |      |      |      |  |  |  |
| Minimum Initial (s)  |      |      |      |      |      |      |      |      |      |      |      |      |  |  |  |
| Minimum Split (s)  |      |      |      |      |      |      |      |      |      |      |      |      |  |  |  |
| Total Split (s)  |      |      |      |      |      |      |      |      |      |      |      |      |  |  |  |
| Total Split (%)  |      |      |      |      |      |      |      |      |      |      |      |      |  |  |  |
| Yellow Time (s)  |      |      |      |      |      |      |      |      |      |      |      |      |  |  |  |
| All-Red Time (s)   |      |      |      |      |      |      |      |      |      |      |      |      |  |  |  |
| Lost Time Adjust (s)                                       |      |      |      |      |      |      |      |      |      |      |      |      |  |  |  |
| Total Lost Time (s)  |      |      |      |      |      |      |      |      |      |      |      |      |  |  |  |
| Lead/Lag   |      |      |      |      |      |      |      |      |      |      |      |      |  |  |  |
| Lead-Lag Optimize?   |      |      |      |      |      |      |      |      |      |      |      |      |  |  |  |
| Recall Mode  |      |      |      |      |      |      |      |      |      |      |      |      |  |  |  |
| Act Effct Green (s)  |      |      |      |      | 22.5 |      |      | 88.5 |      |      |      |      |  |  |  |
| Actuated g/C Ratio   |      |      |      |      | 0.17 |      |      | 0.66 |      |      |      |      |  |  |  |
| v/c Ratio  |      |      |      |      | 0.51 |      |      | 0.29 |      |      |      |      |  |  |  |
| Control Delay  |      |      |      |      | 31.2 |      |      | 5.7  |      |      |      |      |  |  |  |
| Queue Delay  |      |      |      |      | 0.0  |      |      | 0.2  |      |      |      |      |  |  |  |
| Total Delay  |      |      |      |      | 31.2 |      |      | 5.9  |      |      |      |      |  |  |  |
| LOS  |      |      |      |      | C    |      |      | A    |      |      |      |      |  |  |  |
| Approach Delay   |      |      |      |      | 31.2 |      |      | 5.9  |      |      |      |      |  |  |  |
| Approach LOS   |      |      |      |      | C    |      |      | A    |      |      |      |      |  |  |  |
| Queue Length 50th (ft)                                     |      |      |      |      | 63   |      |      | 98   |      |      |      |      |  |  |  |
| Queue Length 95th (ft)                                     |      |      |      |      | 98   |      |      | 86   |      |      |      |      |  |  |  |
| Internal Link Dist (ft)                                    |      | 233  |      |      | 336  |      |      | 281  |      |      |      | 272  |  |  |  |
| Turn Bay Length (ft)                                       |      |      |      |      |      |      |      |      |      |      |      |      |  |  |  |
| Base Capacity (vph)  |      |      |      |      | 484  |      |      | 4217 |      |      |      |      |  |  |  |
| Starvation Cap Reductn                                     |      |      |      |      | 0    |      |      | 1854 |      |      |      |      |  |  |  |
| Spillback Cap Reductn                                      |      |      |      |      | 0    |      |      | 0    |      |      |      |      |  |  |  |
| Storage Cap Reductn  |      |      |      |      | 0    |      |      | 0    |      |      |      |      |  |  |  |
| Reduced v/c Ratio  |      |      |      |      | 0.27 |      |      | 0.51 |      |      |      |      |  |  |  |
| <b>Intersection Summary</b>                                |      |      |      |      |      |      |      |      |      |      |      |      |  |  |  |
| Cycle Length: 135  |      |      |      |      |      |      |      |      |      |      |      |      |  |  |  |
| Actuated Cycle Length: 135                                 |      |      |      |      |      |      |      |      |      |      |      |      |  |  |  |
| Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green |      |      |      |      |      |      |      |      |      |      |      |      |  |  |  |

28: Lavaca St & E. 16th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Lane Group                  | Ø2    | Ø4   | Ø10  | Ø12  |
|-----------------------------|-------|------|------|------|
| Lane Configurations         |       |      |      |      |
| Traffic Volume (vph)        |       |      |      |      |
| Future Volume (vph)         |       |      |      |      |
| Confl. Peds. (#/hr)         |       |      |      |      |
| Confl. Bikes (#/hr)         |       |      |      |      |
| Peak Hour Factor            |       |      |      |      |
| Parking (#/hr)              |       |      |      |      |
| Adj. Flow (vph)             |       |      |      |      |
| Shared Lane Traffic (%)     |       |      |      |      |
| Lane Group Flow (vph)       |       |      |      |      |
| Turn Type                   |       |      |      |      |
| Protected Phases            | 2     | 4    | 10   | 12   |
| Permitted Phases            |       |      |      |      |
| Detector Phase              |       |      |      |      |
| Switch Phase                |       |      |      |      |
| Minimum Initial (s)         | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)           | 28.0  | 32.0 | 21.0 | 23.0 |
| Total Split (s)             | 55.0  | 32.0 | 24.0 | 24.0 |
| Total Split (%)             | 41%   | 24%  | 18%  | 18%  |
| Yellow Time (s)             | 4.0   | 4.0  | 4.0  | 4.0  |
| All-Red Time (s)            | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)        |       |      |      |      |
| Total Lost Time (s)         |       |      |      |      |
| Lead/Lag                    |       |      |      |      |
| Lead-Lag Optimize?          |       |      |      |      |
| Recall Mode                 | C-Max | None | None | None |
| Act Effct Green (s)         |       |      |      |      |
| Actuated g/C Ratio          |       |      |      |      |
| v/c Ratio                   |       |      |      |      |
| Control Delay               |       |      |      |      |
| Queue Delay                 |       |      |      |      |
| Total Delay                 |       |      |      |      |
| LOS                         |       |      |      |      |
| Approach Delay              |       |      |      |      |
| Approach LOS                |       |      |      |      |
| Queue Length 50th (ft)      |       |      |      |      |
| Queue Length 95th (ft)      |       |      |      |      |
| Internal Link Dist (ft)     |       |      |      |      |
| Turn Bay Length (ft)        |       |      |      |      |
| Base Capacity (vph)         |       |      |      |      |
| Starvation Cap Reductn      |       |      |      |      |
| Spillback Cap Reductn       |       |      |      |      |
| Storage Cap Reductn         |       |      |      |      |
| Reduced v/c Ratio           |       |      |      |      |
| <b>Intersection Summary</b> |       |      |      |      |

28: Lavaca St & E. 16th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

Natural Cycle: 105

Control Type: Actuated-Coordinated

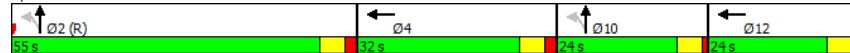
Maximum v/c Ratio: 0.51

Intersection Signal Delay: 8.4 Intersection LOS: A

Intersection Capacity Utilization 48.3% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 28: Lavaca St & E. 16th St



34: Guadalupe St & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

|                         | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑↑   |      | ↑     | ↑↑↑   |      |      |      |      |       | ↑↑↑   | ↑     |
| Traffic Volume (vph)    | 0    | 837   | 91   | 204   | 1640  | 0    | 0    | 0    | 0    | 143   | 808   | 257   |
| Future Volume (vph)     | 0    | 837   | 91   | 204   | 1640  | 0    | 0    | 0    | 0    | 143   | 808   | 257   |
| Confl. Peds. (#/hr)     |      |       | 17   | 17    |       |      |      |      |      | 19    |       | 26    |
| Confl. Bikes (#/hr)     |      |       |      |       |       |      |      |      |      |       |       | 26    |
| Peak Hour Factor        | 0.86 | 0.86  | 0.86 | 0.86  | 0.86  | 0.86 | 0.86 | 0.86 | 0.86 | 0.86  | 0.86  | 0.86  |
| Adj. Flow (vph)         | 0    | 973   | 106  | 237   | 1907  | 0    | 0    | 0    | 0    | 166   | 940   | 299   |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 1079  | 0    | 237   | 1907  | 0    | 0    | 0    | 0    | 0     | 1106  | 299   |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1 3   | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1 3   | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      |       | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       |      | 25.0  |      |       | 25.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (s)         |      | 58.0  |      |       | 88.0  |      |      |      |      | 47.0  | 47.0  | 47.0  |
| Total Split (%)         |      | 43.0% |      |       | 65.2% |      |      |      |      | 34.8% | 34.8% | 34.8% |
| Yellow Time (s)         |      | 4.0   |      |       | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      |       | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      |       | 0.0   |      |      |      |      |       | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      |       | 5.0   |      |      |      |      |       | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      |       |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      |       |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      |       | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effect Green (s)    |      | 53.1  |      | 83.0  | 83.0  |      |      |      |      |       | 42.0  | 42.0  |
| Actuated g/C Ratio      |      | 0.39  |      | 0.61  | 0.61  |      |      |      |      |       | 0.31  | 0.31  |
| v/c Ratio               |      | 0.55  |      | 0.59  | 0.61  |      |      |      |      |       | 0.71  | 0.57  |
| Control Delay           |      | 32.5  |      | 20.0  | 7.5   |      |      |      |      |       | 40.3  | 27.3  |
| Queue Delay             |      | 0.0   |      | 3.5   | 0.2   |      |      |      |      |       | 0.0   | 0.0   |
| Total Delay             |      | 32.5  |      | 23.4  | 7.7   |      |      |      |      |       | 40.3  | 27.3  |
| LOS                     |      | C     |      | C     | A     |      |      |      |      |       | D     | C     |
| Approach Delay          |      | 32.5  |      |       | 9.4   |      |      |      |      |       | 37.5  |       |
| Approach LOS            |      | C     |      |       | A     |      |      |      |      |       | D     |       |
| Queue Length 50th (ft)  |      | 262   |      | 46    | 127   |      |      |      |      |       | 265   | 127   |
| Queue Length 95th (ft)  |      | 290   |      | m111  | 131   |      |      |      |      |       | 287   | 185   |
| Internal Link Dist (ft) |      | 262   |      |       | 240   |      |      | 197  |      |       | 285   |       |
| Turn Bay Length (ft)    |      |       |      | 50    |       |      |      |      |      |       |       | 100   |
| Base Capacity (vph)     |      | 1969  |      | 401   | 3126  |      |      |      |      |       | 1564  | 526   |
| Starvation Cap Reductn  |      | 0     |      | 91    | 386   |      |      |      |      |       | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      |       | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      |       | 0     | 0     |
| Reduced v/c Ratio       |      | 0.55  |      | 0.76  | 0.70  |      |      |      |      |       | 0.71  | 0.57  |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 80

34: Guadalupe St & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Lane Group              | Ø1   | Ø3   |
|-------------------------|------|------|
| Lane Configurations     |      |      |
| Traffic Volume (vph)    |      |      |
| Future Volume (vph)     |      |      |
| Confl. Peds. (#/hr)     |      |      |
| Confl. Bikes (#/hr)     |      |      |
| Peak Hour Factor        |      |      |
| Adj. Flow (vph)         |      |      |
| Shared Lane Traffic (%) |      |      |
| Lane Group Flow (vph)   |      |      |
| Turn Type               |      |      |
| Protected Phases        | 1    | 3    |
| Permitted Phases        |      |      |
| Detector Phase          |      |      |
| Switch Phase            |      |      |
| Minimum Initial (s)     | 5.0  | 8.0  |
| Minimum Split (s)       | 10.0 | 13.0 |
| Total Split (s)         | 15.0 | 15.0 |
| Total Split (%)         | 11%  | 11%  |
| Yellow Time (s)         | 4.0  | 4.0  |
| All-Red Time (s)        | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |
| Total Lost Time (s)     |      |      |
| Lead/Lag                | Lead |      |
| Lead-Lag Optimize?      | Yes  |      |
| Recall Mode             | Min  | None |
| Act Effect Green (s)    |      |      |
| Actuated g/C Ratio      |      |      |
| v/c Ratio               |      |      |
| Control Delay           |      |      |
| Queue Delay             |      |      |
| Total Delay             |      |      |
| LOS                     |      |      |
| Approach Delay          |      |      |
| Approach LOS            |      |      |
| Queue Length 50th (ft)  |      |      |
| Queue Length 95th (ft)  |      |      |
| Internal Link Dist (ft) |      |      |
| Turn Bay Length (ft)    |      |      |
| Base Capacity (vph)     |      |      |
| Starvation Cap Reductn  |      |      |
| Spillback Cap Reductn   |      |      |
| Storage Cap Reductn     |      |      |
| Reduced v/c Ratio       |      |      |
| Intersection Summary    |      |      |

34: Guadalupe St & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 23.3

Intersection LOS: C

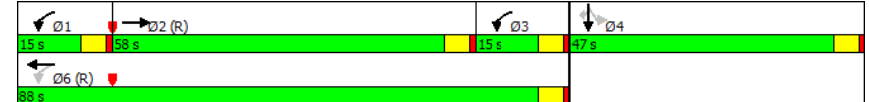
Intersection Capacity Utilization 71.9%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 34: Guadalupe St & W. 15th St



## 35: Lavaca St &amp; W. 15th St

## TIA for Texas Capital Complex Master Plan 2018 Update

## Existing Conditions

Timing Plan: PM

|                         | ←     | →     | ↙    | ↘    | ←     | ↙    | ↘     | ↑     | ↗    | ↖    | ↓    | ↘    | ↖ |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|------|------|------|------|---|
| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR  | SBL  | SBT  | SBR  |   |
| Lane Configurations     | ↙ ↘ ↘ | ↙ ↘ ↘ |      |      | ↙ ↘ ↘ |      |       | ↙ ↘ ↘ |      |      |      |      |   |
| Traffic Volume (vph)    | 85    | 865   | 0    | 0    | 1543  | 63   | 370   | 828   | 151  | 0    | 0    | 0    |   |
| Future Volume (vph)     | 85    | 865   | 0    | 0    | 1543  | 63   | 370   | 828   | 151  | 0    | 0    | 0    |   |
| Confl. Peds. (#/hr)     | 45    |       |      |      |       | 45   | 29    |       | 17   |      |      |      |   |
| Confl. Bikes (#/hr)     |       |       | 2    |      |       |      |       |       | 26   |      |      |      |   |
| Peak Hour Factor        | 0.90  | 0.90  | 0.90 | 0.90 | 0.90  | 0.90 | 0.90  | 0.90  | 0.90 | 0.90 | 0.90 | 0.90 |   |
| Adj. Flow (vph)         | 94    | 961   | 0    | 0    | 1714  | 70   | 411   | 920   | 168  | 0    | 0    | 0    |   |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       |      |      |      |      |   |
| Lane Group Flow (vph)   | 94    | 961   | 0    | 0    | 1784  | 0    | 0     | 1499  | 0    | 0    | 0    | 0    |   |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    |      |      |      |      |   |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |      |      |      |      |   |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       |      |      |      |      |   |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     |      |      |      |      |   |
| Switch Phase            |       |       |      |      |       |      |       |       |      |      |      |      |   |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   |      |      |      |      |   |
| Minimum Split (s)       | 8.0   | 28.0  |      |      | 28.0  |      | 33.0  | 33.0  |      |      |      |      |   |
| Total Split (s)         | 20.0  | 86.0  |      |      | 66.0  |      | 49.0  | 49.0  |      |      |      |      |   |
| Total Split (%)         | 14.8% | 63.7% |      |      | 48.9% |      | 36.3% | 36.3% |      |      |      |      |   |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   |      |      |      |      |   |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 2.0   | 2.0   |      |      |      |      |   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   |      |      |      |      |   |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 6.0   | 6.0   |      |      |      |      |   |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |      |      |      |      |   |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |      |      |      |      |   |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   |      |      |      |      |   |
| Act Effect Green (s)    | 81.0  | 81.0  |      |      | 67.0  |      |       | 43.0  |      |      |      |      |   |
| Actuated g/C Ratio      | 0.60  | 0.60  |      |      | 0.50  |      |       | 0.32  |      |      |      |      |   |
| v/c Ratio               | 0.54  | 0.31  |      |      | 0.71  |      |       | 0.77  |      |      |      |      |   |
| Control Delay           | 57.9  | 3.5   |      |      | 12.8  |      |       | 43.8  |      |      |      |      |   |
| Queue Delay             | 0.0   | 0.1   |      |      | 0.0   |      |       | 0.0   |      |      |      |      |   |
| Total Delay             | 57.9  | 3.7   |      |      | 12.8  |      |       | 43.8  |      |      |      |      |   |
| LOS                     | E     | A     |      |      | B     |      |       | D     |      |      |      |      |   |
| Approach Delay          |       | 8.5   |      |      | 12.8  |      |       | 43.8  |      |      |      |      |   |
| Approach LOS            |       | A     |      |      | B     |      |       | D     |      |      |      |      |   |
| Queue Length 50th (ft)  | 47    | 46    |      |      | 144   |      |       | 338   |      |      |      |      |   |
| Queue Length 95th (ft)  | m104  | 53    |      |      | 156   |      |       | 384   |      |      |      |      |   |
| Internal Link Dist (ft) |       | 240   |      |      | 335   |      |       | 116   |      |      | 281  |      |   |
| Turn Bay Length (ft)    | 50    |       |      |      |       |      |       |       |      |      |      |      |   |
| Base Capacity (vph)     | 247   | 3051  |      |      | 2504  |      |       | 1959  |      |      |      |      |   |
| Starvation Cap Reductn  | 0     | 836   |      |      | 11    |      |       | 0     |      |      |      |      |   |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      |       | 0     |      |      |      |      |   |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      |       | 0     |      |      |      |      |   |
| Reduced v/c Ratio       | 0.38  | 0.43  |      |      | 0.72  |      |       | 0.77  |      |      |      |      |   |

## Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 70

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## 35: Lavaca St &amp; W. 15th St

## TIA for Texas Capital Complex Master Plan 2018 Update

## Existing Conditions

Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 22.5

Intersection LOS: C

Intersection Capacity Utilization 71.9%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 35: Lavaca St &amp; W. 15th St



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






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## 36: Colorado St &amp; W. 15th St

## TIA for Texas Capital Complex Master Plan 2018 Update

## Existing Conditions

Timing Plan: PM

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     |  |  |   |  |  |   |   |  |   |   |  |  |
| Traffic Volume (vph)    | 26  | 1019  | 20  | 21  | 1320  | 13  | 8   | 25  | 104   | 122   | 6   | 257   |
| Future Volume (vph)     | 26  | 1019  | 20  | 21  | 1320  | 13  | 8   | 25  | 104   | 122   | 6   | 257   |
| Confl. Peds. (#/hr)     | 31  |   | 33  | 33  |   | 31  | 92  |   | 6   | 6   |   | 92  |
| Confl. Bikes (#/hr)     |   |   | 1   |   |   | 2   |   |   | 2   |   |   | 1   |
| Peak Hour Factor        | 0.87  | 0.87  | 0.87  | 0.87  | 0.87  | 0.87  | 0.87  | 0.87  | 0.87  | 0.87  | 0.87  | 0.87  |
| Adj. Flow (vph)         | 30  | 1171  | 23  | 24  | 1517  | 15  | 9   | 29  | 120   | 140   | 7   | 295   |
| Shared Lane Traffic (%) |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)   | 30  | 1194  | 0   | 24  | 1532  | 0   | 0   | 158   | 0   | 0   | 147   | 295   |
| Turn Type               | pm+pt   | NA  |   | pm+pt   | NA  |   | Perm  | NA  |   | Perm  | NA  | Perm  |
| Protected Phases        | 5   | 2   |   | 1   | 6   |   |   | 4   |   |   | 8   |   |
| Permitted Phases        | 2   |   |   | 6   |   |   | 4   |   |   | 8   |   | 8   |
| Detector Phase          | 5   | 2   |   | 1   | 6   |   | 4   | 4   |   | 8   | 8   | 8   |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     | 5.0   | 15.0  |   | 5.0   | 15.0  |   | 5.0   | 5.0   |   | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       | 10.0  | 20.0  |   | 10.0  | 22.0  |   | 36.0  | 36.0  |   | 10.0  | 10.0  | 10.0  |
| Total Split (s)         | 10.0  | 79.0  |   | 10.0  | 79.0  |   | 46.0  | 46.0  |   | 46.0  | 46.0  | 46.0  |
| Total Split (%)         | 7.4%  | 58.5%   |   | 7.4%  | 58.5%   |   | 34.1%   | 34.1%   |   | 34.1%   | 34.1%   | 34.1%   |
| Yellow Time (s)         | 4.0   | 4.0   |   | 4.0   | 4.0   |   | 4.0   | 4.0   |   | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |   | 1.0   | 1.0   |   | 1.0   | 1.0   |   | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |   | 0.0   | 0.0   |   |   | 0.0   |   |   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   | 5.0   |   | 5.0   | 5.0   |   |   | 5.0   |   |   | 5.0   | 5.0   |
| Lead/Lag                | Lead  | Lag   |   | Lead  | Lag   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?      | Yes   | Yes   |   | Yes   | Yes   |   |   |   |   |   |   |   |
| Recall Mode             | None  | C-Max   |   | None  | C-Max   |   | Max   | Max   |   | Max   | Max   | Max   |
| Act Effect Green (s)    | 81.0  | 78.0  |   | 81.0  | 78.0  |   |   | 41.0  |   |   | 41.0  | 41.0  |
| Actuated g/C Ratio      | 0.60  | 0.58  |   | 0.60  | 0.58  |   |   | 0.30  |   |   | 0.30  | 0.30  |
| v/c Ratio               | 0.16  | 0.41  |   | 0.09  | 0.52  |   |   | 0.28  |   |   | 0.47  | 0.60  |
| Control Delay           | 7.3   | 8.9   |   | 6.9   | 9.3   |   |   | 11.7  |   |   | 44.1  | 33.1  |
| Queue Delay             | 0.0   | 0.2   |   | 0.0   | 0.1   |   |   | 0.0   |   |   | 0.0   | 0.0   |
| Total Delay             | 7.3   | 9.1   |   | 6.9   | 9.4   |   |   | 11.7  |   |   | 44.1  | 33.1  |
| LOS                     | A   | A   |   | A   | A   |   |   | B   |   |   | D   | C   |
| Approach Delay          |   | 9.0   |   |   | 9.4   |   |   | 11.7  |   |   | 36.8  |   |
| Approach LOS            |   | A   |   |   | A   |   |   | B   |   |   | D   |   |
| Queue Length 50th (ft)  | 0   | 118   |   | 5   | 122   |   |   | 24  |   |   | 105   | 154   |
| Queue Length 95th (ft)  | m0  | 128   |   | m11   | 126   |   |   | 74  |   |   | 169   | 242   |
| Internal Link Dist (ft) |   | 335   |   |   | 362   |   |   | 155   |   |   | 280   |   |
| Turn Bay Length (ft)    | 90  |   |   | 90  |   |   |   |   |   |   |   | 100   |
| Base Capacity (vph)     | 183   | 2927  |   | 254   | 2931  |   |   | 571   |   |   | 314   | 493   |
| Starvation Cap Reductn  | 0   | 749   |   | 0   | 284   |   |   | 0   |   |   | 0   | 0   |
| Spillback Cap Reductn   | 0   | 0   |   | 0   | 0   |   |   | 0   |   |   | 0   | 0   |
| Storage Cap Reductn     | 0   | 0   |   | 0   | 0   |   |   | 0   |   |   | 0   | 0   |
| Reduced v/c Ratio       | 0.16  | 0.55  |   | 0.09  | 0.58  |   |   | 0.28  |   |   | 0.47  | 0.60  |

## Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 75

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## 36: Colorado St &amp; W. 15th St

## TIA for Texas Capital Complex Master Plan 2018 Update

## Existing Conditions

Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 12.9

Intersection LOS: B

Intersection Capacity Utilization 85.8%

ICU Level of Service E

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 36: Colorado St &amp; W. 15th St



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37: N. Congress Ave & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT   | NBR  | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|------|-------|-------|------|------|-------|------|-------|-------|-------|
| Lane Configurations     | ↰     | ↰↰↰   |      | ↰     | ↰↰↰   |      |      | ↰     |      |       | ↰     | ↰     |
| Traffic Volume (vph)    | 36    | 1264  | 0    | 8     | 1095  | 34   | 0    | 2     | 1    | 165   | 1     | 174   |
| Future Volume (vph)     | 36    | 1264  | 0    | 8     | 1095  | 34   | 0    | 2     | 1    | 165   | 1     | 174   |
| Confl. Peds. (#/hr)     | 16    |       | 46   | 46    |       | 16   | 38   |       | 13   | 13    |       | 38    |
| Confl. Bikes (#/hr)     |       |       |      |       |       |      |      |       | 4    |       |       | 9     |
| Peak Hour Factor        | 0.86  | 0.86  | 0.86 | 0.86  | 0.86  | 0.86 | 0.86 | 0.86  | 0.86 | 0.86  | 0.86  | 0.86  |
| Adj. Flow (vph)         | 42    | 1470  | 0    | 9     | 1273  | 40   | 0    | 2     | 1    | 192   | 1     | 202   |
| Shared Lane Traffic (%) |       |       |      |       |       |      |      |       |      |       |       |       |
| Lane Group Flow (vph)   | 42    | 1470  | 0    | 9     | 1313  | 0    | 0    | 3     | 0    | 0     | 193   | 202   |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |      | 4     |      |       | 8     |       |
| Permitted Phases        | 2     |       |      | 6     |       |      |      |       |      | 8     |       | 8     |
| Detector Phase          | 5     | 2     |      | 1     | 6     |      |      | 4     |      | 8     | 8     | 8     |
| Switch Phase            |       |       |      |       |       |      |      |       |      |       |       |       |
| Minimum Initial (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      |      | 5.0   |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       | 10.0  | 25.0  |      | 10.0  | 25.0  |      |      | 33.0  |      | 33.0  | 33.0  | 33.0  |
| Total Split (s)         | 32.0  | 92.0  |      | 10.0  | 70.0  |      |      | 33.0  |      | 33.0  | 33.0  | 33.0  |
| Total Split (%)         | 23.7% | 68.1% |      | 7.4%  | 51.9% |      |      | 24.4% |      | 24.4% | 24.4% | 24.4% |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      |      | 5.0   |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                | Lead  | Lead  |      | Lag   | Lag   |      |      |       |      |       |       |       |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |      |       |      |       |       |       |
| Recall Mode             | None  | C-Max |      | None  | Max   |      |      | Max   |      | Max   | Max   | Max   |
| Act Effect Green (s)    | 95.0  | 95.0  |      | 87.6  | 87.6  |      |      | 28.0  |      | 28.0  | 28.0  | 28.0  |
| Actuated g/C Ratio      | 0.70  | 0.70  |      | 0.65  | 0.65  |      |      | 0.21  |      | 0.21  | 0.21  | 0.21  |
| v/c Ratio               | 0.15  | 0.41  |      | 0.04  | 0.40  |      |      | 0.01  |      | 0.70  | 0.44  | 0.44  |
| Control Delay           | 4.6   | 3.5   |      | 5.8   | 8.4   |      |      | 37.7  |      | 64.5  | 8.9   | 8.9   |
| Queue Delay             | 0.0   | 0.1   |      | 0.0   | 0.2   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |
| Total Delay             | 4.6   | 3.6   |      | 5.8   | 8.6   |      |      | 37.7  |      | 64.5  | 8.9   | 8.9   |
| LOS                     | A     | A     |      | A     | A     |      |      | D     |      | E     | A     | A     |
| Approach Delay          |       | 3.6   |      |       | 8.6   |      |      | 37.7  |      |       | 36.1  |       |
| Approach LOS            |       | A     |      |       | A     |      |      | D     |      |       | D     |       |
| Queue Length 50th (ft)  | 3     | 41    |      | 3     | 221   |      |      | 1     |      | 158   | 0     | 0     |
| Queue Length 95th (ft)  | 13    | 88    |      | m2    | 276   |      |      | 10    |      | 235   | 56    | 56    |
| Internal Link Dist (ft) |       | 362   |      |       | 356   |      |      | 125   |      | 278   |       |       |
| Turn Bay Length (ft)    | 60    |       |      | 100   |       |      |      |       |      |       | 130   |       |
| Base Capacity (vph)     | 501   | 3578  |      | 246   | 3277  |      |      | 365   |      | 275   | 463   |       |
| Starvation Cap Reductn  | 0     | 660   |      | 0     | 913   |      |      | 0     |      | 0     | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |
| Reduced v/c Ratio       | 0.08  | 0.50  |      | 0.04  | 0.56  |      |      | 0.01  |      | 0.70  | 0.44  | 0.44  |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 70

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Synchro 9 Report  
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37: N. Congress Ave & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 9.7

Intersection LOS: A

Intersection Capacity Utilization 61.6%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 37: N. Congress Ave & W. 15th St



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
















Synchro 9 Report  
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## 38: Brazos St &amp; W. 15th St

## TIA for Texas Capital Complex Master Plan 2018 Update

## Existing Conditions

Timing Plan: PM

|                         |  |    |  |  |    |  |  |  |  |  |    |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     |  |    |   |  |    |   |  |  |   |   |   |   |
| Traffic Volume (vph)    | 5   | 1289  | 36  | 9   | 994   | 5   | 125   | 3   | 110   | 61  | 3   | 82  |
| Future Volume (vph)     | 5   | 1289  | 36  | 9   | 994   | 5   | 125   | 3   | 110   | 61  | 3   | 82  |
| Confl. Peds. (#/hr)     | 8   |   | 9   | 9   |   | 8   | 5   |   | 18  | 18  |   | 5   |
| Confl. Bikes (#/hr)     |   |   |   |   |   | 1   |   |   |   |   |   | 1   |
| Peak Hour Factor        | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  |
| Adj. Flow (vph)         | 5   | 1386  | 39  | 10  | 1069  | 5   | 134   | 3   | 118   | 66  | 3   | 88  |
| Shared Lane Traffic (%) |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)   | 5   | 1425  | 0   | 10  | 1074  | 0   | 134   | 121   | 0   | 0   | 157   | 0   |
| Turn Type               | pm+pt   | NA  |   | pm+pt   | NA  |   | Perm  | NA  |   | Perm  | NA  |   |
| Protected Phases        | 5   | 2   |   | 1   | 6   |   |   | 4   |   |   | 8   |   |
| Permitted Phases        | 2   |   |   | 6   |   |   | 4   |   |   | 8   |   |   |
| Detector Phase          | 5   | 2   |   | 1   | 6   |   | 4   | 4   |   | 8   | 8   |   |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     | 5.0   | 15.0  |   | 5.0   | 15.0  |   | 10.0  | 10.0  |   | 10.0  | 10.0  |   |
| Minimum Split (s)       | 10.0  | 22.0  |   | 10.0  | 22.0  |   | 32.0  | 32.0  |   | 32.0  | 32.0  |   |
| Total Split (s)         | 12.0  | 77.0  |   | 12.0  | 77.0  |   | 46.0  | 46.0  |   | 46.0  | 46.0  |   |
| Total Split (%)         | 8.9%  | 57.0%   |   | 8.9%  | 57.0%   |   | 34.1%   | 34.1%   |   | 34.1%   | 34.1%   |   |
| Yellow Time (s)         | 4.0   | 4.0   |   | 4.0   | 4.0   |   | 4.0   | 4.0   |   | 4.0   | 4.0   |   |
| All-Red Time (s)        | 1.0   | 1.0   |   | 1.0   | 1.0   |   | 1.0   | 1.0   |   | 1.0   | 1.0   |   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |   | 0.0   | 0.0   |   | 0.0   | 0.0   |   |   | 0.0   |   |
| Total Lost Time (s)     | 5.0   | 5.0   |   | 5.0   | 5.0   |   | 5.0   | 5.0   |   |   | 5.0   |   |
| Lead/Lag                | Lead  | Lead  |   | Lag   | Lag   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?      | Yes   | Yes   |   | Yes   | Yes   |   |   |   |   |   |   |   |
| Recall Mode             | None  | C-Max   |   | None  | C-Max   |   | Max   | Max   |   | Max   | Max   |   |
| Act Effect Green (s)    | 81.6  | 81.6  |   | 81.8  | 81.8  |   | 41.0  | 41.0  |   |   | 41.0  |   |
| Actuated g/C Ratio      | 0.60  | 0.60  |   | 0.61  | 0.61  |   | 0.30  | 0.30  |   |   | 0.30  |   |
| v/c Ratio               | 0.02  | 0.47  |   | 0.04  | 0.35  |   | 0.38  | 0.22  |   |   | 0.34  |   |
| Control Delay           | 6.2   | 6.6   |   | 10.9  | 11.3  |   | 41.0  | 7.3   |   |   | 27.2  |   |
| Queue Delay             | 0.0   | 0.1   |   | 0.0   | 0.2   |   | 0.0   | 0.0   |   |   | 0.0   |   |
| Total Delay             | 6.2   | 6.7   |   | 10.9  | 11.5  |   | 41.0  | 7.3   |   |   | 27.2  |   |
| LOS                     | A   | A   |   | B   | B   |   | D   | A   |   |   | C   |   |
| Approach Delay          |   | 6.7   |   |   | 11.5  |   |   | 25.0  |   |   | 27.2  |   |
| Approach LOS            |   | A   |   |   | B   |   |   | C   |   |   | C   |   |
| Queue Length 50th (ft)  | 1   | 105   |   | 2   | 108   |   | 93  | 2   |   |   | 72  |   |
| Queue Length 95th (ft)  | m2  | 94  |   | m9  | m220  |   | 156   | 48  |   |   | 136   |   |
| Internal Link Dist (ft) |   | 356   |   |   | 297   |   |   | 199   |   |   | 273   |   |
| Turn Bay Length (ft)    | 100   |   |   | 40  |   |   | 40  |   |   |   |   |   |
| Base Capacity (vph)     | 298   | 3058  |   | 242   | 3076  |   | 350   | 547   |   |   | 457   |   |
| Starvation Cap Reductn  | 0   | 532   |   | 0   | 1119  |   | 0   | 0   |   |   | 0   |   |
| Spillback Cap Reductn   | 0   | 33  |   | 0   | 106   |   | 0   | 0   |   |   | 1   |   |
| Storage Cap Reductn     | 0   | 0   |   | 0   | 0   |   | 0   | 0   |   |   | 0   |   |
| Reduced v/c Ratio       | 0.02  | 0.56  |   | 0.04  | 0.55  |   | 0.38  | 0.22  |   |   | 0.34  |   |

## Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 65

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Synchro 9 Report

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## 38: Brazos St &amp; W. 15th St

## TIA for Texas Capital Complex Master Plan 2018 Update

## Existing Conditions

Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.47

Intersection Signal Delay: 11.2

Intersection LOS: B

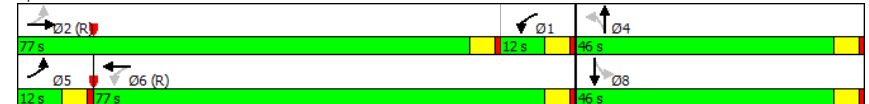
Intersection Capacity Utilization 56.6%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 38: Brazos St &amp; W. 15th St



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Synchro 9 Report

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39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

|                         | ←    | →     | ↖    | ↗     | ←     | ↖    | ↗    | →    | ↖    | ↗     | →     | ↖    | ↗ |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|------|---|
| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR  |   |
| Lane Configurations     |      | ↖↗    |      | ↖     | ↖↗    |      |      |      |      |       | ↖↗    |      |   |
| Traffic Volume (vph)    | 0    | 1521  | 108  | 62    | 782   | 0    | 0    | 0    | 0    | 252   | 564   | 258  |   |
| Future Volume (vph)     | 0    | 1521  | 108  | 62    | 782   | 0    | 0    | 0    | 0    | 252   | 564   | 258  |   |
| Confl. Peds. (#/hr)     |      |       | 11   | 11    |       |      |      |      |      | 30    |       | 5    |   |
| Confl. Bikes (#/hr)     |      |       |      |       |       |      |      |      |      |       |       | 2    |   |
| Peak Hour Factor        | 0.93 | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93 | 0.93 | 0.93 | 0.93  | 0.93  | 0.93 |   |
| Adj. Flow (vph)         | 0    | 1635  | 116  | 67    | 841   | 0    | 0    | 0    | 0    | 271   | 606   | 277  |   |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |      |   |
| Lane Group Flow (vph)   | 0    | 1751  | 0    | 67    | 841   | 0    | 0    | 0    | 0    | 0     | 1154  | 0    |   |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    |      |   |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |       | 4     |      |   |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       |      |   |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4     | 4     |      |   |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |      |   |
| Minimum Initial (s)     |      | 10.0  |      | 3.0   | 10.0  |      |      |      |      | 7.0   | 7.0   |      |   |
| Minimum Split (s)       |      | 28.0  |      | 8.0   | 28.0  |      |      |      |      | 32.0  | 32.0  |      |   |
| Total Split (s)         |      | 80.0  |      | 15.0  | 95.0  |      |      |      |      | 40.0  | 40.0  |      |   |
| Total Split (%)         |      | 59.3% |      | 11.1% | 70.4% |      |      |      |      | 29.6% | 29.6% |      |   |
| Yellow Time (s)         |      | 4.0   |      | 4.0   | 4.0   |      |      |      |      | 4.0   | 4.0   |      |   |
| All-Red Time (s)        |      | 1.0   |      | 1.0   | 1.0   |      |      |      |      | 1.0   | 1.0   |      |   |
| Lost Time Adjust (s)    |      | 0.0   |      | 0.0   | 0.0   |      |      |      |      |       | 0.0   |      |   |
| Total Lost Time (s)     |      | 5.0   |      | 5.0   | 5.0   |      |      |      |      |       | 5.0   |      |   |
| Lead/Lag                |      | Lag   |      | Lead  |       |      |      |      |      |       |       |      |   |
| Lead-Lag Optimize?      |      | Yes   |      | Yes   |       |      |      |      |      |       |       |      |   |
| Recall Mode             |      | C-Max |      | None  | C-Max |      |      |      |      | Max   | Max   |      |   |
| Act Effect Green (s)    |      | 79.9  |      | 90.0  | 90.0  |      |      |      |      |       | 35.0  |      |   |
| Actuated g/C Ratio      |      | 0.59  |      | 0.67  | 0.67  |      |      |      |      |       | 0.26  |      |   |
| v/c Ratio               |      | 0.59  |      | 0.37  | 0.25  |      |      |      |      |       | 0.90  |      |   |
| Control Delay           |      | 6.7   |      | 18.7  | 8.1   |      |      |      |      |       | 55.5  |      |   |
| Queue Delay             |      | 0.1   |      | 0.0   | 0.2   |      |      |      |      |       | 0.0   |      |   |
| Total Delay             |      | 6.7   |      | 18.7  | 8.3   |      |      |      |      |       | 55.5  |      |   |
| LOS                     |      | A     |      | B     | A     |      |      |      |      |       | E     |      |   |
| Approach Delay          |      | 6.7   |      |       | 9.1   |      |      |      |      |       | 55.5  |      |   |
| Approach LOS            |      | A     |      |       | A     |      |      |      |      |       | E     |      |   |
| Queue Length 50th (ft)  |      | 200   |      | 19    | 90    |      |      |      |      |       | 321   |      |   |
| Queue Length 95th (ft)  |      | 214   |      | 48    | 102   |      |      |      |      |       | #400  |      |   |
| Internal Link Dist (ft) |      | 297   |      |       | 282   |      |      | 125  |      |       | 272   |      |   |
| Turn Bay Length (ft)    |      |       |      | 70    |       |      |      |      |      |       |       |      |   |
| Base Capacity (vph)     |      | 2979  |      | 217   | 3390  |      |      |      |      |       | 1278  |      |   |
| Starvation Cap Reductn  |      | 178   |      | 0     | 1474  |      |      |      |      |       | 0     |      |   |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      |       | 0     |      |   |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      |       | 0     |      |   |
| Reduced v/c Ratio       |      | 0.63  |      | 0.31  | 0.44  |      |      |      |      |       | 0.90  |      |   |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 70

39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 22.0

Intersection LOS: C

Intersection Capacity Utilization 70.3%

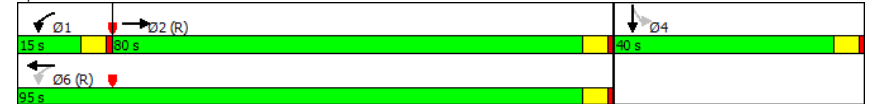
ICU Level of Service C

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 39: San Jacinto Blvd & W. 15th St



## 40: Trinity St &amp; W. 15th St

## TIA for Texas Capital Complex Master Plan 2018 Update

## Existing Conditions

Timing Plan: PM

|                         | ↖     | →     | ↗    | ↖    | ←     | ↖    | ↖     | ↑     | ↗     | ↓    | ↘    | ↘    |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
| Lane Configurations     | ↖     | ↖↖↖   |      |      | ↖↖↖   |      | ↖     | ↑     | ↖     |      |      |      |
| Traffic Volume (vph)    | 39    | 1521  | 0    | 0    | 680   | 46   | 169   | 280   | 266   | 0    | 0    | 0    |
| Future Volume (vph)     | 39    | 1521  | 0    | 0    | 680   | 46   | 169   | 280   | 266   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 2     |       |      |      |       | 2    | 7     |       | 8     |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       |      |       |       | 8     |      |      |      |
| Peak Hour Factor        | 0.96  | 0.96  | 0.96 | 0.96 | 0.96  | 0.96 | 0.96  | 0.96  | 0.96  | 0.96 | 0.96 | 0.96 |
| Adj. Flow (vph)         | 41    | 1584  | 0    | 0    | 708   | 48   | 176   | 292   | 277   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 41    | 1584  | 0    | 0    | 756   | 0    | 176   | 292   | 277   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 28.0  |      |      | 28.0  |      | 40.0  | 40.0  | 40.0  |      |      |      |
| Total Split (s)         | 10.0  | 100.0 |      |      | 90.0  |      | 35.0  | 35.0  | 35.0  |      |      |      |
| Total Split (%)         | 7.4%  | 74.1% |      |      | 66.7% |      | 25.9% | 25.9% | 25.9% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 95.0  | 95.0  |      |      | 87.0  |      | 30.0  | 30.0  | 30.0  |      |      |      |
| Actuated g/C Ratio      | 0.70  | 0.70  |      |      | 0.64  |      | 0.22  | 0.22  | 0.22  |      |      |      |
| v/c Ratio               | 0.09  | 0.44  |      |      | 0.23  |      | 0.45  | 0.71  | 0.72  |      |      |      |
| Control Delay           | 3.3   | 3.8   |      |      | 3.0   |      | 49.8  | 58.8  | 50.0  |      |      |      |
| Queue Delay             | 0.0   | 0.1   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Delay             | 3.3   | 3.9   |      |      | 3.0   |      | 49.8  | 58.8  | 50.0  |      |      |      |
| LOS                     | A     | A     |      |      | A     |      | D     | E     | D     |      |      |      |
| Approach Delay          |       | 3.9   |      |      | 3.0   |      |       | 53.4  |       |      |      |      |
| Approach LOS            |       | A     |      |      | A     |      |       | D     |       |      |      |      |
| Queue Length 50th (ft)  | 5     | 75    |      |      | 19    |      | 135   | 238   | 182   |      |      |      |
| Queue Length 95th (ft)  | m8    | 82    |      |      | m31   |      | 210   | 342   | 287   |      |      |      |
| Internal Link Dist (ft) |       | 282   |      |      | 648   |      |       | 149   |       |      | 621  |      |
| Turn Bay Length (ft)    | 100   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 461   | 3578  |      |      | 3246  |      | 390   | 414   | 385   |      |      |      |
| Starvation Cap Reductn  | 0     | 701   |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.09  | 0.55  |      |      | 0.23  |      | 0.45  | 0.71  | 0.72  |      |      |      |

## Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 80

09/29/2016

MS

Synchro 9 Report

Page 35

## 40: Trinity St &amp; W. 15th St

## TIA for Texas Capital Complex Master Plan 2018 Update

## Existing Conditions

Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.72

Intersection Signal Delay: 15.5

Intersection LOS: B

Intersection Capacity Utilization 70.3%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 40: Trinity St &amp; W. 15th St



09/29/2016

MS

Synchro 9 Report

Page 36

80: Red River St & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR   | NBL   | NBT    | NBR  | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|------|-------|-------|-------|-------|--------|------|-------|-------|-------|
| Lane Configurations     | ↩     | ↩↪    | ↪    | ↩     | ↩↪    | ↪     | ↩     | ↩↪     | ↪    | ↩     | ↩↪    | ↪     |
| Traffic Volume (vph)    | 221   | 1141  | 35   | 123   | 526   | 46    | 46    | 691    | 67   | 166   | 485   | 194   |
| Future Volume (vph)     | 221   | 1141  | 35   | 123   | 526   | 46    | 46    | 691    | 67   | 166   | 485   | 194   |
| Peak Hour Factor        | 0.96  | 0.96  | 0.96 | 0.92  | 0.92  | 0.92  | 0.92  | 0.92   | 0.92 | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)         | 230   | 1189  | 36   | 134   | 572   | 50    | 50    | 751    | 73   | 180   | 527   | 211   |
| Shared Lane Traffic (%) |       |       |      |       |       |       |       |        |      |       |       |       |
| Lane Group Flow (vph)   | 230   | 1225  | 0    | 134   | 572   | 50    | 50    | 824    | 0    | 180   | 527   | 211   |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    | Perm  | pm+pt | NA     |      | pm+pt | NA    | Perm  |
| Protected Phases        | 5     | 2     |      | 1     | 6     |       | 3     | 8      |      | 7     | 4     |       |
| Permitted Phases        | 2     |       |      | 6     |       | 6     | 8     |        |      | 4     |       | 4     |
| Detector Phase          | 5     | 2     |      | 1     | 6     | 6     | 3     | 8      |      | 7     | 4     | 4     |
| Switch Phase            |       |       |      |       |       |       |       |        |      |       |       |       |
| Minimum Initial (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   | 5.0   | 5.0   | 5.0    |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       | 10.0  | 23.0  |      | 10.0  | 23.0  | 23.0  | 10.0  | 23.0   |      | 10.0  | 23.0  | 23.0  |
| Total Split (s)         | 20.0  | 51.0  |      | 11.0  | 42.0  | 42.0  | 10.0  | 59.0   |      | 14.0  | 63.0  | 63.0  |
| Total Split (%)         | 14.8% | 37.8% |      | 8.1%  | 31.1% | 31.1% | 7.4%  | 43.7%  |      | 10.4% | 46.7% | 46.7% |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0    |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0    |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0    |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   | 5.0   | 5.0   | 5.0    |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   | Lag   | Lead  | Lag    |      | Lead  | Lag   | Lag   |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   | Yes   | Yes   | Yes    |      | Yes   | Yes   | Yes   |
| Recall Mode             | None  | C-Max |      | None  | C-Max | C-Max | None  | None   |      | None  | None  | None  |
| Act Effct Green (s)     | 57.0  | 46.0  |      | 43.7  | 37.7  | 37.7  | 59.0  | 54.0   |      | 67.2  | 60.0  | 60.0  |
| Actuated g/C Ratio      | 0.42  | 0.34  |      | 0.32  | 0.28  | 0.28  | 0.44  | 0.40   |      | 0.50  | 0.44  | 0.44  |
| v/c Ratio               | 0.71  | 1.02  |      | 0.99  | 0.58  | 0.09  | 0.13  | 1.12   |      | 1.05  | 0.34  | 0.26  |
| Control Delay           | 48.7  | 75.1  |      | 112.0 | 50.9  | 5.8   | 34.8  | 124.6  |      | 115.2 | 25.7  | 3.7   |
| Queue Delay             | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0    |      | 0.0   | 0.0   | 0.0   |
| Total Delay             | 48.7  | 75.1  |      | 112.0 | 50.9  | 5.8   | 34.8  | 124.6  |      | 115.2 | 25.7  | 3.7   |
| LOS                     | D     | E     |      | F     | D     | A     | C     | F      |      | F     | C     | A     |
| Approach Delay          |       | 70.9  |      |       | 58.7  |       |       | 119.5  |      |       | 38.2  |       |
| Approach LOS            |       | E     |      |       | E     |       |       | F      |      |       | D     |       |
| Queue Length 50th (ft)  | 122   | -593  |      | -98   | 257   | 4     | 36    | -846   |      | -121  | 160   | 0     |
| Queue Length 95th (ft)  | 216   | #717  |      | #208  | 326   | 18    | m49   | m#1061 |      | #278  | 206   | 47    |
| Internal Link Dist (ft) |       | 665   |      |       | 503   |       |       | 366    |      |       | 486   |       |
| Turn Bay Length (ft)    | 100   |       |      | 120   |       |       | 140   |        |      | 150   |       |       |
| Base Capacity (vph)     | 329   | 1202  |      | 135   | 988   | 541   | 383   | 738    |      | 171   | 1572  | 820   |
| Starvation Cap Reductn  | 0     | 0     |      | 0     | 0     | 0     | 0     | 0      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 0     | 0     | 0     | 0      |      | 0     | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     | 0     | 0     | 0      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       | 0.70  | 1.02  |      | 0.99  | 0.58  | 0.09  | 0.13  | 1.12   |      | 1.05  | 0.34  | 0.26  |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 9 (7%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
Natural Cycle: 110  
Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 1.12

80: Red River St & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

Intersection Signal Delay: 71.7

Intersection LOS: E

Intersection Capacity Utilization 105.8%

ICU Level of Service G

Analysis Period (min) 15

- Volume exceeds capacity, queue is theoretically infinite.

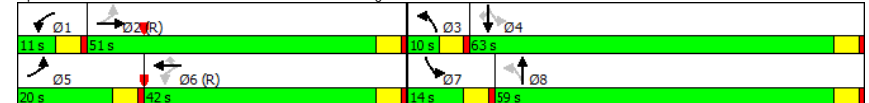
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.













m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 80: Red River St & Martin Luther King Jr. Blvd



81: I-35 SB Frontage Rd & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     |   | ↑↑  | ↑   | ↑   | ↑↑  |   |   |   |   |   | ↑↑  | ↑↑  |
| Traffic Volume (vph)    | 0   | 585   | 270   | 470   | 429   | 0   | 0   | 0   | 0   | 88  | 794   | 275   |
| Future Volume (vph)     | 0   | 585   | 270   | 470   | 429   | 0   | 0   | 0   | 0   | 88  | 794   | 275   |
| Peak Hour Factor        | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  | 0.92  |
| Adj. Flow (vph)         | 0   | 636   | 293   | 511   | 466   | 0   | 0   | 0   | 0   | 96  | 863   | 299   |
| Shared Lane Traffic (%) |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)   | 0   | 636   | 293   | 511   | 466   | 0   | 0   | 0   | 0   | 0   | 959   | 299   |
| Turn Type               |   | NA  | Perm  | pm+pt   | NA  |   |   |   |   | Perm  | NA  | Perm  |
| Protected Phases        |   | 2   |   | 1   | 2 1   |   |   |   |   |   | 4 12  |   |
| Permitted Phases        |   |   | 2   | 1 2   |   |   |   |   |   | 4 12  |   | 4 12  |
| Detector Phase          |   | 2   | 2   | 1   | 2 1   |   |   |   |   | 4 12  | 4 12  | 4 12  |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     |   | 5.0   | 5.0   | 5.0   |   |   |   |   |   |   |   |   |
| Minimum Split (s)       |   | 23.0  | 23.0  | 10.0  |   |   |   |   |   |   |   |   |
| Total Split (s)         |   | 36.0  | 36.0  | 56.0  |   |   |   |   |   |   |   |   |
| Total Split (%)         |   | 26.7%   | 26.7%   | 41.5%   |   |   |   |   |   |   |   |   |
| Yellow Time (s)         |   | 4.0   | 4.0   | 4.0   |   |   |   |   |   |   |   |   |
| All-Red Time (s)        |   | 1.0   | 1.0   | 1.0   |   |   |   |   |   |   |   |   |
| Lost Time Adjust (s)    |   | 0.0   | 0.0   | 0.0   |   |   |   |   |   |   |   |   |
| Total Lost Time (s)     |   | 5.0   | 5.0   | 5.0   |   |   |   |   |   |   |   |   |
| Lead/Lag                |   | Lead  | Lead  | Lag   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?      |   | Yes   | Yes   | Yes   |   |   |   |   |   |   |   |   |
| Recall Mode             |   | C-Max   | C-Max   | Min   |   |   |   |   |   |   |   |   |
| Act Effct Green (s)     |   | 31.0  | 31.0  | 82.0  | 87.0  |   |   |   |   |   | 38.0  | 38.0  |
| Actuated g/C Ratio      |   | 0.23  | 0.23  | 0.61  | 0.64  |   |   |   |   |   | 0.28  | 0.28  |
| v/c Ratio               |   | 0.78  | 0.62  | 0.69  | 0.20  |   |   |   |   |   | 0.97  | 0.31  |
| Control Delay           |   | 59.9  | 36.8  | 13.6  | 3.5   |   |   |   |   |   | 69.6  | 9.2   |
| Queue Delay             |   | 1.2   | 0.0   | 7.1   | 0.0   |   |   |   |   |   | 0.0   | 0.0   |
| Total Delay             |   | 61.1  | 36.8  | 20.7  | 3.5   |   |   |   |   |   | 69.6  | 9.2   |
| LOS                     |   | E   | D   | C   | A   |   |   |   |   |   | E   | A   |
| Approach Delay          |   | 53.4  |   |   | 12.5  |   |   |   |   |   | 55.3  |   |
| Approach LOS            |   | D   |   |   | B   |   |   |   |   |   | E   |   |
| Queue Length 50th (ft)  |   | 214   | 123   | 316   | 20  |   |   |   |   |   | 438   | 21  |
| Queue Length 95th (ft)  |   | m208  | m119  | 449   | 25  |   |   |   |   |   | #578  | 60  |
| Internal Link Dist (ft) |   | 503   |   |   | 364   |   |   | 1366  |   |   | 411   |   |
| Turn Bay Length (ft)    |   |   |   |   |   |   |   |   |   |   |   |   |
| Base Capacity (vph)     |   | 812   | 469   | 738   | 2280  |   |   |   |   |   | 991   | 958   |
| Starvation Cap Reductn  |   | 0   | 0   | 181   | 0   |   |   |   |   |   | 0   | 0   |
| Spillback Cap Reductn   |   | 54  | 0   | 0   | 0   |   |   |   |   |   | 0   | 0   |
| Storage Cap Reductn     |   | 0   | 0   | 0   | 0   |   |   |   |   |   | 0   | 0   |
| Reduced v/c Ratio       |   | 0.84  | 0.62  | 0.92  | 0.20  |   |   |   |   |   | 0.97  | 0.31  |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green  
Natural Cycle: 95  
Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 0.97

81: I-35 SB Frontage Rd & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Lane Group              | 04   | 05   | 06   | 08   | 012  | 016  |
|-------------------------|------|------|------|------|------|------|
| Lane Configurations     |      |      |      |      |      |      |
| Traffic Volume (vph)    |      |      |      |      |      |      |
| Future Volume (vph)     |      |      |      |      |      |      |
| Peak Hour Factor        |      |      |      |      |      |      |
| Adj. Flow (vph)         |      |      |      |      |      |      |
| Shared Lane Traffic (%) |      |      |      |      |      |      |
| Lane Group Flow (vph)   |      |      |      |      |      |      |
| Turn Type               |      |      |      |      |      |      |
| Protected Phases        | 4    | 5    | 6    | 8    | 12   | 16   |
| Permitted Phases        |      |      |      |      |      |      |
| Detector Phase          |      |      |      |      |      |      |
| Switch Phase            |      |      |      |      |      |      |
| Minimum Initial (s)     | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  |
| Minimum Split (s)       | 23.0 | 23.0 | 23.0 | 23.0 | 12.0 | 12.0 |
| Total Split (s)         | 31.0 | 55.0 | 24.0 | 44.0 | 12.0 | 12.0 |
| Total Split (%)         | 23%  | 41%  | 18%  | 33%  | 9%   | 9%   |
| Yellow Time (s)         | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  |
| All-Red Time (s)        | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |      |      |      |      |
| Total Lost Time (s)     |      |      |      |      |      |      |
| Lead/Lag                | Lag  | Lag  | Lead | Lag  | Lead | Lead |
| Lead-Lag Optimize?      | Yes  | Yes  | Yes  | Yes  | Yes  | Yes  |
| Recall Mode             | Max  | Min  | Max  | Max  | Max  | Max  |
| Act Effct Green (s)     |      |      |      |      |      |      |
| Actuated g/C Ratio      |      |      |      |      |      |      |
| v/c Ratio               |      |      |      |      |      |      |
| Control Delay           |      |      |      |      |      |      |
| Queue Delay             |      |      |      |      |      |      |
| Total Delay             |      |      |      |      |      |      |
| LOS                     |      |      |      |      |      |      |
| Approach Delay          |      |      |      |      |      |      |
| Approach LOS            |      |      |      |      |      |      |
| Queue Length 50th (ft)  |      |      |      |      |      |      |
| Queue Length 95th (ft)  |      |      |      |      |      |      |
| Internal Link Dist (ft) |      |      |      |      |      |      |
| Turn Bay Length (ft)    |      |      |      |      |      |      |
| Base Capacity (vph)     |      |      |      |      |      |      |
| Starvation Cap Reductn  |      |      |      |      |      |      |
| Spillback Cap Reductn   |      |      |      |      |      |      |
| Storage Cap Reductn     |      |      |      |      |      |      |
| Reduced v/c Ratio       |      |      |      |      |      |      |

Intersection Summary

81: I-35 SB Frontage Rd & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

Intersection Signal Delay: 41.5

Intersection LOS: D

Intersection Capacity Utilization 76.0%

ICU Level of Service D

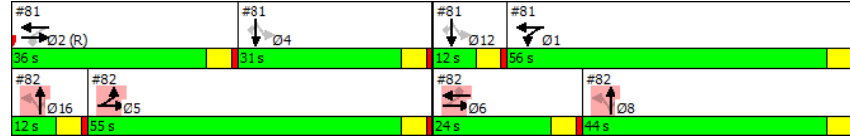
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 81: I-35 SB Frontage Rd & Martin Luther King Jr. Blvd



82: I-35 NB Frontage Rd & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

|                         | EBL   | EBT  | EBR  | WBL  | WBT   | WBR   | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-------------------------|-------|------|------|------|-------|-------|------|------|------|------|------|------|
| Lane Configurations     | ↩     | ↩↩   |      |      | ↩↩↩   | ↩     | ↩    | ↩↩   | ↩    |      |      |      |
| Traffic Volume (vph)    | 743   | 525  | 0    | 0    | 470   | 89    | 184  | 555  | 417  | 0    | 0    | 0    |
| Future Volume (vph)     | 743   | 525  | 0    | 0    | 470   | 89    | 184  | 555  | 417  | 0    | 0    | 0    |
| Peak Hour Factor        | 0.92  | 0.92 | 0.92 | 0.92 | 0.92  | 0.92  | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph)         | 808   | 571  | 0    | 0    | 511   | 97    | 200  | 603  | 453  | 0    | 0    | 0    |
| Shared Lane Traffic (%) | 50%   |      |      |      |       |       | 10%  |      |      |      |      |      |
| Lane Group Flow (vph)   | 404   | 975  | 0    | 0    | 511   | 97    | 180  | 623  | 453  | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA   |      |      | NA    | Perm  | Perm | NA   | Perm |      |      |      |
| Protected Phases        | 5     | 5 6  |      |      | 6     |       |      | 8 16 |      |      |      |      |
| Permitted Phases        | 5 6   |      |      |      |       | 6     | 8 16 |      | 8 16 |      |      |      |
| Detector Phase          | 5     | 5 6  |      |      | 6     | 6     | 8 16 | 8 16 | 8 16 |      |      |      |
| Switch Phase            |       |      |      |      |       |       |      |      |      |      |      |      |
| Minimum Initial (s)     | 5.0   |      |      |      | 5.0   | 5.0   |      |      |      |      |      |      |
| Minimum Split (s)       | 23.0  |      |      |      | 23.0  | 23.0  |      |      |      |      |      |      |
| Total Split (s)         | 55.0  |      |      |      | 24.0  | 24.0  |      |      |      |      |      |      |
| Total Split (%)         | 40.7% |      |      |      | 17.8% | 17.8% |      |      |      |      |      |      |
| Yellow Time (s)         | 4.0   |      |      |      | 4.0   | 4.0   |      |      |      |      |      |      |
| All-Red Time (s)        | 1.0   |      |      |      | 1.0   | 1.0   |      |      |      |      |      |      |
| Lost Time Adjust (s)    | 0.0   |      |      |      | 0.0   | 0.0   |      |      |      |      |      |      |
| Total Lost Time (s)     | 5.0   |      |      |      | 5.0   | 5.0   |      |      |      |      |      |      |
| Lead/Lag                | Lag   |      |      |      | Lead  | Lead  |      |      |      |      |      |      |
| Lead-Lag Optimize?      | Yes   |      |      |      | Yes   | Yes   |      |      |      |      |      |      |
| Recall Mode             | Min   |      |      |      | Max   | Max   |      |      |      |      |      |      |
| Act Effct Green (s)     | 69.0  | 69.0 |      |      | 19.0  | 19.0  | 51.0 | 51.0 | 51.0 |      |      |      |
| Actuated g/C Ratio      | 0.51  | 0.51 |      |      | 0.14  | 0.14  | 0.38 | 0.38 | 0.38 |      |      |      |
| v/c Ratio               | 0.62  | 0.65 |      |      | 0.71  | 0.29  | 0.30 | 0.49 | 0.60 |      |      |      |
| Control Delay           | 15.2  | 14.0 |      |      | 61.7  | 4.7   | 46.0 | 50.0 | 33.0 |      |      |      |
| Queue Delay             | 1.6   | 2.4  |      |      | 0.2   | 0.0   | 0.0  | 0.0  | 0.0  |      |      |      |
| Total Delay             | 16.7  | 16.4 |      |      | 61.9  | 4.7   | 46.1 | 50.1 | 33.0 |      |      |      |
| LOS                     | B     | B    |      |      | E     | A     | D    | D    | C    |      |      |      |
| Approach Delay          |       | 16.5 |      |      | 52.8  |       |      | 43.3 |      |      |      |      |
| Approach LOS            |       | B    |      |      | D     |       |      | D    |      |      |      |      |
| Queue Length 50th (ft)  | 202   | 340  |      |      | 158   | 0     | 171  | 298  | 248  |      |      |      |
| Queue Length 95th (ft)  | m341  | m439 |      |      | 202   | 20    | 257  | 365  | 355  |      |      |      |
| Internal Link Dist (ft) |       | 364  |      |      | 388   |       | 808  |      | 388  |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |       | 180   |      |      |      |      |      |      |
| Base Capacity (vph)     | 656   | 1506 |      |      | 715   | 340   | 608  | 1278 | 759  |      |      |      |
| Starvation Cap Reductn  | 115   | 383  |      |      | 0     | 0     | 0    | 0    | 0    |      |      |      |
| Spillback Cap Reductn   | 0     | 0    |      |      | 17    | 0     | 13   | 28   | 0    |      |      |      |
| Storage Cap Reductn     | 0     | 0    |      |      | 0     | 0     | 0    | 0    | 0    |      |      |      |
| Reduced v/c Ratio       | 0.75  | 0.87 |      |      | 0.73  | 0.29  | 0.30 | 0.50 | 0.60 |      |      |      |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.97

82: I-35 NB Frontage Rd & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Lane Group              | Ø1   | Ø2    | Ø4   | Ø8   | Ø12  | Ø16  |
|-------------------------|------|-------|------|------|------|------|
| Lane Configurations     |      |       |      |      |      |      |
| Traffic Volume (vph)    |      |       |      |      |      |      |
| Future Volume (vph)     |      |       |      |      |      |      |
| Peak Hour Factor        |      |       |      |      |      |      |
| Adj. Flow (vph)         |      |       |      |      |      |      |
| Shared Lane Traffic (%) |      |       |      |      |      |      |
| Lane Group Flow (vph)   |      |       |      |      |      |      |
| Turn Type               |      |       |      |      |      |      |
| Protected Phases        | 1    | 2     | 4    | 8    | 12   | 16   |
| Permitted Phases        |      |       |      |      |      |      |
| Detector Phase          |      |       |      |      |      |      |
| Switch Phase            |      |       |      |      |      |      |
| Minimum Initial (s)     | 5.0  | 5.0   | 5.0  | 5.0  | 5.0  | 5.0  |
| Minimum Split (s)       | 10.0 | 23.0  | 23.0 | 23.0 | 12.0 | 12.0 |
| Total Split (s)         | 56.0 | 36.0  | 31.0 | 44.0 | 12.0 | 12.0 |
| Total Split (%)         | 41%  | 27%   | 23%  | 33%  | 9%   | 9%   |
| Yellow Time (s)         | 4.0  | 4.0   | 4.0  | 4.0  | 4.0  | 4.0  |
| All-Red Time (s)        | 1.0  | 1.0   | 1.0  | 1.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |       |      |      |      |      |
| Total Lost Time (s)     |      |       |      |      |      |      |
| Lead/Lag                | Lag  | Lead  | Lag  | Lag  | Lead | Lead |
| Lead-Lag Optimize?      | Yes  | Yes   | Yes  | Yes  | Yes  | Yes  |
| Recall Mode             | Min  | C-Max | Max  | Max  | Max  | Max  |
| Act Effct Green (s)     |      |       |      |      |      |      |
| Actuated g/C Ratio      |      |       |      |      |      |      |
| v/c Ratio               |      |       |      |      |      |      |
| Control Delay           |      |       |      |      |      |      |
| Queue Delay             |      |       |      |      |      |      |
| Total Delay             |      |       |      |      |      |      |
| LOS                     |      |       |      |      |      |      |
| Approach Delay          |      |       |      |      |      |      |
| Approach LOS            |      |       |      |      |      |      |
| Queue Length 50th (ft)  |      |       |      |      |      |      |
| Queue Length 95th (ft)  |      |       |      |      |      |      |
| Internal Link Dist (ft) |      |       |      |      |      |      |
| Turn Bay Length (ft)    |      |       |      |      |      |      |
| Base Capacity (vph)     |      |       |      |      |      |      |
| Starvation Cap Reductn  |      |       |      |      |      |      |
| Spillback Cap Reductn   |      |       |      |      |      |      |
| Storage Cap Reductn     |      |       |      |      |      |      |
| Reduced v/c Ratio       |      |       |      |      |      |      |
| Intersection Summary    |      |       |      |      |      |      |

82: I-35 NB Frontage Rd & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

Intersection Signal Delay: 33.7

Intersection LOS: C

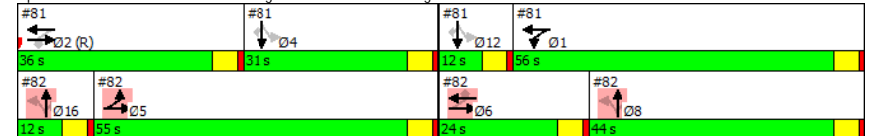
Intersection Capacity Utilization 76.0%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 82: I-35 NB Frontage Rd & Martin Luther King Jr. Blvd



## 83: Red River St &amp; W. 15th St

## TIA for Texas Capital Complex Master Plan 2018 Update

## Existing Conditions

Timing Plan: PM

|                         | ←     | →     | ↖    | ↗     | ↙     | ↘    | ↖     | ↗     | ↙    | ↘     | ↖     | ↗    |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Group              | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR  |
| Lane Configurations     | ↖ ↗ ↘ | ↖ ↗ ↘ |      | ↖ ↗ ↘ | ↖ ↗ ↘ |      | ↖ ↗ ↘ | ↖ ↗ ↘ |      | ↖ ↗ ↘ | ↖ ↗ ↘ |      |
| Traffic Volume (vph)    | 539   | 1631  | 31   | 45    | 512   | 22   | 13    | 105   | 133  | 49    | 133   | 549  |
| Future Volume (vph)     | 539   | 1631  | 31   | 45    | 512   | 22   | 13    | 105   | 133  | 49    | 133   | 549  |
| Peak Hour Factor        | 0.96  | 0.96  | 0.96 | 0.92  | 0.92  | 0.92 | 0.92  | 0.92  | 0.92 | 0.92  | 0.92  | 0.92 |
| Adj. Flow (vph)         | 561   | 1699  | 32   | 49    | 557   | 24   | 14    | 114   | 145  | 53    | 145   | 597  |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |      |       |       |      |
| Lane Group Flow (vph)   | 561   | 1731  | 0    | 49    | 581   | 0    | 0     | 273   | 0    | 53    | 742   | 0    |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | Perm  | NA    |      | Perm  | NA    |      |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |       | 8     |      |       | 4     |      |
| Permitted Phases        | 2     |       |      | 6     |       |      | 8     |       |      | 4     |       |      |
| Minimum Split (s)       | 10.0  | 23.0  |      | 10.0  | 23.0  |      | 23.0  | 23.0  |      | 23.0  | 23.0  |      |
| Total Split (s)         | 49.0  | 63.0  |      | 10.0  | 24.0  |      | 62.0  | 62.0  |      | 62.0  | 62.0  |      |
| Total Split (%)         | 36.3% | 46.7% |      | 7.4%  | 17.8% |      | 45.9% | 45.9% |      | 45.9% | 45.9% |      |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   |      |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      | 5.0   | 5.0   |      | 5.0   | 5.0   |      |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   |      |       |       |      |       |       |      |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |       |       |      |       |       |      |
| Act Effect Green (s)    | 68.0  | 58.0  |      | 24.0  | 19.0  |      | 57.0  |       |      | 57.0  | 57.0  |      |
| Actuated g/C Ratio      | 0.50  | 0.43  |      | 0.18  | 0.14  |      | 0.42  |       |      | 0.42  | 0.42  |      |
| v/c Ratio               | 0.89  | 0.79  |      | 0.41  | 0.81  |      | 0.59  |       |      | 0.13  | 0.93  |      |
| Control Delay           | 62.1  | 49.4  |      | 35.5  | 51.5  |      | 30.2  |       |      | 39.2  | 65.4  |      |
| Queue Delay             | 0.0   | 0.1   |      | 0.0   | 0.0   |      | 0.1   |       |      | 0.0   | 0.0   |      |
| Total Delay             | 62.1  | 49.6  |      | 35.5  | 51.5  |      | 30.2  |       |      | 39.2  | 65.4  |      |
| LOS                     | E     | D     |      | D     | D     |      | C     |       |      | D     | E     |      |
| Approach Delay          |       | 52.6  |      |       | 50.2  |      | 30.2  |       |      |       | 63.7  |      |
| Approach LOS            |       | D     |      |       | D     |      | C     |       |      |       | E     |      |
| Queue Length 50th (ft)  | 458   | 508   |      | 22    | 181   |      | 148   |       |      | 38    | 561   |      |
| Queue Length 95th (ft)  | #629  | 560   |      | 44    | 228   |      | 248   |       |      | m#73  | m#740 |      |
| Internal Link Dist (ft) |       | 648   |      |       | 607   |      | 283   |       |      |       | 924   |      |
| Turn Bay Length (ft)    | 70    |       |      | 55    |       |      |       |       |      | 404   | 800   |      |
| Base Capacity (vph)     | 632   | 2179  |      | 120   | 714   |      | 461   |       |      | 404   | 800   |      |
| Starvation Cap Reductn  | 0     | 44    |      | 0     | 0     |      | 0     |       |      | 0     | 0     |      |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 0     |      | 7     |       |      | 6     | 0     |      |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      | 0     |       |      | 0     | 0     |      |
| Reduced v/c Ratio       | 0.89  | 0.81  |      | 0.41  | 0.81  |      | 0.60  |       |      | 0.13  | 0.93  |      |

## Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 80

Control Type: Pretimed

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 52.9

Intersection LOS: D

Intersection Capacity Utilization 93.6%

ICU Level of Service F

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

09/29/2016

MS

Synchro 9 Report

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## 83: Red River St &amp; W. 15th St

## TIA for Texas Capital Complex Master Plan 2018 Update

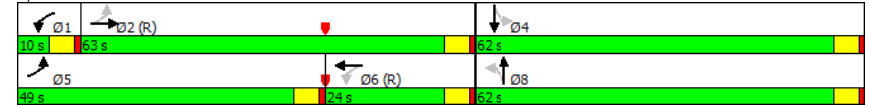
## Existing Conditions

Timing Plan: PM

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 83: Red River St &amp; W. 15th St



09/29/2016

MS

Synchro 9 Report

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84: I-35 SB Frontage Rd & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Lane Group              | EBL  | EBT   | EBR   | WBL   | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT   | SBR   |  |  |  |
|-------------------------|------|-------|-------|-------|------|------|------|------|------|------|-------|-------|--|--|--|
| Lane Configurations     |      | ↑↑    | ↑     |       | ↑↑   |      |      |      |      |      | ↑↑↑   | ↑     |  |  |  |
| Traffic Volume (vph)    | 0    | 1028  | 514   | 1     | 138  | 0    | 0    | 0    | 0    | 0    | 1197  | 362   |  |  |  |
| Future Volume (vph)     | 0    | 1028  | 514   | 1     | 138  | 0    | 0    | 0    | 0    | 0    | 1197  | 362   |  |  |  |
| Peak Hour Factor        | 0.92 | 0.92  | 0.92  | 0.92  | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92  | 0.92  |  |  |  |
| Adj. Flow (vph)         | 0    | 1117  | 559   | 1     | 150  | 0    | 0    | 0    | 0    | 0    | 1301  | 393   |  |  |  |
| Shared Lane Traffic (%) |      |       |       |       |      |      |      |      |      |      |       |       |  |  |  |
| Lane Group Flow (vph)   | 0    | 1117  | 559   | 0     | 151  | 0    | 0    | 0    | 0    | 0    | 1301  | 393   |  |  |  |
| Turn Type               |      | NA    | Perm  | pm+pt | NA   |      |      |      |      |      | NA    | Free  |  |  |  |
| Protected Phases        |      | 2     |       | 1     | 2 1  |      |      |      |      |      | 4 12  |       |  |  |  |
| Permitted Phases        |      |       | 2     | 1 2   |      |      |      |      |      | 4 12 |       | Free  |  |  |  |
| Detector Phase          |      | 2     | 2     | 1     | 2 1  |      |      |      |      | 4 12 | 4 12  |       |  |  |  |
| Switch Phase            |      |       |       |       |      |      |      |      |      |      |       |       |  |  |  |
| Minimum Initial (s)     |      | 5.0   | 5.0   | 5.0   |      |      |      |      |      |      |       |       |  |  |  |
| Minimum Split (s)       |      | 23.0  | 23.0  | 10.0  |      |      |      |      |      |      |       |       |  |  |  |
| Total Split (s)         |      | 71.0  | 71.0  | 23.0  |      |      |      |      |      |      |       |       |  |  |  |
| Total Split (%)         |      | 52.6% | 52.6% | 17.0% |      |      |      |      |      |      |       |       |  |  |  |
| Yellow Time (s)         |      | 4.0   | 4.0   | 4.0   |      |      |      |      |      |      |       |       |  |  |  |
| All-Red Time (s)        |      | 1.0   | 1.0   | 1.0   |      |      |      |      |      |      |       |       |  |  |  |
| Lost Time Adjust (s)    |      | 0.0   | 0.0   |       |      |      |      |      |      |      |       |       |  |  |  |
| Total Lost Time (s)     |      | 5.0   | 5.0   |       |      |      |      |      |      |      |       |       |  |  |  |
| Lead/Lag                |      | Lead  | Lead  | Lag   |      |      |      |      |      |      |       |       |  |  |  |
| Lead-Lag Optimize?      |      | Yes   | Yes   | Yes   |      |      |      |      |      |      |       |       |  |  |  |
| Recall Mode             |      | C-Max | C-Max | Min   |      |      |      |      |      |      |       |       |  |  |  |
| Act Effect Green (s)    |      | 66.0  | 66.0  |       | 84.0 |      |      |      |      |      | 36.0  | 135.0 |  |  |  |
| Actuated g/C Ratio      |      | 0.49  | 0.49  |       | 0.62 |      |      |      |      |      | 0.27  | 1.00  |  |  |  |
| v/c Ratio               |      | 0.65  | 0.57  |       | 0.07 |      |      |      |      |      | 0.96  | 0.25  |  |  |  |
| Control Delay           |      | 22.3  | 15.7  |       | 3.9  |      |      |      |      |      | 47.4  | 0.2   |  |  |  |
| Queue Delay             |      | 1.5   | 1.0   |       | 0.0  |      |      |      |      |      | 0.0   | 0.0   |  |  |  |
| Total Delay             |      | 23.7  | 16.7  |       | 3.9  |      |      |      |      |      | 47.4  | 0.2   |  |  |  |
| LOS                     |      | C     | B     |       | A    |      |      |      |      |      | D     | A     |  |  |  |
| Approach Delay          |      | 21.4  |       |       | 3.9  |      |      |      |      |      | 36.5  |       |  |  |  |
| Approach LOS            |      | C     |       |       | A    |      |      |      |      |      | D     |       |  |  |  |
| Queue Length 50th (ft)  |      | 508   | 396   |       | 5    |      |      |      |      |      | 367   | 0     |  |  |  |
| Queue Length 95th (ft)  |      | 582   | 514   |       | 8    |      |      |      |      |      | m#467 | m0    |  |  |  |
| Internal Link Dist (ft) |      | 607   |       |       | 190  |      |      | 264  |      |      | 1366  |       |  |  |  |
| Turn Bay Length (ft)    |      |       |       |       |      |      |      |      |      |      |       |       |  |  |  |
| Base Capacity (vph)     |      | 1730  | 978   |       | 2124 |      |      |      |      |      | 1356  | 1583  |  |  |  |
| Starvation Cap Reductn  |      | 395   | 196   |       | 0    | 0    |      |      |      |      | 0     | 0     |  |  |  |
| Spillback Cap Reductn   |      | 138   | 0     |       | 0    |      |      |      |      |      | 0     | 0     |  |  |  |
| Storage Cap Reductn     |      | 0     | 0     |       | 0    |      |      |      |      |      | 0     | 0     |  |  |  |
| Reduced v/c Ratio       |      | 0.84  | 0.71  |       | 0.07 |      |      |      |      |      | 0.96  | 0.25  |  |  |  |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green  
Natural Cycle: 75  
Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 0.96

84: I-35 SB Frontage Rd & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Lane Group              | 04   | 05   | 08   | 012  | 016  |
|-------------------------|------|------|------|------|------|
| Lane Configurations     |      |      |      |      |      |
| Traffic Volume (vph)    |      |      |      |      |      |
| Future Volume (vph)     |      |      |      |      |      |
| Peak Hour Factor        |      |      |      |      |      |
| Adj. Flow (vph)         |      |      |      |      |      |
| Shared Lane Traffic (%) |      |      |      |      |      |
| Lane Group Flow (vph)   |      |      |      |      |      |
| Turn Type               |      |      |      |      |      |
| Protected Phases        | 4    | 5    | 8    | 12   | 16   |
| Permitted Phases        |      |      |      |      |      |
| Detector Phase          |      |      |      |      |      |
| Switch Phase            |      |      |      |      |      |
| Minimum Initial (s)     | 5.0  | 5.0  | 5.0  | 5.0  | 5.0  |
| Minimum Split (s)       | 23.0 | 23.0 | 23.0 | 10.0 | 10.0 |
| Total Split (s)         | 31.0 | 92.0 | 33.0 | 10.0 | 10.0 |
| Total Split (%)         | 23%  | 68%  | 24%  | 7%   | 7%   |
| Yellow Time (s)         | 4.0  | 4.0  | 4.0  | 4.0  | 4.0  |
| All-Red Time (s)        | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |      |      |      |
| Total Lost Time (s)     |      |      |      |      |      |
| Lead/Lag                | Lag  | Lag  |      | Lead | Lead |
| Lead-Lag Optimize?      | Yes  | Yes  |      | Yes  | Yes  |
| Recall Mode             | Max  | Max  | Max  | Max  | Max  |
| Act Effct Green (s)     |      |      |      |      |      |
| Actuated g/C Ratio      |      |      |      |      |      |
| v/c Ratio               |      |      |      |      |      |
| Control Delay           |      |      |      |      |      |
| Queue Delay             |      |      |      |      |      |
| Total Delay             |      |      |      |      |      |
| LOS                     |      |      |      |      |      |
| Approach Delay          |      |      |      |      |      |
| Approach LOS            |      |      |      |      |      |
| Queue Length 50th (ft)  |      |      |      |      |      |
| Queue Length 95th (ft)  |      |      |      |      |      |
| Internal Link Dist (ft) |      |      |      |      |      |
| Turn Bay Length (ft)    |      |      |      |      |      |
| Base Capacity (vph)     |      |      |      |      |      |
| Starvation Cap Reductn  |      |      |      |      |      |
| Spillback Cap Reductn   |      |      |      |      |      |
| Storage Cap Reductn     |      |      |      |      |      |
| Reduced v/c Ratio       |      |      |      |      |      |

Intersection Summary

84: I-35 SB Frontage Rd & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

Intersection Signal Delay: 27.9

Intersection LOS: C

Intersection Capacity Utilization 71.6%

ICU Level of Service C

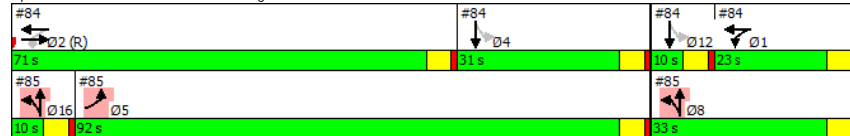
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 84: I-35 SB Frontage Rd & W. 15th St



85: I-35 NB Frontage Rd & W. 15th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

|                         | EBL   | EBR  | NBL    | NBT  | SBT  | SBR  | Ø1   | Ø2    | Ø4   | Ø8   | Ø12  | Ø16  |
|-------------------------|-------|------|--------|------|------|------|------|-------|------|------|------|------|
| Lane Configurations     | ↔↔    | ↔↔   | ↔↔     | ↔↔   | ↔↔   | ↔↔   |      |       |      |      |      |      |
| Traffic Volume (vph)    | 1033  | 0    | 102    | 706  | 0    | 0    |      |       |      |      |      |      |
| Future Volume (vph)     | 1033  | 0    | 102    | 706  | 0    | 0    |      |       |      |      |      |      |
| Peak Hour Factor        | 0.92  | 0.92 | 0.92   | 0.92 | 0.92 | 0.92 |      |       |      |      |      |      |
| Adj. Flow (vph)         | 1123  | 0    | 111    | 767  | 0    | 0    |      |       |      |      |      |      |
| Shared Lane Traffic (%) |       |      | 10%    |      |      |      |      |       |      |      |      |      |
| Lane Group Flow (vph)   | 1123  | 0    | 100    | 778  | 0    | 0    |      |       |      |      |      |      |
| Turn Type               | Prot  |      | custom | NA   |      |      |      |       |      |      |      |      |
| Protected Phases        | 5     |      | 8 16   | 8 16 |      |      | 1    | 2     | 4    | 8    | 12   | 16   |
| Permitted Phases        |       |      | 8 16   |      |      |      |      |       |      |      |      |      |
| Detector Phase          | 5     |      | 8 16   | 8 16 |      |      |      |       |      |      |      |      |
| Switch Phase            |       |      |        |      |      |      |      |       |      |      |      |      |
| Minimum Initial (s)     | 5.0   |      |        |      |      |      | 5.0  | 5.0   | 5.0  | 5.0  | 5.0  | 5.0  |
| Minimum Split (s)       | 23.0  |      |        |      |      |      | 10.0 | 23.0  | 23.0 | 23.0 | 10.0 | 10.0 |
| Total Split (s)         | 92.0  |      |        |      |      |      | 23.0 | 71.0  | 31.0 | 33.0 | 10.0 | 10.0 |
| Total Split (%)         | 68.1% |      |        |      |      |      | 17%  | 53%   | 23%  | 24%  | 7%   | 7%   |
| Yellow Time (s)         | 4.0   |      |        |      |      |      | 4.0  | 4.0   | 4.0  | 4.0  | 4.0  | 4.0  |
| All-Red Time (s)        | 1.0   |      |        |      |      |      | 1.0  | 1.0   | 1.0  | 1.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    | 0.0   |      |        |      |      |      |      |       |      |      |      |      |
| Total Lost Time (s)     | 5.0   |      |        |      |      |      |      |       |      |      |      |      |
| Lead/Lag                | Lag   |      |        |      |      |      | Lag  | Lead  | Lag  |      | Lead | Lead |
| Lead-Lag Optimize?      | Yes   |      |        |      |      |      | Yes  | Yes   | Yes  |      | Yes  | Yes  |
| Recall Mode             | Max   |      |        |      |      |      | Min  | C-Max | Max  | Max  | Max  | Max  |
| Act Effct Green (s)     | 87.0  |      | 38.0   | 38.0 |      |      |      |       |      |      |      |      |
| Actuated g/C Ratio      | 0.64  |      | 0.28   | 0.28 |      |      |      |       |      |      |      |      |
| v/c Ratio               | 0.51  |      | 0.23   | 0.58 |      |      |      |       |      |      |      |      |
| Control Delay           | 5.9   |      | 39.1   | 43.6 |      |      |      |       |      |      |      |      |
| Queue Delay             | 0.6   |      | 0.0    | 0.0  |      |      |      |       |      |      |      |      |
| Total Delay             | 6.5   |      | 39.1   | 43.6 |      |      |      |       |      |      |      |      |
| LOS                     | A     |      | D      | D    |      |      |      |       |      |      |      |      |
| Approach Delay          | 6.5   |      |        | 43.1 |      |      |      |       |      |      |      |      |
| Approach LOS            | A     |      |        | D    |      |      |      |       |      |      |      |      |
| Queue Length 50th (ft)  | 509   |      | 79     | 227  |      |      |      |       |      |      |      |      |
| Queue Length 95th (ft)  | 1     |      | 138    | 276  |      |      |      |       |      |      |      |      |
| Internal Link Dist (ft) | 190   |      |        | 238  | 628  |      |      |       |      |      |      |      |
| Turn Bay Length (ft)    |       |      |        |      |      |      |      |       |      |      |      |      |
| Base Capacity (vph)     | 2212  |      | 428    | 1351 |      |      |      |       |      |      |      |      |
| Starvation Cap Reductn  | 652   |      | 0      | 0    |      |      |      |       |      |      |      |      |
| Spillback Cap Reductn   | 0     |      | 0      | 0    |      |      |      |       |      |      |      |      |
| Storage Cap Reductn     | 0     |      | 0      | 0    |      |      |      |       |      |      |      |      |
| Reduced v/c Ratio       | 0.72  |      | 0.23   | 0.58 |      |      |      |       |      |      |      |      |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.96

85: I-35 NB Frontage Rd & W. 15th St

TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions

Timing Plan: PM

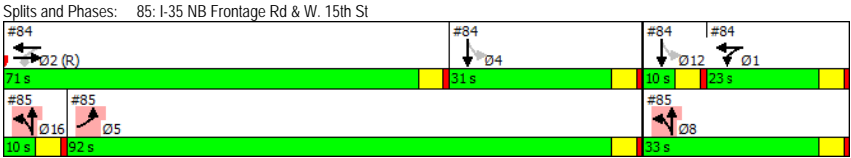
Intersection Signal Delay: 22.6

Intersection LOS: C

Intersection Capacity Utilization 51.4%

ICU Level of Service A

Analysis Period (min) 15



11: Colorado St & W. 18th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Intersection              |     |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 8.4 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | A   |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      |      |      |      |      | ↔    |      |      |      | ↔    |      |
| Traffic Vol, veh/h  | 0    | 0    | 0    | 0    | 0    | 39   | 70   | 20   | 0    | 29   | 86   | 0    |
| Future Vol, veh/h   | 0    | 0    | 0    | 0    | 0    | 39   | 70   | 20   | 0    | 29   | 86   | 0    |
| Peak Hour Factor    | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 0    | 0    | 0    | 50   | 90   | 26   | 0    | 37   | 110  | 0    |
| Number of Lanes     | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | WB  | NB  |
|----------------------------|-----|-----|
| Opposing Approach          |     | SB  |
| Opposing Lanes             | 0   | 1   |
| Conflicting Approach Left  | NB  |     |
| Conflicting Lanes Left     | 1   | 0   |
| Conflicting Approach Right | SB  | WB  |
| Conflicting Lanes Right    | 1   | 1   |
| HCM Control Delay          | 8.7 | 8.5 |
| HCM LOS                    | A   | A   |

| Lane                   | NBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, %            | 25%   | 30%   | 0%    |
| Vol Thru, %            | 75%   | 54%   | 72%   |
| Vol Right, %           | 0%    | 16%   | 28%   |
| Sign Control           | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 115   | 129   | 87    |
| LT Vol                 | 29    | 39    | 0     |
| Through Vol            | 86    | 70    | 63    |
| RT Vol                 | 0     | 20    | 24    |
| Lane Flow Rate         | 147   | 165   | 112   |
| Geometry Grp           | 1     | 1     | 1     |
| Degree of Util (X)     | 0.184 | 0.206 | 0.134 |
| Departure Headway (Hd) | 4.496 | 4.487 | 4.324 |
| Convergence, Y/N       | Yes   | Yes   | Yes   |
| Cap                    | 799   | 802   | 831   |
| Service Time           | 2.514 | 2.506 | 2.343 |
| HCM Lane V/C Ratio     | 0.184 | 0.206 | 0.135 |
| HCM Control Delay      | 8.5   | 8.7   | 8     |
| HCM Lane LOS           | A     | A     | A     |
| HCM 95th-tile Q        | 0.7   | 0.8   | 0.5   |

11: Colorado St & W. 18th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↔    |      |
| Traffic Vol, veh/h  | 0    | 0    | 63   | 24   |
| Future Vol, veh/h   | 0    | 0    | 63   | 24   |
| Peak Hour Factor    | 0.78 | 0.78 | 0.78 | 0.78 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 81   | 31   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB |
|----------------------------|----|
| Opposing Approach          | NB |
| Opposing Lanes             | 1  |
| Conflicting Approach Left  | WB |
| Conflicting Lanes Left     | 1  |
| Conflicting Approach Right |    |
| Conflicting Lanes Right    | 0  |
| HCM Control Delay          | 8  |
| HCM LOS                    | A  |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Intersection              |     |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 9.9 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | A   |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      |      |      |      |      | ↔    |      |      |      | ↔    |      |
| Traffic Vol, veh/h  | 0    | 0    | 0    | 0    | 0    | 77   | 50   | 108  | 0    | 13   | 196  | 0    |
| Future Vol, veh/h   | 0    | 0    | 0    | 0    | 0    | 77   | 50   | 108  | 0    | 13   | 196  | 0    |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 0    | 0    | 0    | 90   | 58   | 126  | 0    | 15   | 228  | 0    |
| Number of Lanes     | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   |  |  |  |  |  | WB   |  |  | NB   |  |  |
|----------------------------|--|--|--|--|--|------|--|--|------|--|--|
| Opposing Approach          |  |  |  |  |  |      |  |  | SB   |  |  |
| Opposing Lanes             |  |  |  |  |  | 0    |  |  | 1    |  |  |
| Conflicting Approach Left  |  |  |  |  |  | NB   |  |  |      |  |  |
| Conflicting Lanes Left     |  |  |  |  |  | 1    |  |  | 0    |  |  |
| Conflicting Approach Right |  |  |  |  |  | SB   |  |  | WB   |  |  |
| Conflicting Lanes Right    |  |  |  |  |  | 1    |  |  | 1    |  |  |
| HCM Control Delay          |  |  |  |  |  | 10.2 |  |  | 10.1 |  |  |
| HCM LOS                    |  |  |  |  |  | B    |  |  | B    |  |  |

| Lane                   | NBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, %            | 6%    | 33%   | 0%    |
| Vol Thru, %            | 94%   | 21%   | 88%   |
| Vol Right, %           | 0%    | 46%   | 12%   |
| Sign Control           | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 209   | 235   | 122   |
| LT Vol                 | 13    | 77    | 0     |
| Through Vol            | 196   | 50    | 107   |
| RT Vol                 | 0     | 108   | 15    |
| Lane Flow Rate         | 243   | 273   | 142   |
| Geometry Grp           | 1     | 1     | 1     |
| Degree of Util (X)     | 0.322 | 0.352 | 0.19  |
| Departure Headway (Hd) | 4.776 | 4.634 | 4.814 |
| Convergence, Y/N       | Yes   | Yes   | Yes   |
| Cap                    | 749   | 773   | 742   |
| Service Time           | 2.828 | 2.681 | 2.87  |
| HCM Lane V/C Ratio     | 0.324 | 0.353 | 0.191 |
| HCM Control Delay      | 10.1  | 10.2  | 9     |
| HCM Lane LOS           | B     | B     | A     |
| HCM 95th-ile Q         | 1.4   | 1.6   | 0.7   |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↔    |      |
| Traffic Vol, veh/h  | 0    | 0    | 107  | 15   |
| Future Vol, veh/h   | 0    | 0    | 107  | 15   |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 124  | 17   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   |  | SB |  |
|----------------------------|--|----|--|
| Opposing Approach          |  | NB |  |
| Opposing Lanes             |  | 1  |  |
| Conflicting Approach Left  |  | WB |  |
| Conflicting Lanes Left     |  | 1  |  |
| Conflicting Approach Right |  |    |  |
| Conflicting Lanes Right    |  | 0  |  |
| HCM Control Delay          |  | 9  |  |
| HCM LOS                    |  | A  |  |

14: Brazos St & W. 18th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Intersection              |     |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 9.4 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | A   |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      |      |      |      |      | ↔    |      |      |      | ↔    |      |
| Traffic Vol, veh/h  | 0    | 0    | 0    | 0    | 0    | 10   | 37   | 15   | 0    | 133  | 154  | 0    |
| Future Vol, veh/h   | 0    | 0    | 0    | 0    | 0    | 10   | 37   | 15   | 0    | 133  | 154  | 0    |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 0    | 0    | 0    | 12   | 43   | 17   | 0    | 155  | 179  | 0    |
| Number of Lanes     | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | WB  | NB   |
|----------------------------|-----|------|
| Opposing Approach          |     | SB   |
| Opposing Lanes             | 0   | 1    |
| Conflicting Approach Left  | NB  |      |
| Conflicting Lanes Left     | 1   | 0    |
| Conflicting Approach Right | SB  | WB   |
| Conflicting Lanes Right    | 1   | 1    |
| HCM Control Delay          | 8.4 | 10.2 |
| HCM LOS                    | A   | B    |

| Lane                   | NBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, %            | 46%   | 16%   | 0%    |
| Vol Thru, %            | 54%   | 60%   | 46%   |
| Vol Right, %           | 0%    | 24%   | 54%   |
| Sign Control           | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 287   | 62    | 118   |
| LT Vol                 | 133   | 10    | 0     |
| Through Vol            | 154   | 37    | 54    |
| RT Vol                 | 0     | 15    | 64    |
| Lane Flow Rate         | 334   | 72    | 137   |
| Geometry Grp           | 1     | 1     | 1     |
| Degree of Util (X)     | 0.395 | 0.097 | 0.158 |
| Departure Headway (Hd) | 4.258 | 4.848 | 4.133 |
| Convergence, Y/N       | Yes   | Yes   | Yes   |
| Cap                    | 831   | 742   | 871   |
| Service Time           | 2.356 | 2.858 | 2.143 |
| HCM Lane V/C Ratio     | 0.402 | 0.097 | 0.157 |
| HCM Control Delay      | 10.2  | 8.4   | 7.9   |
| HCM Lane LOS           | B     | A     | A     |
| HCM 95th-tile Q        | 1.9   | 0.3   | 0.6   |

14: Brazos St & W. 18th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↔    |      |
| Traffic Vol, veh/h  | 0    | 0    | 54   | 64   |
| Future Vol, veh/h   | 0    | 0    | 54   | 64   |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 63   | 74   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB  |
|----------------------------|-----|
| Opposing Approach          | NB  |
| Opposing Lanes             | 1   |
| Conflicting Approach Left  | WB  |
| Conflicting Lanes Left     | 1   |
| Conflicting Approach Right |     |
| Conflicting Lanes Right    | 0   |
| HCM Control Delay          | 7.9 |
| HCM LOS                    | A   |

20: Colorado St & E. 17th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 10.2 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↔    |      |      |      |      |      |      |      | ↔    |      |
| Traffic Vol, veh/h  | 0    | 19   | 200  | 40   | 0    | 0    | 0    | 0    | 0    | 0    | 85   | 117  |
| Future Vol, veh/h   | 0    | 19   | 200  | 40   | 0    | 0    | 0    | 0    | 0    | 0    | 85   | 117  |
| Peak Hour Factor    | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 23   | 244  | 49   | 0    | 0    | 0    | 0    | 0    | 0    | 104  | 143  |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB | NB  |
|----------------------------|----|-----|
| Opposing Approach          |    | SB  |
| Opposing Lanes             | 0  | 1   |
| Conflicting Approach Left  | SB | EB  |
| Conflicting Lanes Left     | 1  | 1   |
| Conflicting Approach Right | NB |     |
| Conflicting Lanes Right    | 1  | 0   |
| HCM Control Delay          | 11 | 9.6 |
| HCM LOS                    | B  | A   |

| Lane                   | NBLn1 | EBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, %            | 0%    | 7%    | 27%   |
| Vol Thru, %            | 42%   | 77%   | 73%   |
| Vol Right, %           | 58%   | 15%   | 0%    |
| Sign Control           | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 202   | 259   | 97    |
| LT Vol                 | 0     | 19    | 26    |
| Through Vol            | 85    | 200   | 71    |
| RT Vol                 | 117   | 40    | 0     |
| Lane Flow Rate         | 246   | 316   | 118   |
| Geometry Grp           | 1     | 1     | 1     |
| Degree of Util (X)     | 0.309 | 0.412 | 0.166 |
| Departure Headway (Hd) | 4.513 | 4.696 | 5.052 |
| Convergence, Y/N       | Yes   | Yes   | Yes   |
| Cap                    | 793   | 764   | 706   |
| Service Time           | 2.563 | 2.748 | 3.113 |
| HCM Lane V/C Ratio     | 0.31  | 0.414 | 0.167 |
| HCM Control Delay      | 9.6   | 11    | 9.1   |
| HCM Lane LOS           | A     | B     | A     |
| HCM 95th-ile Q         | 1.3   | 2     | 0.6   |

20: Colorado St & E. 17th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↔    |      |
| Traffic Vol, veh/h  | 0    | 26   | 71   | 0    |
| Future Vol, veh/h   | 0    | 26   | 71   | 0    |
| Peak Hour Factor    | 0.82 | 0.82 | 0.82 | 0.82 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 32   | 87   | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB  |
|----------------------------|-----|
| Opposing Approach          | NB  |
| Opposing Lanes             | 1   |
| Conflicting Approach Left  |     |
| Conflicting Lanes Left     | 0   |
| Conflicting Approach Right | EB  |
| Conflicting Lanes Right    | 1   |
| HCM Control Delay          | 9.1 |
| HCM LOS                    | A   |

22: N. Congress Ave & E. 17th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 12.3 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↔    |      |      |      |      |      |      |      | ↔    |      |
| Traffic Vol, veh/h  | 0    | 86   | 190  | 73   | 0    | 0    | 0    | 0    | 0    | 0    | 104  | 39   |
| Future Vol, veh/h   | 0    | 86   | 190  | 73   | 0    | 0    | 0    | 0    | 0    | 0    | 104  | 39   |
| Peak Hour Factor    | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 102  | 226  | 87   | 0    | 0    | 0    | 0    | 0    | 0    | 124  | 46   |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB | NB  |
|----------------------------|----|-----|
| Opposing Approach          |    | SB  |
| Opposing Lanes             | 0  | 1   |
| Conflicting Approach Left  | SB | EB  |
| Conflicting Lanes Left     | 1  | 1   |
| Conflicting Approach Right | NB |     |
| Conflicting Lanes Right    | 1  | 0   |
| HCM Control Delay          | 14 | 9.9 |
| HCM LOS                    | B  | A   |

| Lane                   | NBLn1 | EBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, %            | 0%    | 25%   | 19%   |
| Vol Thru, %            | 73%   | 54%   | 81%   |
| Vol Right, %           | 27%   | 21%   | 0%    |
| Sign Control           | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 143   | 349   | 189   |
| LT Vol                 | 0     | 86    | 35    |
| Through Vol            | 104   | 190   | 154   |
| RT Vol                 | 39    | 73    | 0     |
| Lane Flow Rate         | 170   | 415   | 225   |
| Geometry Grp           | 1     | 1     | 1     |
| Degree of Util (X)     | 0.247 | 0.558 | 0.334 |
| Departure Headway (Hd) | 5.219 | 4.837 | 5.337 |
| Convergence, Y/N       | Yes   | Yes   | Yes   |
| Cap                    | 691   | 735   | 677   |
| Service Time           | 3.227 | 2.936 | 3.337 |
| HCM Lane V/C Ratio     | 0.246 | 0.565 | 0.332 |
| HCM Control Delay      | 9.9   | 14    | 11    |
| HCM Lane LOS           | A     | B     | B     |
| HCM 95th-ile Q         | 1     | 3.5   | 1.5   |

22: N. Congress Ave & E. 17th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↔    |      |
| Traffic Vol, veh/h  | 0    | 35   | 154  | 0    |
| Future Vol, veh/h   | 0    | 35   | 154  | 0    |
| Peak Hour Factor    | 0.84 | 0.84 | 0.84 | 0.84 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 42   | 183  | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB |
|----------------------------|----|
| Opposing Approach          | NB |
| Opposing Lanes             | 1  |
| Conflicting Approach Left  |    |
| Conflicting Lanes Left     | 0  |
| Conflicting Approach Right | EB |
| Conflicting Lanes Right    | 1  |
| HCM Control Delay          | 11 |
| HCM LOS                    | B  |

4: Colorado St & Martin Luther King Jr. Blvd  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.9  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑↑   |      | ↑    | ↑↑   | ↑    |      |
| Traffic Vol, veh/h       | 602  | 32   | 31   | 1171 | 2    | 111  |
| Future Vol, veh/h        | 602  | 32   | 31   | 1171 | 2    | 111  |
| Conflicting Peds, #/hr   | 0    | 8    | 8    | 0    | 0    | 11   |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | 40   | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 94   | 94   | 94   | 94   | 94   | 94   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 640  | 34   | 33   | 1246 | 2    | 118  |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |      |
|----------------------|--------|---|--------|---|--------|------|
| Conflicting Flow All | 0      | 0 | 682    | 0 | 1354   | 356  |
| Stage 1              | -      | - | -      | - | 665    | -    |
| Stage 2              | -      | - | -      | - | 689    | -    |
| Critical Hdwy        | -      | - | 4.14   | - | 7.54   | 6.94 |
| Critical Hdwy Stg 1  | -      | - | -      | - | 6.54   | -    |
| Critical Hdwy Stg 2  | -      | - | -      | - | 6.54   | -    |
| Follow-up Hdwy       | -      | - | 2.22   | - | 3.52   | 3.32 |
| Pot Cap-1 Maneuver   | -      | - | 907    | - | 108    | 640  |
| Stage 1              | -      | - | -      | - | 416    | -    |
| Stage 2              | -      | - | -      | - | 402    | -    |
| Platoon blocked, %   | -      | - | -      | - | -      | -    |
| Mov Cap-1 Maneuver   | -      | - | 897    | - | 104    | 628  |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 104    | -    |
| Stage 1              | -      | - | -      | - | 416    | -    |
| Stage 2              | -      | - | -      | - | 387    | -    |

| Approach             | EB | WB  | NB   |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0  | 0.2 | 12.9 |
| HCM LOS              |    |     | B    |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 577   | -   | -   | 897   | -   |
| HCM Lane V/C Ratio    | 0.208 | -   | -   | 0.037 | -   |
| HCM Control Delay (s) | 12.9  | -   | -   | 9.2   | -   |
| HCM Lane LOS          | B     | -   | -   | A     | -   |
| HCM 95th %tile Q(veh) | 0.8   | -   | -   | 0.1   | -   |

9: Guadalupe St & W. 18th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 3    |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      | ↑    |      |      |      |      | ↑↑   |      |      |
| Traffic Vol, veh/h       | 0    | 0    | 0    | 57   | 137  | 0    | 0    | 0    | 0    | 0    | 933  | 39   |
| Future Vol, veh/h        | 0    | 0    | 0    | 57   | 137  | 0    | 0    | 0    | 0    | 0    | 933  | 39   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 52   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 39   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | -    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 0    | 0    | 59   | 141  | 0    | 0    | 0    | 0    | 0    | 962  | 40   |

| Major/Minor          | Minor1 |      |   | Major2 |   |   |
|----------------------|--------|------|---|--------|---|---|
| Conflicting Flow All | 533    | 1041 | - | -      | - | 0 |
| Stage 1              | 0      | 0    | - | -      | - | - |
| Stage 2              | 533    | 1041 | - | -      | - | - |
| Critical Hdwy        | 6.84   | 6.54 | - | -      | - | - |
| Critical Hdwy Stg 1  | -      | -    | - | -      | - | - |
| Critical Hdwy Stg 2  | 5.84   | 5.54 | - | -      | - | - |
| Follow-up Hdwy       | 3.52   | 4.02 | - | -      | - | - |
| Pot Cap-1 Maneuver   | 477    | 229  | 0 | 0      | - | - |
| Stage 1              | -      | -    | 0 | 0      | - | - |
| Stage 2              | 553    | 305  | 0 | 0      | - | - |
| Platoon blocked, %   | -      | -    | - | -      | - | - |
| Mov Cap-1 Maneuver   | 477    | 0    | - | -      | - | - |
| Mov Cap-2 Maneuver   | 477    | 0    | - | -      | - | - |
| Stage 1              | -      | 0    | - | -      | - | - |
| Stage 2              | 553    | 0    | - | -      | - | - |

| Approach             | WB   | SB |
|----------------------|------|----|
| HCM Control Delay, s | 17.9 | 0  |
| HCM LOS              | C    |    |

| Minor Lane/Major Mvmt | WBLn1 | SBT | SBR |
|-----------------------|-------|-----|-----|
| Capacity (veh/h)      | 477   | -   | -   |
| HCM Lane V/C Ratio    | 0.419 | -   | -   |
| HCM Control Delay (s) | 17.9  | -   | -   |
| HCM Lane LOS          | C     | -   | -   |
| HCM 95th %tile Q(veh) | 2     | -   | -   |

10: Lavaca St & W. 18th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.4  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      |      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 0    | 0    | 0    | 0    | 79   | 28   | 113  | 900  | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 0    | 0    | 0    | 0    | 79   | 28   | 113  | 900  | 0    | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 20   | 24   | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | -    | -    | -    | 0    | -    | -    | 0    | -    | -    | -    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 0    | 0    | 0    | 83   | 29   | 119  | 947  | 0    | 0    | 0    | 0    |

| Major/Minor          | Minor1 |      |      | Major1 |   |   |
|----------------------|--------|------|------|--------|---|---|
| Conflicting Flow All | -      | 1209 | 494  | 24     | 0 | - |
| Stage 1              | -      | 1185 | -    | -      | - | - |
| Stage 2              | -      | 24   | -    | -      | - | - |
| Critical Hdwy        | -      | 6.54 | 7.14 | 5.34   | - | - |
| Critical Hdwy Stg 1  | -      | 5.54 | -    | -      | - | - |
| Critical Hdwy Stg 2  | -      | -    | -    | -      | - | - |
| Follow-up Hdwy       | -      | 4.02 | 3.92 | 3.12   | - | - |
| Pot Cap-1 Maneuver   | 0      | 182  | 446  | 1125   | - | 0 |
| Stage 1              | 0      | 261  | -    | -      | - | 0 |
| Stage 2              | 0      | -    | -    | -      | - | 0 |
| Platoon blocked, %   | -      | -    | -    | -      | - | - |
| Mov Cap-1 Maneuver   | -      | 0    | 446  | 1125   | - | - |
| Mov Cap-2 Maneuver   | -      | 0    | -    | -      | - | - |
| Stage 1              | -      | 0    | -    | -      | - | - |
| Stage 2              | -      | 0    | -    | -      | - | - |

| Approach             | WB   | NB |
|----------------------|------|----|
| HCM Control Delay, s | 15.8 | 1  |
| HCM LOS              | C    |    |

| Minor Lane/Major Mvmt | NBL   | NBTWBLn1 |
|-----------------------|-------|----------|
| Capacity (veh/h)      | 1125  | - 446    |
| HCM Lane V/C Ratio    | 0.106 | - 0.253  |
| HCM Control Delay (s) | 8.6   | - 15.8   |
| HCM Lane LOS          | A     | - C      |
| HCM 95th %tile Q(veh) | 0.4   | - 1      |

24: E. 17th St & Brazos St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 16.8 |      |      |      |      |      |
| Movement                 | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
| Lane Configurations      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 56   | 229  | 0    | 0    | 66   | 0    |
| Future Vol, veh/h        | 56   | 229  | 0    | 0    | 66   | 0    |
| Conflicting Peds, #/hr   | 403  | 0    | 0    | 0    | 3    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | 0    | -    | 0    | -    |
| Peak Hour Factor         | 81   | 81   | 81   | 81   | 81   | 81   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 69   | 283  | 0    | 0    | 81   | 0    |

| Major/Minor          | Major1 |   | Minor2 |   |
|----------------------|--------|---|--------|---|
| Conflicting Flow All | 403    | 0 | 827    | - |
| Stage 1              | -      | - | 403    | - |
| Stage 2              | -      | - | 424    | - |
| Critical Hdwy        | 4.12   | - | 6.42   | - |
| Critical Hdwy Stg 1  | -      | - | -      | - |
| Critical Hdwy Stg 2  | -      | - | 5.42   | - |
| Follow-up Hdwy       | 2.218  | - | 3.518  | - |
| Pot Cap-1 Maneuver   | 1156   | - | 341    | 0 |
| Stage 1              | -      | - | -      | 0 |
| Stage 2              | -      | - | 660    | 0 |
| Platoon blocked, %   | -      | - | -      | - |
| Mov Cap-1 Maneuver   | 1156   | - | 120    | - |
| Mov Cap-2 Maneuver   | -      | - | 120    | - |
| Stage 1              | -      | - | -      | - |
| Stage 2              | -      | - | 378    | - |

| Approach             | EB  | SB   |
|----------------------|-----|------|
| HCM Control Delay, s | 1.6 | 82.7 |
| HCM LOS              |     | F    |

| Minor Lane/Major Mvmt | EBL  | EBT SBLn1 |
|-----------------------|------|-----------|
| Capacity (veh/h)      | 1156 | - 120     |
| HCM Lane V/C Ratio    | 0.06 | - 0.679   |
| HCM Control Delay (s) | 8.3  | 0 82.7    |
| HCM Lane LOS          | A    | A F       |
| HCM 95th %tile Q(veh) | 0.2  | - 3.6     |

25: San Jacinto Blvd & E. 17th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 10.3 |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↱    |      |      |      |      |      |      |      | ↱↱↱  |      |      |
| Traffic Vol, veh/h       | 0    | 140  | 175  | 0    | 0    | 0    | 0    | 0    | 0    | 100  | 727  | 0    |
| Future Vol, veh/h        | 0    | 140  | 175  | 0    | 0    | 0    | 0    | 0    | 0    | 100  | 727  | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 18   | 0    | 0    | 0    | 0    | 0    | 0    | 90   | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | -    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 165  | 206  | 0    | 0    | 0    | 0    | 0    | 0    | 118  | 855  | 0    |

| Major/Minor          | Minor2 |      | Major2 |      |     |
|----------------------|--------|------|--------|------|-----|
| Conflicting Flow All | -      | 1181 | 446    | 90   | 0 0 |
| Stage 1              | -      | 1091 | -      | -    | -   |
| Stage 2              | -      | 90   | -      | -    | -   |
| Critical Hdwy        | -      | 6.54 | 7.14   | 5.34 | - - |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | - - |
| Critical Hdwy Stg 2  | -      | -    | -      | -    | - - |
| Follow-up Hdwy       | -      | 4.02 | 3.92   | 3.12 | - - |
| Pot Cap-1 Maneuver   | 0      | 189  | 479    | 1050 | - 0 |
| Stage 1              | 0      | 289  | -      | -    | - 0 |
| Stage 2              | 0      | -    | -      | -    | - 0 |
| Platoon blocked, %   | -      | -    | -      | -    | -   |
| Mov Cap-1 Maneuver   | -      | 0    | 479    | 1050 | - - |
| Mov Cap-2 Maneuver   | -      | 0    | -      | -    | - - |
| Stage 1              | -      | 0    | -      | -    | - - |
| Stage 2              | -      | 0    | -      | -    | - - |

| Approach             | EB   | SB  |
|----------------------|------|-----|
| HCM Control Delay, s | 33.8 | 1.4 |
| HCM LOS              | D    |     |

| Minor Lane/Major Mvmt | EBLn1 | SBL   | SBT |
|-----------------------|-------|-------|-----|
| Capacity (veh/h)      | 479   | 1050  | -   |
| HCM Lane V/C Ratio    | 0.774 | 0.112 | -   |
| HCM Control Delay (s) | 33.8  | 8.9   | 0.4 |
| HCM Lane LOS          | D     | A     | A   |
| HCM 95th %tile Q(veh) | 6.8   | 0.4   | -   |

26: Trinity St & E. 17th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 4.5  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | ↱    |      | ↱↱↱  |      |      |      |
| Traffic Vol, veh/h       | 248  | 0    | 0    | 481  | 0    | 0    |
| Future Vol, veh/h        | 248  | 0    | 0    | 481  | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | -    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 83   | 83   | 83   | 83   | 83   | 83   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 299  | 0    | 0    | 580  | 0    | 0    |

| Major/Minor          | Minor2 | Major1 |   |   |
|----------------------|--------|--------|---|---|
| Conflicting Flow All | 232    | -      | - | 0 |
| Stage 1              | 0      | -      | - | - |
| Stage 2              | 232    | -      | - | - |
| Critical Hdwy        | 5.74   | -      | - | - |
| Critical Hdwy Stg 1  | -      | -      | - | - |
| Critical Hdwy Stg 2  | 6.04   | -      | - | - |
| Follow-up Hdwy       | 3.82   | -      | - | - |
| Pot Cap-1 Maneuver   | 734    | 0      | 0 | - |
| Stage 1              | -      | 0      | 0 | - |
| Stage 2              | 720    | 0      | 0 | - |
| Platoon blocked, %   | -      | -      | - | - |
| Mov Cap-1 Maneuver   | 734    | -      | - | - |
| Mov Cap-2 Maneuver   | 734    | -      | - | - |
| Stage 1              | -      | -      | - | - |
| Stage 2              | 720    | -      | - | - |

| Approach             | EB   | NB |
|----------------------|------|----|
| HCM Control Delay, s | 13.2 | 0  |
| HCM LOS              | B    |    |

| Minor Lane/Major Mvmt | NBT EBLn1 |
|-----------------------|-----------|
| Capacity (veh/h)      | - 734     |
| HCM Lane V/C Ratio    | - 0.407   |
| HCM Control Delay (s) | - 13.2    |
| HCM Lane LOS          | - B       |
| HCM 95th %tile Q(veh) | - 2       |

27: Guadalupe St & E. 16th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 9.6  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      |      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 0    | 0    | 0    | 188  | 133  | 0    | 0    | 0    | 0    | 0    | 941  | 25   |
| Future Vol, veh/h        | 0    | 0    | 0    | 188  | 133  | 0    | 0    | 0    | 0    | 0    | 941  | 25   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 23   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 40   |
| Sign Control             | Free | Free | Free | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0    |
| Veh in Median Storage, # | -    | -    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 0    | 0    | 216  | 153  | 0    | 0    | 0    | 0    | 0    | 1082 | 29   |

| Major/Minor          | Minor1 |      |   | Major2 |   |   |
|----------------------|--------|------|---|--------|---|---|
| Conflicting Flow All | 564    | 1122 | - | -      | - | 0 |
| Stage 1              | 0      | 0    | - | -      | - | - |
| Stage 2              | 564    | 1122 | - | -      | - | - |
| Critical Hdwy        | 6.84   | 6.54 | - | -      | - | - |
| Critical Hdwy Stg 1  | -      | -    | - | -      | - | - |
| Critical Hdwy Stg 2  | 5.84   | 5.54 | - | -      | - | - |
| Follow-up Hdwy       | 3.52   | 4.02 | - | -      | - | - |
| Pot Cap-1 Maneuver   | 456    | 205  | 0 | 0      | - | - |
| Stage 1              | -      | -    | 0 | 0      | - | - |
| Stage 2              | 533    | 279  | 0 | 0      | - | - |
| Platoon blocked, %   | -      | -    | - | -      | - | - |
| Mov Cap-1 Maneuver   | 456    | 0    | - | -      | - | - |
| Mov Cap-2 Maneuver   | 456    | 0    | - | -      | - | - |
| Stage 1              | -      | 0    | - | -      | - | - |
| Stage 2              | 533    | 0    | - | -      | - | - |

| Approach             | WB   | SB |
|----------------------|------|----|
| HCM Control Delay, s | 38.6 | 0  |
| HCM LOS              | E    |    |

| Minor Lane/Major Mvmt | WBLn1 | SBT | SBR |
|-----------------------|-------|-----|-----|
| Capacity (veh/h)      | 456   | -   | -   |
| HCM Lane V/C Ratio    | 0.809 | -   | -   |
| HCM Control Delay (s) | 38.6  | -   | -   |
| HCM Lane LOS          | E     | -   | -   |
| HCM 95th %tile Q(veh) | 7.5   | -   | -   |

29: Colorado St & E. 16th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.3  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      |      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 0    | 0    | 0    | 11   | 33   | 6    | 13   | 63   | 0    | 0    | 346  | 93   |
| Future Vol, veh/h        | 0    | 0    | 0    | 11   | 33   | 6    | 13   | 63   | 0    | 0    | 346  | 93   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 14   | 82   | 0    | 0    | 0    | 0    | 82   |
| Sign Control             | Free | Free | Free | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | -    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 0    | 0    | 14   | 42   | 8    | 17   | 81   | 0    | 0    | 444  | 119  |

| Major/Minor          | Minor1 |       |       | Major1 |   |   | Major2 |   |   |
|----------------------|--------|-------|-------|--------|---|---|--------|---|---|
| Conflicting Flow All | 617    | 759   | 95    | 645    | 0 | - | -      | - | 0 |
| Stage 1              | 114    | 114   | -     | -      | - | - | -      | - | - |
| Stage 2              | 503    | 645   | -     | -      | - | - | -      | - | - |
| Critical Hdwy        | 6.42   | 6.52  | 6.22  | 4.12   | - | - | -      | - | - |
| Critical Hdwy Stg 1  | 5.42   | 5.52  | -     | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | 5.42   | 5.52  | -     | -      | - | - | -      | - | - |
| Follow-up Hdwy       | 3.518  | 4.018 | 3.318 | 2.218  | - | - | -      | - | - |
| Pot Cap-1 Maneuver   | 453    | 336   | 962   | 940    | - | 0 | 0      | - | - |
| Stage 1              | 911    | 801   | -     | -      | - | 0 | 0      | - | - |
| Stage 2              | 607    | 467   | -     | -      | - | 0 | 0      | - | - |
| Platoon blocked, %   | -      | -     | -     | -      | - | - | -      | - | - |
| Mov Cap-1 Maneuver   | 444    | 0     | 949   | 940    | - | - | -      | - | - |
| Mov Cap-2 Maneuver   | 444    | 0     | -     | -      | - | - | -      | - | - |
| Stage 1              | 894    | 0     | -     | -      | - | - | -      | - | - |
| Stage 2              | 607    | 0     | -     | -      | - | - | -      | - | - |

| Approach             | WB   | NB  | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 12.5 | 1.5 | 0  |
| HCM LOS              | B    |     |    |

| Minor Lane/Major Mvmt | NBL   | NBTWBLn1 | SBT   | SBR |
|-----------------------|-------|----------|-------|-----|
| Capacity (veh/h)      | 940   | -        | 547   | -   |
| HCM Lane V/C Ratio    | 0.018 | -        | 0.117 | -   |
| HCM Control Delay (s) | 8.9   | 0        | 12.5  | -   |
| HCM Lane LOS          | A     | A        | B     | -   |
| HCM 95th %tile Q(veh) | 0.1   | -        | 0.4   | -   |

30: N. Congress Ave & E. 16th St  
TIA for Texas Capital Complex Master Plan 2018 Update

Existing Conditions  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 3.1  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      |      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 0    | 0    | 0    | 43   | 27   | 48   | 3    | 92   | 0    | 0    | 248  | 9    |
| Future Vol, veh/h        | 0    | 0    | 0    | 43   | 27   | 48   | 3    | 92   | 0    | 0    | 248  | 9    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 55   | 0    | 24   | 20   | 0    | 0    | 0    | 0    | 20   |
| Sign Control             | Free | Free | Free | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | -    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 0    | 0    | 53   | 33   | 59   | 4    | 114  | 0    | 0    | 306  | 11   |

| Major/Minor          | Minor1 |       |       | Major1 |   |   | Major2 |   |   |
|----------------------|--------|-------|-------|--------|---|---|--------|---|---|
| Conflicting Flow All | 488    | 458   | 138   | 337    | 0 | - | -      | - | 0 |
| Stage 1              | 121    | 121   | -     | -      | - | - | -      | - | - |
| Stage 2              | 367    | 337   | -     | -      | - | - | -      | - | - |
| Critical Hdwy        | 6.42   | 6.52  | 6.22  | 4.12   | - | - | -      | - | - |
| Critical Hdwy Stg 1  | 5.42   | 5.52  | -     | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | 5.42   | 5.52  | -     | -      | - | - | -      | - | - |
| Follow-up Hdwy       | 3.518  | 4.018 | 3.318 | 2.218  | - | - | -      | - | - |
| Pot Cap-1 Maneuver   | 539    | 499   | 910   | 1222   | - | 0 | 0      | - | - |
| Stage 1              | 904    | 796   | -     | -      | - | 0 | 0      | - | - |
| Stage 2              | 701    | 641   | -     | -      | - | 0 | 0      | - | - |
| Platoon blocked, %   |        |       |       |        |   |   |        |   |   |
| Mov Cap-1 Maneuver   | 509    | 0     | 889   | 1158   | - | - | -      | - | - |
| Mov Cap-2 Maneuver   | 509    | 0     | -     | -      | - | - | -      | - | - |
| Stage 1              | 900    | 0     | -     | -      | - | - | -      | - | - |
| Stage 2              | 664    | 0     | -     | -      | - | - | -      | - | - |

| Approach             | WB | NB  | SB |
|----------------------|----|-----|----|
| HCM Control Delay, s | 12 | 0.3 | 0  |
| HCM LOS              | B  |     |    |

| Minor Lane/Major Mvmt | NBL   | NBTWBLn1 | SBT   | SBR |
|-----------------------|-------|----------|-------|-----|
| Capacity (veh/h)      | 1158  | -        | 657   | -   |
| HCM Lane V/C Ratio    | 0.003 | -        | 0.222 | -   |
| HCM Control Delay (s) | 8.1   | 0        | 12    | -   |
| HCM Lane LOS          | A     | A        | B     | -   |
| HCM 95th %tile Q(veh) | 0     | -        | 0.8   | -   |

31: Brazos St & E. 16th St  
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Existing Conditions  
Timing Plan: PM




















| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 3.3  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 0    | 0    | 14   | 90   | 35   | 0    |
| Future Vol, veh/h        | 0    | 0    | 14   | 90   | 35   | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 1    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | -    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 58   | 58   | 58   | 58   | 58   | 58   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 0    | 24   | 155  | 60   | 0    |

| Major/Minor          | Major2 |   | Minor1 |
|----------------------|--------|---|--------|
| Conflicting Flow All | 1      | 0 | 204    |
| Stage 1              | -      | - | 1      |
| Stage 2              | -      | - | 203    |
| Critical Hdwy        | 4.12   | - | 6.42   |
| Critical Hdwy Stg 1  | -      | - | -      |
| Critical Hdwy Stg 2  | -      | - | 5.42   |
| Follow-up Hdwy       | 2.218  | - | 3.518  |
| Pot Cap-1 Maneuver   | 1622   | - | 784    |
| Stage 1              | -      | - | -      |
| Stage 2              | -      | - | 831    |
| Platoon blocked, %   |        |   |        |
| Mov Cap-1 Maneuver   | 1622   | - | 771    |
| Mov Cap-2 Maneuver   | -      | - | 771    |
| Stage 1              | -      | - | -      |
| Stage 2              | -      | - | 818    |

| Approach             | WB | NB   |
|----------------------|----|------|
| HCM Control Delay, s | 1  | 10.1 |
| HCM LOS              |    | B    |

| Minor Lane/Major Mvmt | NBLn1 | WBL   | WBT |
|-----------------------|-------|-------|-----|
| Capacity (veh/h)      | 771   | 1622  | -   |
| HCM Lane V/C Ratio    | 0.078 | 0.015 | -   |
| HCM Control Delay (s) | 10.1  | 7.3   | 0   |
| HCM Lane LOS          | B     | A     | A   |
| HCM 95th %tile Q(veh) | 0.3   | 0     | -   |

1: Martin Luther King Jr. Blvd & Guadalupe St  
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|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     |  |  |   |   |  |  |   |   |   |  |  |  |
| Traffic Volume (vph)    | 66  | 697   | 158   | 0   | 498   | 311   | 0   | 0   | 0   | 233   | 681   | 129   |
| Future Volume (vph)     | 66  | 697   | 158   | 0   | 498   | 311   | 0   | 0   | 0   | 233   | 681   | 129   |
| Confl. Peds. (#/hr)     | 27  |   | 19  | 19  |   | 27  |   |   |   | 28  |   | 19  |
| Confl. Bikes (#/hr)     |   |   | 1   |   |   | 1   |   |   |   |   |   | 12  |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  |
| Adj. Flow (vph)         | 70  | 741   | 168   | 0   | 530   | 331   | 0   | 0   | 0   | 248   | 724   | 137   |
| Shared Lane Traffic (%) |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)   | 70  | 909   | 0   | 0   | 530   | 331   | 0   | 0   | 0   | 248   | 724   | 137   |
| Turn Type               | Prot  | NA  |   |   | NA  | pm+ov   |   |   |   | pm+pt   | NA  | Perm  |
| Protected Phases        | 5   | 2   |   |   | 6   | 7   |   |   |   | 7   | 4   |   |
| Permitted Phases        |   |   |   |   |   | 6   |   |   |   | 4   |   | 4   |
| Detector Phase          | 5   | 2   |   |   | 6   | 7   |   |   |   | 7   | 4   | 4   |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     | 2.0   | 15.0  |   |   | 15.0  | 10.0  |   |   |   | 10.0  | 5.0   | 5.0   |
| Minimum Split (s)       | 7.0   | 27.0  |   |   | 34.0  | 15.0  |   |   |   | 15.0  | 32.0  | 32.0  |
| Total Split (s)         | 18.0  | 75.0  |   |   | 57.0  | 45.0  |   |   |   | 45.0  | 45.0  | 45.0  |
| Total Split (%)         | 15.0%   | 62.5%   |   |   | 47.5%   | 37.5%   |   |   |   | 37.5%   | 37.5%   | 37.5%   |
| Yellow Time (s)         | 4.0   | 4.0   |   |   | 4.0   | 4.0   |   |   |   | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |   |   | 1.0   | 1.0   |   |   |   | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |   |   | 0.0   | 0.0   |   |   |   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   | 5.0   |   |   | 5.0   | 5.0   |   |   |   | 5.0   | 5.0   | 5.0   |
| Lead/Lag                | Lag   |   |   |   | Lead  |   |   |   |   |   |   |   |
| Lead-Lag Optimize?      | Yes   |   |   |   | Yes   |   |   |   |   |   |   |   |
| Recall Mode             | None  | C-Max   |   |   | C-Max   | None  |   |   |   | None  | Max   | Max   |
| Act Effct Green (s)     | 11.6  | 70.0  |   |   | 55.6  | 95.6  |   |   |   | 40.0  | 40.0  | 40.0  |
| Actuated g/C Ratio      | 0.10  | 0.58  |   |   | 0.46  | 0.80  |   |   |   | 0.33  | 0.33  | 0.33  |
| v/c Ratio               | 0.41  | 0.45  |   |   | 0.32  | 0.26  |   |   |   | 0.42  | 0.61  | 0.24  |
| Control Delay           | 57.7  | 14.3  |   |   | 21.9  | 1.3   |   |   |   | 33.7  | 36.3  | 11.6  |
| Queue Delay             | 0.0   | 0.0   |   |   | 0.0   | 0.0   |   |   |   | 0.0   | 0.0   | 0.0   |
| Total Delay             | 57.7  | 14.3  |   |   | 21.9  | 1.4   |   |   |   | 33.7  | 36.3  | 11.6  |
| LOS                     | E   | B   |   |   | C   | A   |   |   |   | C   | D   | B   |
| Approach Delay          |   | 17.4  |   |   | 14.0  |   |   |   |   |   | 32.6  |   |
| Approach LOS            |   | B   |   |   | B   |   |   |   |   |   | C   |   |
| Queue Length 50th (ft)  | 51  | 189   |   |   | 134   | 0   |   |   |   | 148   | 246   | 23  |
| Queue Length 95th (ft)  | 99  | 237   |   |   | 196   | 40  |   |   |   | 225   | 311   | 70  |
| Internal Link Dist (ft) |   | 228   |   |   | 45  |   |   | 159   |   |   | 210   |   |
| Turn Bay Length (ft)    | 160   |   |   |   |   |   |   |   |   | 130   |   | 120   |
| Base Capacity (vph)     | 191   | 2007  |   |   | 1639  | 1273  |   |   |   | 590   | 1179  | 567   |
| Starvation Cap Reductn  | 0   | 0   |   |   | 0   | 144   |   |   |   | 0   | 0   | 0   |
| Spillback Cap Reductn   | 0   | 0   |   |   | 0   | 0   |   |   |   | 0   | 0   | 0   |
| Storage Cap Reductn     | 0   | 0   |   |   | 0   | 0   |   |   |   | 0   | 0   | 0   |
| Reduced v/c Ratio       | 0.37  | 0.45  |   |   | 0.32  | 0.29  |   |   |   | 0.42  | 0.61  | 0.24  |

## Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 75

1: Martin Luther King Jr. Blvd & Guadalupe St  
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Control Type: Actuated-Coordinated

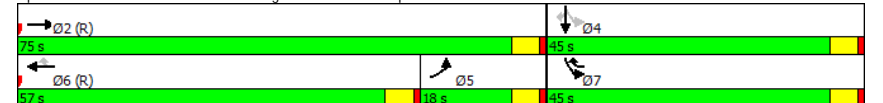
Maximum v/c Ratio: 0.61

Intersection Signal Delay: 22.2      Intersection LOS: C

Intersection Capacity Utilization 62.8% ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: Martin Luther King Jr. Blvd & Guadalupe St



3: Lavaca St & Martin Luther King Jr. Blvd  
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2020 Background  
Timing Plan: AM

|   | →     | ↖    | ↗    | ←     | ↖     | ↗     |
|---|-------|------|------|-------|-------|-------|
| Lane Group  | EBT   | EBR  | WBL  | WBT   | NBL   | NBR   |
| Lane Configurations   | ↑↑    |      |      | ↑↑    | ↖↗    | ↖     |
| Traffic Volume (vph)  | 930   | 0    | 0    | 692   | 322   | 219   |
| Future Volume (vph)   | 930   | 0    | 0    | 692   | 322   | 219   |
| Confl. Peds. (#/hr)   |       |      |      |       |       | 10    |
| Peak Hour Factor  | 0.86  | 0.86 | 0.86 | 0.86  | 0.86  | 0.86  |
| Adj. Flow (vph)   | 1081  | 0    | 0    | 805   | 374   | 255   |
| Shared Lane Traffic (%)   |       |      |      |       |       |       |
| Lane Group Flow (vph)   | 1081  | 0    | 0    | 805   | 374   | 255   |
| Turn Type   | NA    |      |      | NA    | Prot  | Perm  |
| Protected Phases  | 2     |      |      | 6     | 8     |       |
| Permitted Phases  |       |      |      |       |       | 3     |
| Detector Phase  | 2     |      |      | 6     | 8     | 3     |
| Switch Phase  |       |      |      |       |       |       |
| Minimum Initial (s)   | 10.0  |      |      | 10.0  | 5.0   | 5.0   |
| Minimum Split (s)   | 30.0  |      |      | 15.0  | 10.0  | 29.0  |
| Total Split (s)   | 87.0  |      |      | 87.0  | 33.0  | 33.0  |
| Total Split (%)   | 72.5% |      |      | 72.5% | 27.5% | 27.5% |
| Yellow Time (s)   | 4.0   |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)  | 1.0   |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)  | 0.0   |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)   | 5.0   |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag  |       |      |      |       |       |       |
| Lead-Lag Optimize?  |       |      |      |       |       |       |
| Recall Mode   | C-Max |      |      | C-Max | Max   | Max   |
| Act Effect Green (s)  | 82.0  |      |      | 82.0  | 28.0  | 28.0  |
| Actuated g/C Ratio  | 0.68  |      |      | 0.68  | 0.23  | 0.23  |
| v/c Ratio   | 0.45  |      |      | 0.33  | 0.47  | 0.55  |
| Control Delay   | 7.9   |      |      | 5.1   | 43.5  | 28.2  |
| Queue Delay   | 0.1   |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay   | 8.0   |      |      | 5.1   | 43.5  | 28.2  |
| LOS   | A     |      |      | A     | D     | C     |
| Approach Delay  | 8.0   |      |      | 5.1   | 37.3  |       |
| Approach LOS  | A     |      |      | A     | D     |       |
| Queue Length 50th (ft)  | 126   |      |      | 52    | 89    | 14    |
| Queue Length 95th (ft)  | 138   |      |      | 63    | 171   | 162   |
| Internal Link Dist (ft)   | 272   |      |      | 277   | 337   |       |
| Turn Bay Length (ft)  |       |      |      |       |       |       |
| Base Capacity (vph)   | 2418  |      |      | 2418  | 801   | 463   |
| Starvation Cap Reductn  | 426   |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   | 0     |      |      | 0     | 0     | 0     |
| Storage Cap Reductn   | 0     |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio   | 0.54  |      |      | 0.33  | 0.47  | 0.55  |
| <b>Intersection Summary</b>   |       |      |      |       |       |       |
| Cycle Length: 120   |       |      |      |       |       |       |
| Actuated Cycle Length: 120  |       |      |      |       |       |       |
| Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green |       |      |      |       |       |       |
| Natural Cycle: 60   |       |      |      |       |       |       |
| Control Type: Actuated-Coordinated                                  |       |      |      |       |       |       |

MS

Synchro 9 Report  
Page 3

3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

Maximum v/c Ratio: 0.55

Intersection Signal Delay: 14.4

Intersection LOS: B

Intersection Capacity Utilization 54.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Lavaca St & Martin Luther King Jr. Blvd

|          |      |
|----------|------|
| → Ø2 (R) | ↖ Ø3 |
| 87 s     | 33 s |
| ← Ø6 (R) | ↗ Ø8 |
| 87 s     | 33 s |

MS

Synchro 9 Report  
Page 4

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

|                         | →     | ↖    | ↗     | ←      | ↖    | ↗    |
|-------------------------|-------|------|-------|--------|------|------|
| Lane Group              | EBT   | EBR  | WBL   | WBT    | NBL  | NBR  |
| Lane Configurations     | ↔↔    |      | ↖     | ↔↔     |      |      |
| Traffic Volume (vph)    | 986   | 0    | 8     | 942    | 0    | 0    |
| Future Volume (vph)     | 986   | 0    | 8     | 942    | 0    | 0    |
| Confl. Peds. (#/hr)     |       | 6    | 6     |        | 1    |      |
| Confl. Bikes (#/hr)     |       | 1    |       |        |      |      |
| Peak Hour Factor        | 0.89  | 0.89 | 0.89  | 0.89   | 0.89 | 0.89 |
| Adj. Flow (vph)         | 1108  | 0    | 9     | 1058   | 0    | 0    |
| Shared Lane Traffic (%) |       |      |       |        |      |      |
| Lane Group Flow (vph)   | 1108  | 0    | 9     | 1058   | 0    | 0    |
| Turn Type               | NA    |      | pm+pt | NA     |      |      |
| Protected Phases        | 2     |      | 1     | 6      |      |      |
| Permitted Phases        |       |      | 6     |        |      |      |
| Detector Phase          | 2     |      | 1     | 6      |      |      |
| Switch Phase            |       |      |       |        |      |      |
| Minimum Initial (s)     | 15.0  |      | 1.0   | 5.0    |      |      |
| Minimum Split (s)       | 34.0  |      | 5.5   | 29.0   |      |      |
| Total Split (s)         | 106.0 |      | 14.0  | 120.0  |      |      |
| Total Split (%)         | 88.3% |      | 11.7% | 100.0% |      |      |
| Yellow Time (s)         | 4.0   |      | 3.5   | 4.0    |      |      |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0    |      |      |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0    |      |      |
| Total Lost Time (s)     | 5.0   |      | 4.5   | 5.0    |      |      |
| Lead/Lag                | Lead  |      | Lag   |        |      |      |
| Lead-Lag Optimize?      | Yes   |      | Yes   |        |      |      |
| Recall Mode             | C-Max |      | None  | C-Max  |      |      |
| Act Effect Green (s)    | 116.2 |      | 119.1 | 120.0  |      |      |
| Actuated g/C Ratio      | 0.97  |      | 0.99  | 1.00   |      |      |
| v/c Ratio               | 0.32  |      | 0.02  | 0.30   |      |      |
| Control Delay           | 0.5   |      | 0.0   | 0.2    |      |      |
| Queue Delay             | 0.0   |      | 0.0   | 0.0    |      |      |
| Total Delay             | 0.5   |      | 0.0   | 0.2    |      |      |
| LOS                     | A     |      | A     | A      |      |      |
| Approach Delay          | 0.5   |      |       | 0.2    |      |      |
| Approach LOS            | A     |      |       | A      |      |      |
| Queue Length 50th (ft)  | 0     |      | 0     | 0      |      |      |
| Queue Length 95th (ft)  | 47    |      | m0    | 0      |      |      |
| Internal Link Dist (ft) | 366   |      |       | 377    | 331  |      |
| Turn Bay Length (ft)    |       |      | 115   |        |      |      |
| Base Capacity (vph)     | 3427  |      | 560   | 3539   |      |      |
| Starvation Cap Reductn  | 0     |      | 0     | 0      |      |      |
| Spillback Cap Reductn   | 0     |      | 0     | 0      |      |      |
| Storage Cap Reductn     | 0     |      | 0     | 0      |      |      |
| Reduced v/c Ratio       | 0.32  |      | 0.02  | 0.30   |      |      |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 40

MS

Synchro 9 Report  
Page 5

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.32

Intersection Signal Delay: 0.3

Intersection LOS: A

Intersection Capacity Utilization 31.4%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: N. Congress Ave & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 6

6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations     | ↰     | ↰↱    |      | ↰     | ↰↱    | ↰     |       | ↰     | ↰     | ↰     | ↰     | ↰     |
| Traffic Volume (vph)    | 137   | 734   | 123  | 133   | 948   | 135   | 5     | 0     | 14    | 42    | 1     | 10    |
| Future Volume (vph)     | 137   | 734   | 123  | 133   | 948   | 135   | 5     | 0     | 14    | 42    | 1     | 10    |
| Confl. Peds. (#/hr)     | 18    |       | 8    | 8     |       | 18    | 23    |       | 7     | 7     |       | 23    |
| Confl. Bikes (#/hr)     |       |       | 3    |       |       | 3     |       |       |       |       |       | 1     |
| Peak Hour Factor        | 0.84  | 0.84  | 0.84 | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  |
| Adj. Flow (vph)         | 163   | 874   | 146  | 158   | 1129  | 161   | 6     | 0     | 17    | 50    | 1     | 12    |
| Shared Lane Traffic (%) |       |       |      |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)   | 163   | 1020  | 0    | 158   | 1129  | 161   | 0     | 6     | 17    | 0     | 51    | 12    |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    | Perm  | Perm  | NA    | Perm  | Perm  | NA    | Perm  |
| Protected Phases        | 5     | 2     |      | 1     | 6     |       |       | 8     |       |       | 4     |       |
| Permitted Phases        | 2     |       |      | 6     |       | 6     | 8     |       | 8     | 4     |       | 4     |
| Detector Phase          | 5     | 2     |      | 1     | 6     | 6     | 8     | 8     | 8     | 4     | 4     | 4     |
| Switch Phase            |       |       |      |       |       |       |       |       |       |       |       |       |
| Minimum Initial (s)     | 1.0   | 10.0  |      | 1.0   | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  |
| Minimum Split (s)       | 5.5   | 22.0  |      | 5.5   | 28.0  | 28.0  | 22.0  | 22.0  | 22.0  | 28.0  | 28.0  | 28.0  |
| Total Split (s)         | 20.0  | 70.0  |      | 20.0  | 70.0  | 70.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  |
| Total Split (%)         | 16.7% | 58.3% |      | 16.7% | 58.3% | 58.3% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% |
| Yellow Time (s)         | 3.5   | 4.0   |      | 3.5   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Total Lost Time (s)     | 4.5   | 5.0   |      | 4.5   | 5.0   | 5.0   |       | 5.0   | 5.0   |       | 5.0   | 5.0   |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   | Lag   |       |       |       |       |       |       |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   | Yes   |       |       |       |       |       |       |
| Recall Mode             | None  | C-Max |      | None  | C-Max | C-Max | Max   | Max   | Max   | Max   | Max   | Max   |
| Act Effect Green (s)    | 81.1  | 71.6  |      | 80.9  | 71.5  | 71.5  |       | 25.0  | 25.0  |       | 25.0  | 25.0  |
| Actuated g/C Ratio      | 0.68  | 0.60  |      | 0.67  | 0.60  | 0.60  |       | 0.21  | 0.21  |       | 0.21  | 0.21  |
| v/c Ratio               | 0.48  | 0.49  |      | 0.42  | 0.54  | 0.18  |       | 0.02  | 0.05  |       | 0.18  | 0.03  |
| Control Delay           | 13.4  | 9.6   |      | 9.1   | 11.9  | 4.4   |       | 38.2  | 0.2   |       | 41.1  | 0.2   |
| Queue Delay             | 0.0   | 0.3   |      | 0.0   | 0.2   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Total Delay             | 13.4  | 9.9   |      | 9.1   | 12.1  | 4.4   |       | 38.2  | 0.2   |       | 41.1  | 0.2   |
| LOS                     | B     | A     |      | A     | B     | A     |       | D     | A     |       | D     | A     |
| Approach Delay          |       | 10.4  |      |       | 10.9  |       |       | 10.1  |       |       | 33.3  |       |
| Approach LOS            |       | B     |      |       | B     |       |       | B     |       |       | C     |       |
| Queue Length 50th (ft)  | 26    | 134   |      | 30    | 207   | 15    |       | 4     | 0     |       | 33    | 0     |
| Queue Length 95th (ft)  | 60    | 127   |      | 40    | 223   | 22    |       | 15    | 0     |       | 65    | 0     |
| Internal Link Dist (ft) |       | 377   |      |       | 273   |       |       | 135   |       |       | 212   |       |
| Turn Bay Length (ft)    | 160   |       |      | 100   |       | 100   |       |       | 100   |       |       |       |
| Base Capacity (vph)     | 428   | 2062  |      | 467   | 2109  | 915   |       | 271   | 367   |       | 288   | 360   |
| Starvation Cap Reductn  | 0     | 441   |      | 0     | 281   | 0     |       | 0     | 0     |       | 0     | 0     |
| Spillback Cap Reductn   | 0     | 13    |      | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Reduced v/c Ratio       | 0.38  | 0.63  |      | 0.34  | 0.62  | 0.18  |       | 0.02  | 0.05  |       | 0.18  | 0.03  |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 65

MS

Synchro 9 Report  
Page 7

6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 11.2

Intersection LOS: B

Intersection Capacity Utilization 72.0%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 6: Brazos St & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 8

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑    |      | ↑     | ↑↑    |      |      |      |      | ↓     | ↑↑    | ↑     |
| Traffic Volume (vph)    | 0    | 687   | 166  | 337   | 1207  | 0    | 0    | 0    | 0    | 35    | 50    | 54    |
| Future Volume (vph)     | 0    | 687   | 166  | 337   | 1207  | 0    | 0    | 0    | 0    | 35    | 50    | 54    |
| Confl. Peds. (#/hr)     |      |       | 52   | 52    |       |      |      |      |      | 7     |       | 47    |
| Confl. Bikes (#/hr)     |      |       | 2    |       |       |      |      |      |      |       |       | 28    |
| Peak Hour Factor        | 0.93 | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93 | 0.93 | 0.93 | 0.93  | 0.93  | 0.93  |
| Adj. Flow (vph)         | 0    | 739   | 178  | 362   | 1298  | 0    | 0    | 0    | 0    | 38    | 54    | 58    |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 917   | 0    | 362   | 1298  | 0    | 0    | 0    | 0    | 38    | 54    | 58    |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1 9   | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1 9   | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 5.0   |      |       | 10.0  |      |      |      |      | 10.0  | 10.0  | 10.0  |
| Minimum Split (s)       |      | 30.0  |      |       | 30.0  |      |      |      |      | 28.0  | 28.0  | 28.0  |
| Total Split (s)         |      | 62.0  |      |       | 92.0  |      |      |      |      | 28.0  | 28.0  | 28.0  |
| Total Split (%)         |      | 51.7% |      |       | 76.7% |      |      |      |      | 23.3% | 23.3% | 23.3% |
| Yellow Time (s)         |      | 4.0   |      |       | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      |       | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      |       | 0.0   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      |       | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      |       |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      |       |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      |       | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effect Green (s)    |      | 57.0  |      | 87.5  | 87.0  |      |      |      |      | 23.0  | 23.0  | 23.0  |
| Actuated g/C Ratio      |      | 0.48  |      | 0.73  | 0.72  |      |      |      |      | 0.19  | 0.19  | 0.19  |
| v/c Ratio               |      | 0.57  |      | 0.70  | 0.51  |      |      |      |      | 0.11  | 0.08  | 0.16  |
| Control Delay           |      | 15.6  |      | 19.2  | 6.0   |      |      |      |      | 41.3  | 40.3  | 1.8   |
| Queue Delay             |      | 0.2   |      | 3.8   | 0.2   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             |      | 15.7  |      | 23.0  | 6.2   |      |      |      |      | 41.3  | 40.3  | 1.8   |
| LOS                     |      | B     |      | C     | A     |      |      |      |      | D     | D     | A     |
| Approach Delay          |      | 15.7  |      |       | 9.9   |      |      |      |      |       | 25.7  |       |
| Approach LOS            |      | B     |      |       | A     |      |      |      |      |       | C     |       |
| Queue Length 50th (ft)  |      | 111   |      | 85    | 101   |      |      |      |      | 25    | 18    | 0     |
| Queue Length 95th (ft)  |      | 137   |      | m150  | 130   |      |      |      |      | 56    | 36    | 6     |
| Internal Link Dist (ft) |      | 273   |      |       | 321   |      |      | 343  |      |       | 244   |       |
| Turn Bay Length (ft)    |      |       |      | 120   |       |      |      |      |      | 100   |       | 100   |
| Base Capacity (vph)     |      | 1623  |      | 519   | 2565  |      |      |      |      | 335   | 678   | 354   |
| Starvation Cap Reductn  |      | 155   |      | 89    | 506   |      |      |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       |      | 0.62  |      | 0.84  | 0.63  |      |      |      |      | 0.11  | 0.08  | 0.16  |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 80

MS

Synchro 9 Report  
Page 9

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Lane Group              | 01   | 09   |
|-------------------------|------|------|
| Lane Configurations     |      |      |
| Traffic Volume (vph)    |      |      |
| Future Volume (vph)     |      |      |
| Confl. Peds. (#/hr)     |      |      |
| Confl. Bikes (#/hr)     |      |      |
| Peak Hour Factor        |      |      |
| Adj. Flow (vph)         |      |      |
| Shared Lane Traffic (%) |      |      |
| Lane Group Flow (vph)   |      |      |
| Turn Type               |      |      |
| Protected Phases        | 1    | 9    |
| Permitted Phases        |      |      |
| Detector Phase          |      |      |
| Switch Phase            |      |      |
| Minimum Initial (s)     | 1.0  | 5.0  |
| Minimum Split (s)       | 5.5  | 9.5  |
| Total Split (s)         | 15.0 | 15.0 |
| Total Split (%)         | 13%  | 13%  |
| Yellow Time (s)         | 3.5  | 3.5  |
| All-Red Time (s)        | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |
| Total Lost Time (s)     |      |      |
| Lead/Lag                | Lead |      |
| Lead-Lag Optimize?      | Yes  |      |
| Recall Mode             | None | None |
| Act Effect Green (s)    |      |      |
| Actuated g/C Ratio      |      |      |
| v/c Ratio               |      |      |
| Control Delay           |      |      |
| Queue Delay             |      |      |
| Total Delay             |      |      |
| LOS                     |      |      |
| Approach Delay          |      |      |
| Approach LOS            |      |      |
| Queue Length 50th (ft)  |      |      |
| Queue Length 95th (ft)  |      |      |
| Internal Link Dist (ft) |      |      |
| Turn Bay Length (ft)    |      |      |
| Base Capacity (vph)     |      |      |
| Starvation Cap Reductn  |      |      |
| Spillback Cap Reductn   |      |      |
| Storage Cap Reductn     |      |      |
| Reduced v/c Ratio       |      |      |

Intersection Summary

MS

Synchro 9 Report  
Page 10

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 12.7

Intersection LOS: B

Intersection Capacity Utilization 79.9%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: San Jacinto Blvd & Martin Luther King Jr. Blvd



8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↩     | ↩↩    |      |      | ↩↩    |      | ↩     | ↩     | ↩     |      |      |      |
| Traffic Volume (vph)    | 149   | 502   | 0    | 0    | 1467  | 57   | 66    | 82    | 86    | 0    | 0    | 0    |
| Future Volume (vph)     | 149   | 502   | 0    | 0    | 1467  | 57   | 66    | 82    | 86    | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     |       |       | 34   |      |       | 57   | 33    |       | 27    |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       | 4    |       |       | 4     |      |      |      |
| Peak Hour Factor        | 0.89  | 0.89  | 0.89 | 0.89 | 0.89  | 0.89 | 0.89  | 0.89  | 0.89  | 0.89 | 0.89 | 0.89 |
| Adj. Flow (vph)         | 167   | 564   | 0    | 0    | 1648  | 64   | 74    | 92    | 97    | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       | 10%  |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 167   | 564   | 0    | 0    | 1712  | 0    | 67    | 99    | 97    | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 1.0   | 10.0  |      |      | 1.0   |      | 10.0  | 10.0  | 10.0  |      |      |      |
| Minimum Split (s)       | 5.5   | 26.0  |      |      | 5.5   |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (s)         | 15.0  | 94.0  |      |      | 79.0  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (%)         | 12.5% | 78.3% |      |      | 65.8% |      | 21.7% | 21.7% | 21.7% |      |      |      |
| Yellow Time (s)         | 3.5   | 4.0   |      |      | 3.5   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 4.5   | 5.0   |      |      | 4.5   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effct Green (s)     | 89.5  | 89.0  |      |      | 75.3  |      | 21.0  | 21.0  | 21.0  |      |      |      |
| Actuated g/C Ratio      | 0.75  | 0.74  |      |      | 0.63  |      | 0.18  | 0.18  | 0.18  |      |      |      |
| v/c Ratio               | 0.77  | 0.21  |      |      | 0.78  |      | 0.24  | 0.32  | 0.29  |      |      |      |
| Control Delay           | 66.7  | 1.0   |      |      | 4.8   |      | 45.7  | 46.6  | 12.7  |      |      |      |
| Queue Delay             | 0.0   | 0.1   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Delay             | 66.7  | 1.1   |      |      | 4.9   |      | 45.7  | 46.6  | 12.7  |      |      |      |
| LOS                     | E     | A     |      |      | A     |      | D     | D     | B     |      |      |      |
| Approach Delay          |       | 16.1  |      |      | 4.9   |      |       | 33.9  |       |      |      |      |
| Approach LOS            |       | B     |      |      | A     |      |       | C     |       |      |      |      |
| Queue Length 50th (ft)  | 86    | 13    |      |      | 56    |      | 46    | 69    | 4     |      |      |      |
| Queue Length 95th (ft)  | #166  | 15    |      |      | 86    |      | m75   | m109  | m34   |      |      |      |
| Internal Link Dist (ft) |       | 321   |      |      | 675   |      |       | 350   |       |      | 106  |      |
| Turn Bay Length (ft)    | 120   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 229   | 2624  |      |      | 2205  |      | 277   | 307   | 339   |      |      |      |
| Starvation Cap Reductn  | 0     | 954   |      |      | 12    |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.73  | 0.34  |      |      | 0.78  |      | 0.24  | 0.32  | 0.29  |      |      |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 90

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 10.7

Intersection LOS: B

Intersection Capacity Utilization 79.9%

ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Trinity St & Martin Luther King Jr. Blvd



18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

|  | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|--|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations  |      | ↑    | ↑    |      | ↑    |      |      |      |      |      | ↑↑   |      |
| Traffic Volume (vph)                                       | 0    | 14   | 46   | 40   | 9    | 0    | 0    | 0    | 0    | 24   | 1019 | 18   |
| Future Volume (vph)  | 0    | 14   | 46   | 40   | 9    | 0    | 0    | 0    | 0    | 24   | 1019 | 18   |
| Confl. Peds. (#/hr)  |      |      | 18   |      |      |      |      |      |      | 44   |      |      |
| Peak Hour Factor   | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Parking (#/hr)   |      | 0    |      |      |      |      |      |      |      |      |      |      |
| Adj. Flow (vph)  | 0    | 15   | 50   | 43   | 10   | 0    | 0    | 0    | 0    | 26   | 1108 | 20   |
| Shared Lane Traffic (%)                                    |      |      |      |      |      |      |      |      |      |      |      |      |
| Lane Group Flow (vph)                                      | 0    | 15   | 50   | 0    | 53   | 0    | 0    | 0    | 0    | 0    | 1154 | 0    |
| Turn Type  |      | NA   | Perm | Perm | NA   |      |      |      |      | Perm | NA   |      |
| Protected Phases   | 4 12 |      |      |      | 4 12 |      |      |      |      |      | 2 10 |      |
| Permitted Phases   |      |      | 4 12 | 4 12 |      |      |      |      |      | 2 10 |      |      |
| Detector Phase   | 4 12 | 4 12 | 4 12 | 4 12 |      |      |      |      |      | 2 10 | 2 10 |      |
| Switch Phase   |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Initial (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Split (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (%)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Yellow Time (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| All-Red Time (s)   |      |      |      |      |      |      |      |      |      |      |      |      |
| Lost Time Adjust (s)                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Lost Time (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead/Lag   |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead-Lag Optimize?   |      |      |      |      |      |      |      |      |      |      |      |      |
| Recall Mode  |      |      |      |      |      |      |      |      |      |      |      |      |
| Act Effect Green (s)                                       | 20.5 | 20.5 |      | 20.5 |      |      |      |      |      |      | 84.1 |      |
| Actuated g/C Ratio   | 0.17 | 0.17 |      | 0.17 |      |      |      |      |      |      | 0.70 |      |
| v/c Ratio  | 0.05 | 0.16 |      | 0.22 |      |      |      |      |      |      | 0.47 |      |
| Control Delay  | 21.4 | 3.9  |      | 35.2 |      |      |      |      |      |      | 6.3  |      |
| Queue Delay  | 0.0  | 0.0  |      | 0.0  |      |      |      |      |      |      | 0.0  |      |
| Total Delay  | 21.4 | 3.9  |      | 35.2 |      |      |      |      |      |      | 6.3  |      |
| LOS  | C    | A    |      | D    |      |      |      |      |      |      | A    |      |
| Approach Delay   | 7.9  |      |      | 35.2 |      |      |      |      |      |      | 6.3  |      |
| Approach LOS   | A    |      |      | D    |      |      |      |      |      |      | A    |      |
| Queue Length 50th (ft)                                     | 6    | 0    |      | 32   |      |      |      |      |      |      | 131  |      |
| Queue Length 95th (ft)                                     | 15   | 12   |      | 64   |      |      |      |      |      |      | 161  |      |
| Internal Link Dist (ft)                                    | 177  |      |      | 244  |      |      |      | 271  |      |      | 262  |      |
| Turn Bay Length (ft)                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| Base Capacity (vph)  | 723  | 687  |      | 608  |      |      |      |      |      |      | 2440 |      |
| Starvation Cap Reductn                                     | 0    | 0    |      | 0    |      |      |      |      |      |      | 0    |      |
| Spillback Cap Reductn                                      | 0    | 0    |      | 0    |      |      |      |      |      |      | 0    |      |
| Storage Cap Reductn  | 0    | 0    |      | 0    |      |      |      |      |      |      | 0    |      |
| Reduced v/c Ratio  | 0.02 | 0.07 |      | 0.09 |      |      |      |      |      |      | 0.47 |      |
| <b>Intersection Summary</b>                                |      |      |      |      |      |      |      |      |      |      |      |      |
| Cycle Length: 120  |      |      |      |      |      |      |      |      |      |      |      |      |
| Actuated Cycle Length: 120                                 |      |      |      |      |      |      |      |      |      |      |      |      |
| Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green |      |      |      |      |      |      |      |      |      |      |      |      |
| Natural Cycle: 95  |      |      |      |      |      |      |      |      |      |      |      |      |

18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 23.0  | 23.0 | 22.5 | 22.5 |
| Total Split (s)         | 26.0  | 43.0 | 28.0 | 23.0 |
| Total Split (%)         | 22%   | 36%  | 23%  | 19%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effect Green (s)    |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.47

Intersection Signal Delay: 7.6

Intersection LOS: A

Intersection Capacity Utilization 70.2%

ICU Level of Service C













Analysis Period (min) 15

Splits and Phases: 18: Guadalupe St & E. 17th St



19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     |   |   |   |   |   |   |   |   |   |   |   |   |
| Traffic Volume (vph)    | 4   | 18  | 0   | 0   | 16  | 11  | 86  | 644   | 48  | 0   | 0   | 0   |
| Future Volume (vph)     | 4   | 18  | 0   | 0   | 16  | 11  | 86  | 644   | 48  | 0   | 0   | 0   |
| Confl. Peds. (#/hr)     | 30  |   |   |   |   |   |   | 32  |   |   |   |   |
| Peak Hour Factor        | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  |
| Parking (#/hr)          |   | 0   |   |   |   |   |   |   |   |   |   |   |
| Adj. Flow (vph)         | 5   | 22  | 0   | 0   | 19  | 13  | 104   | 776   | 58  | 0   | 0   | 0   |
| Shared Lane Traffic (%) |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)   | 0   | 27  | 0   | 0   | 32  | 0   | 0   | 880   | 58  | 0   | 0   | 0   |
| Turn Type               | Perm  | NA  |   |   | NA  |   | Perm  | NA  | Perm  |   |   |   |
| Protected Phases        |   | 4 12  |   |   | 4 12  |   |   | 2 10  |   |   |   |   |
| Permitted Phases        | 4 12  |   |   |   |   |   | 2 10  |   | 2 10  |   |   |   |
| Detector Phase          | 4 12  | 4 12  |   |   | 4 12  |   | 2 10  | 2 10  | 2 10  |   |   |   |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Split (s)       |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (s)         |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (%)         |   |   |   |   |   |   |   |   |   |   |   |   |
| Yellow Time (s)         |   |   |   |   |   |   |   |   |   |   |   |   |
| All-Red Time (s)        |   |   |   |   |   |   |   |   |   |   |   |   |
| Lost Time Adjust (s)    |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Lost Time (s)     |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead/Lag                |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?      |   |   |   |   |   |   |   |   |   |   |   |   |
| Recall Mode             |   |   |   |   |   |   |   |   |   |   |   |   |
| Act Effect Green (s)    | 20.3  |   |   | 20.3  |   |   | 84.3  | 84.3  |   |   |   |   |
| Actuated g/C Ratio      | 0.17  |   |   | 0.17  |   |   | 0.70  | 0.70  |   |   |   |   |
| v/c Ratio               | 0.10  |   |   | 0.10  |   |   | 0.25  | 0.06  |   |   |   |   |
| Control Delay           | 26.6  |   |   | 18.2  |   |   | 7.7   | 4.0   |   |   |   |   |
| Queue Delay             | 0.0   |   |   | 0.0   |   |   | 0.0   | 0.0   |   |   |   |   |
| Total Delay             | 26.6  |   |   | 18.2  |   |   | 7.7   | 4.0   |   |   |   |   |
| LOS                     | C   |   |   | B   |   |   | A   | A   |   |   |   |   |
| Approach Delay          | 26.6  |   |   | 18.2  |   |   | 7.5   |   |   |   |   |   |
| Approach LOS            | C   |   |   | B   |   |   | A   |   |   |   |   |   |
| Queue Length 50th (ft)  | 11  |   |   | 9   |   |   | 165   | 10  |   |   |   |   |
| Queue Length 95th (ft)  | m31   |   |   | 26  |   |   | 183   | 35  |   |   |   |   |
| Internal Link Dist (ft) | 244   |   |   | 319   |   |   | 272   |   |   | 254   |   |   |
| Turn Bay Length (ft)    |   |   |   |   |   |   |   | 100   |   |   |   |   |
| Base Capacity (vph)     | 551   |   |   | 618   |   |   | 3830  | 1079  |   |   |   |   |
| Starvation Cap Reductn  | 0   |   |   | 0   |   |   | 807   | 0   |   |   |   |   |
| Spillback Cap Reductn   | 0   |   |   | 0   |   |   | 0   | 0   |   |   |   |   |
| Storage Cap Reductn     | 0   |   |   | 0   |   |   | 0   | 0   |   |   |   |   |
| Reduced v/c Ratio       | 0.05  |   |   | 0.05  |   |   | 0.29  | 0.05  |   |   |   |   |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green  
Natural Cycle: 100

MS

Synchro 9 Report  
Page 17

19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 26.0  | 28.0 | 22.5 | 22.5 |
| Total Split (s)         | 38.0  | 29.0 | 27.0 | 26.0 |
| Total Split (%)         | 32%   | 24%  | 23%  | 22%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effect Green (s)    |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |

Intersection Summary

MS

Synchro 9 Report  
Page 18

19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.25

Intersection Signal Delay: 8.3

Intersection LOS: A

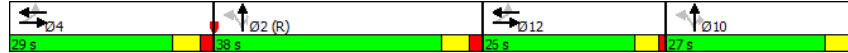
Intersection Capacity Utilization 39.2%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 19: Lavaca St & E. 17th St



28: Lavaca St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

|   | ←    | →    | ↶    | ↷    | ←    | ↶    | ↷    | ↶    | ↷    | ↶    | ↷    | ↶    | ↷ |
|---|------|------|------|------|------|------|------|------|------|------|------|------|---|
| Lane Group  | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |   |
| Lane Configurations                                       |      | ↶    |      |      | ↷    |      |      | ↶↶↶  | ↷    |      |      |      |   |
| Traffic Volume (vph)                                      | 4    | 18   | 0    | 0    | 17   | 14   | 86   | 749  | 48   | 0    | 0    | 0    |   |
| Future Volume (vph)                                       | 4    | 18   | 0    | 0    | 17   | 14   | 86   | 749  | 48   | 0    | 0    | 0    |   |
| Confl. Peds. (#/hr)                                       |      |      |      |      |      | 10   | 57   |      |      |      |      |      |   |
| Confl. Bikes (#/hr)                                       |      |      |      |      |      | 2    |      |      |      |      |      |      |   |
| Peak Hour Factor  | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 |   |
| Parking (#/hr)  |      |      |      |      | 0    |      |      |      |      |      |      |      |   |
| Adj. Flow (vph)   | 5    | 21   | 0    | 0    | 20   | 17   | 102  | 892  | 57   | 0    | 0    | 0    |   |
| Shared Lane Traffic (%)                                   |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Lane Group Flow (vph)                                     | 0    | 26   | 0    | 0    | 37   | 0    | 0    | 994  | 57   | 0    | 0    | 0    |   |
| Turn Type   | Perm | NA   |      |      | NA   |      | Perm | NA   | Perm |      |      |      |   |
| Protected Phases  |      | 4 12 |      |      | 4 12 |      |      | 2 10 |      |      |      |      |   |
| Permitted Phases  | 4 12 |      |      |      |      |      | 2 10 |      | 2 10 |      |      |      |   |
| Detector Phase  | 4 12 | 4 12 |      |      | 4 12 |      | 2 10 | 2 10 | 2 10 |      |      |      |   |
| Switch Phase  |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Minimum Initial (s)                                       |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Minimum Split (s)   |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Total Split (s)   |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Total Split (%)   |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Yellow Time (s)   |      |      |      |      |      |      |      |      |      |      |      |      |   |
| All-Red Time (s)  |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Lost Time Adjust (s)                                      |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Total Lost Time (s)                                       |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Lead/Lag  |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Lead-Lag Optimize?  |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Recall Mode   |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Act Effct Green (s)                                       |      | 19.3 |      |      | 19.3 |      |      | 85.1 | 85.1 |      |      |      |   |
| Actuated g/C Ratio  |      | 0.16 |      |      | 0.16 |      |      | 0.71 | 0.71 |      |      |      |   |
| v/c Ratio   |      | 0.09 |      |      | 0.14 |      |      | 0.28 | 0.05 |      |      |      |   |
| Control Delay   |      | 29.0 |      |      | 16.0 |      |      | 2.7  | 0.1  |      |      |      |   |
| Queue Delay   |      | 0.0  |      |      | 0.0  |      |      | 0.1  | 0.0  |      |      |      |   |
| Total Delay   |      | 29.0 |      |      | 16.0 |      |      | 2.8  | 0.1  |      |      |      |   |
| LOS   |      | C    |      |      | B    |      |      | A    | A    |      |      |      |   |
| Approach Delay  |      | 29.0 |      |      | 16.0 |      |      | 2.7  |      |      |      |      |   |
| Approach LOS  |      | C    |      |      | B    |      |      | A    |      |      |      |      |   |
| Queue Length 50th (ft)                                    |      | 12   |      |      | 9    |      |      | 30   | 0    |      |      |      |   |
| Queue Length 95th (ft)                                    |      | m24  |      |      | m27  |      |      | 27   | 1    |      |      |      |   |
| Internal Link Dist (ft)                                   |      | 233  |      |      | 60   |      |      | 281  |      |      | 272  |      |   |
| Turn Bay Length (ft)                                      |      |      |      |      |      |      |      |      | 100  |      |      |      |   |
| Base Capacity (vph)                                       |      | 631  |      |      | 562  |      |      | 3539 | 1145 |      |      |      |   |
| Starvation Cap Reductn                                    |      | 0    |      |      | 0    |      |      | 1186 | 0    |      |      |      |   |
| Spillback Cap Reductn                                     |      | 0    |      |      | 0    |      |      | 0    | 0    |      |      |      |   |
| Storage Cap Reductn                                       |      | 0    |      |      | 0    |      |      | 0    | 0    |      |      |      |   |
| Reduced v/c Ratio   |      | 0.04 |      |      | 0.07 |      |      | 0.42 | 0.05 |      |      |      |   |
| <b>Intersection Summary</b>                               |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Cycle Length: 120   |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Actuated Cycle Length: 120                                |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Offset: 5 (4%), Referenced to phase 2:NBT, Start of Green |      |      |      |      |      |      |      |      |      |      |      |      |   |

28: Lavaca St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Confl. Bikes (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 28.0  | 32.0 | 21.0 | 20.0 |
| Total Split (s)         | 42.0  | 32.0 | 21.0 | 25.0 |
| Total Split (%)         | 35%   | 27%  | 18%  | 21%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effct Green (s)     |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

28: Lavaca St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.28

Intersection Signal Delay: 3.7

Intersection LOS: A

Intersection Capacity Utilization 41.3%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 28: Lavaca St & E. 16th St



34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑↑   |      | ↓     | ↑↑↑   |      |      |      |      |       | ↓↑↑   | ↑     |
| Traffic Volume (vph)    | 0    | 1487  | 317  | 195   | 947   | 0    | 0    | 0    | 0    | 101   | 662   | 52    |
| Future Volume (vph)     | 0    | 1487  | 317  | 195   | 947   | 0    | 0    | 0    | 0    | 101   | 662   | 52    |
| Confl. Peds. (#/hr)     |      |       | 31   | 31    |       |      |      |      |      | 29    |       |       |
| Confl. Bikes (#/hr)     |      |       |      |       |       | 1    |      |      |      |       |       | 20    |
| Peak Hour Factor        | 0.98 | 0.98  | 0.98 | 0.98  | 0.98  | 0.98 | 0.98 | 0.98 | 0.98 | 0.98  | 0.98  | 0.98  |
| Adj. Flow (vph)         | 0    | 1517  | 323  | 199   | 966   | 0    | 0    | 0    | 0    | 103   | 676   | 53    |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 1840  | 0    | 199   | 966   | 0    | 0    | 0    | 0    | 0     | 779   | 53    |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1 3   | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1 3   | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      |       | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       |      | 25.0  |      |       | 25.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (s)         |      | 56.0  |      |       | 84.0  |      |      |      |      | 36.0  | 36.0  | 36.0  |
| Total Split (%)         |      | 46.7% |      |       | 70.0% |      |      |      |      | 30.0% | 30.0% | 30.0% |
| Yellow Time (s)         |      | 4.0   |      |       | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      |       | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      |       | 0.0   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      |       | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      |       |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      |       |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      |       | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effect Green (s)    |      | 51.2  |      |       | 79.0  |      |      |      |      | 31.0  | 31.0  | 31.0  |
| Actuated g/C Ratio      |      | 0.43  |      |       | 0.66  |      |      |      |      | 0.26  | 0.26  | 0.26  |
| v/c Ratio               |      | 0.87  |      |       | 0.61  |      |      |      |      | 0.60  | 0.12  | 0.12  |
| Control Delay           |      | 36.1  |      |       | 37.6  |      |      |      |      | 42.6  | 3.1   | 3.1   |
| Queue Delay             |      | 0.0   |      |       | 10.7  |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             |      | 36.1  |      |       | 48.3  |      |      |      |      | 42.6  | 3.1   | 3.1   |
| LOS                     |      | D     |      |       | D     |      |      |      |      | D     | A     | A     |
| Approach Delay          |      | 36.1  |      |       | 11.4  |      |      |      |      | 40.1  |       |       |
| Approach LOS            |      | D     |      |       | B     |      |      |      |      | D     |       |       |
| Queue Length 50th (ft)  |      | 458   |      |       | 96    |      |      |      |      | 216   | 1     | 1     |
| Queue Length 95th (ft)  |      | 529   |      |       | 171   |      |      |      |      | 257   | 7     | 7     |
| Internal Link Dist (ft) |      | 262   |      |       | 240   |      |      | 197  |      | 285   |       |       |
| Turn Bay Length (ft)    |      |       |      |       | 50    |      |      |      |      |       |       | 100   |
| Base Capacity (vph)     |      | 2115  |      |       | 327   |      |      |      |      | 1297  | 459   | 459   |
| Starvation Cap Reductn  |      | 0     |      |       | 99    |      |      |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      |       | 0     |      |      |      |      | 0     | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      |       | 0     |      |      |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       |      | 0.87  |      |       | 0.87  |      |      |      |      | 0.60  | 0.12  | 0.12  |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 90

34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Lane Group              | Ø1   | Ø3   |
|-------------------------|------|------|
| Lane Configurations     |      |      |
| Traffic Volume (vph)    |      |      |
| Future Volume (vph)     |      |      |
| Confl. Peds. (#/hr)     |      |      |
| Confl. Bikes (#/hr)     |      |      |
| Peak Hour Factor        |      |      |
| Adj. Flow (vph)         |      |      |
| Shared Lane Traffic (%) |      |      |
| Lane Group Flow (vph)   |      |      |
| Turn Type               |      |      |
| Protected Phases        | 1    | 3    |
| Permitted Phases        |      |      |
| Detector Phase          |      |      |
| Switch Phase            |      |      |
| Minimum Initial (s)     | 8.0  | 5.0  |
| Minimum Split (s)       | 13.0 | 10.0 |
| Total Split (s)         | 14.0 | 14.0 |
| Total Split (%)         | 12%  | 12%  |
| Yellow Time (s)         | 4.0  | 4.0  |
| All-Red Time (s)        | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |
| Total Lost Time (s)     |      |      |
| Lead/Lag                | Lead |      |
| Lead-Lag Optimize?      | Yes  |      |
| Recall Mode             | Min  | None |
| Act Effect Green (s)    |      |      |
| Actuated g/C Ratio      |      |      |
| v/c Ratio               |      |      |
| Control Delay           |      |      |
| Queue Delay             |      |      |
| Total Delay             |      |      |
| LOS                     |      |      |
| Approach Delay          |      |      |
| Approach LOS            |      |      |
| Queue Length 50th (ft)  |      |      |
| Queue Length 95th (ft)  |      |      |
| Internal Link Dist (ft) |      |      |
| Turn Bay Length (ft)    |      |      |
| Base Capacity (vph)     |      |      |
| Starvation Cap Reductn  |      |      |
| Spillback Cap Reductn   |      |      |
| Storage Cap Reductn     |      |      |
| Reduced v/c Ratio       |      |      |

Intersection Summary

34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 0.87  
Intersection Signal Delay: 29.5  
Intersection Capacity Utilization 82.1%  
Analysis Period (min) 15

Intersection LOS: C  
ICU Level of Service E

Splits and Phases: 34: Guadalupe St & W. 15th St



35: Lavaca St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↰     | ↰↰↰   |      |      | ↰↰↰   |      |       | ↰↰↰   | ↰     |      |      |      |
| Traffic Volume (vph)    | 119   | 1396  | 0    | 0    | 1024  | 127  | 128   | 606   | 155   | 0    | 0    | 0    |
| Future Volume (vph)     | 119   | 1396  | 0    | 0    | 1024  | 127  | 128   | 606   | 155   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 36    |       |      |      |       | 36   | 17    |       | 46    |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       |      |       |       | 10    |      |      |      |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94 | 0.94 | 0.94  | 0.94 | 0.94  | 0.94  | 0.94  | 0.94 | 0.94 | 0.94 |
| Adj. Flow (vph)         | 127   | 1485  | 0    | 0    | 1089  | 135  | 136   | 645   | 165   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 127   | 1485  | 0    | 0    | 1224  | 0    | 0     | 781   | 165   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 28.0  |      |      | 28.0  |      | 33.0  | 33.0  | 33.0  |      |      |      |
| Total Split (s)         | 19.0  | 79.0  |      |      | 60.0  |      | 41.0  | 41.0  | 41.0  |      |      |      |
| Total Split (%)         | 15.8% | 65.8% |      |      | 50.0% |      | 34.2% | 34.2% | 34.2% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 2.0   | 2.0   | 2.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      |       | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      |       | 6.0   | 6.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effct Green (s)     | 74.0  | 74.0  |      |      | 59.9  |      |       | 35.0  | 35.0  |      |      |      |
| Actuated g/C Ratio      | 0.62  | 0.62  |      |      | 0.50  |      |       | 0.29  | 0.29  |      |      |      |
| v/c Ratio               | 0.45  | 0.47  |      |      | 0.49  |      |       | 0.53  | 0.35  |      |      |      |
| Control Delay           | 17.4  | 2.6   |      |      | 9.8   |      |       | 37.3  | 22.5  |      |      |      |
| Queue Delay             | 0.0   | 0.3   |      |      | 0.1   |      |       | 0.0   | 0.0   |      |      |      |
| Total Delay             | 17.4  | 2.8   |      |      | 9.9   |      |       | 37.3  | 22.5  |      |      |      |
| LOS                     | B     | A     |      |      | A     |      |       | D     | C     |      |      |      |
| Approach Delay          |       | 4.0   |      |      | 9.9   |      |       | 34.7  |       |      |      |      |
| Approach LOS            |       | A     |      |      | A     |      |       | C     |       |      |      |      |
| Queue Length 50th (ft)  | 11    | 39    |      |      | 68    |      |       | 185   | 60    |      |      |      |
| Queue Length 95th (ft)  | m29   | 55    |      |      | 78    |      |       | 229   | 122   |      |      |      |
| Internal Link Dist (ft) |       | 240   |      |      | 335   |      |       | 116   |       |      | 281  |      |
| Turn Bay Length (ft)    | 50    |       |      |      |       |      |       |       | 100   |      |      |      |
| Base Capacity (vph)     | 345   | 3135  |      |      | 2490  |      |       | 1464  | 470   |      |      |      |
| Starvation Cap Reductn  | 0     | 812   |      |      | 185   |      |       | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      |       | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      |       | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.37  | 0.64  |      |      | 0.53  |      |       | 0.53  | 0.35  |      |      |      |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green  
Natural Cycle: 70

35: Lavaca St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.53

Intersection Signal Delay: 13.6

Intersection LOS: B

Intersection Capacity Utilization 82.1%

ICU Level of Service E

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 35: Lavaca St & W. 15th St



36: Colorado St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR    |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|--------|
| Lane Configurations     | ↩ ↪   | ↩ ↪   | ↩    | ↩ ↪   | ↩ ↪   | ↩    | ↩     | ↩ ↪   | ↩    | ↩     | ↩ ↪   | ↩      |
| Traffic Volume (vph)    | 184   | 1352  | 51   | 70    | 1086  | 136  | 1     | 21    | 21   | 5     | 19    | 20     |
| Future Volume (vph)     | 184   | 1352  | 51   | 70    | 1086  | 136  | 1     | 21    | 21   | 5     | 19    | 20     |
| Confl. Peds. (#/hr)     | 6     |       | 80   | 80    |       | 6    | 4     |       | 33   | 33    |       | 4      |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94 | 0.94  | 0.94  | 0.94 | 0.94  | 0.94  | 0.94 | 0.94  | 0.94  | 0.94   |
| Adj. Flow (vph)         | 196   | 1438  | 54   | 74    | 1155  | 145  | 1     | 22    | 22   | 5     | 20    | 21     |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |      |       |       |        |
| Lane Group Flow (vph)   | 196   | 1492  | 0    | 74    | 1300  | 0    | 0     | 45    | 0    | 0     | 25    | 21     |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | Perm  | NA    |      | Perm  | NA    | custom |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |       | 4     |      |       | 8     |        |
| Permitted Phases        | 2     |       |      | 6     |       |      | 4     |       |      | 8     |       | 6      |
| Detector Phase          | 5     | 2     |      | 1     | 6     |      | 4     | 4     |      | 8     | 8     | 6      |
| Switch Phase            |       |       |      |       |       |      |       |       |      |       |       |        |
| Minimum Initial (s)     | 5.0   | 15.0  |      | 5.0   | 15.0  |      | 5.0   | 5.0   |      | 5.0   | 5.0   | 15.0   |
| Minimum Split (s)       | 10.0  | 22.0  |      | 10.0  | 30.0  |      | 32.0  | 32.0  |      | 32.0  | 32.0  | 30.0   |
| Total Split (s)         | 15.0  | 72.0  |      | 15.0  | 72.0  |      | 33.0  | 33.0  |      | 33.0  | 33.0  | 72.0   |
| Total Split (%)         | 12.5% | 60.0% |      | 12.5% | 60.0% |      | 27.5% | 27.5% |      | 27.5% | 27.5% | 60.0%  |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0    |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0    |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0    |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      | 5.0   | 5.0   |      | 5.0   | 5.0   | 5.0    |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   |      |       |       |      |       |       | Lag    |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |       |       |      |       |       | Yes    |
| Recall Mode             | None  | C-Max |      | None  | C-Max |      | Max   | Max   |      | Max   | Max   | C-Max  |
| Act Effct Green (s)     | 79.8  | 72.0  |      | 74.8  | 67.6  |      |       | 28.0  |      |       | 28.0  | 67.6   |
| Actuated g/C Ratio      | 0.66  | 0.60  |      | 0.62  | 0.56  |      |       | 0.23  |      |       | 0.23  | 0.56   |
| v/c Ratio               | 0.64  | 0.50  |      | 0.30  | 0.46  |      |       | 0.11  |      |       | 0.06  | 0.02   |
| Control Delay           | 29.8  | 4.3   |      | 9.4   | 7.0   |      |       | 22.8  |      |       | 36.4  | 0.1    |
| Queue Delay             | 0.0   | 0.1   |      | 0.0   | 0.1   |      |       | 0.0   |      |       | 0.0   | 0.0    |
| Total Delay             | 29.8  | 4.4   |      | 9.4   | 7.1   |      |       | 22.8  |      |       | 36.4  | 0.1    |
| LOS                     | C     | A     |      | A     | A     |      |       | C     |      |       | D     | A      |
| Approach Delay          |       | 7.3   |      |       | 7.2   |      |       | 22.8  |      |       | 19.8  |        |
| Approach LOS            |       | A     |      |       | A     |      |       | C     |      |       | B     |        |
| Queue Length 50th (ft)  | 43    | 73    |      | 4     | 115   |      |       | 14    |      |       | 15    | 0      |
| Queue Length 95th (ft)  | 112   | 96    |      | 23    | 174   |      |       | 46    |      |       | 39    | 0      |
| Internal Link Dist (ft) |       | 335   |      |       | 362   |      |       | 155   |      |       | 114   |        |
| Turn Bay Length (ft)    | 90    |       |      | 90    |       |      |       |       |      |       |       | 100    |
| Base Capacity (vph)     | 312   | 3006  |      | 285   | 2819  |      |       | 410   |      |       | 416   | 904    |
| Starvation Cap Reductn  | 0     | 371   |      | 0     | 365   |      |       | 0     |      |       | 0     | 0      |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 0     |      |       | 0     |      |       | 0     | 0      |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      |       | 0     |      |       | 0     | 0      |
| Reduced v/c Ratio       | 0.63  | 0.57  |      | 0.26  | 0.53  |      |       | 0.11  |      |       | 0.06  | 0.02   |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

36: Colorado St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 7.7

Intersection LOS: A

Intersection Capacity Utilization 79.9%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 36: Colorado St & W. 15th St



37: N. Congress Ave & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

|                         | →     | ↖    | ↗     | ←     | ↖    | ↗     |
|-------------------------|-------|------|-------|-------|------|-------|
| Lane Group              | EBT   | EBR  | WBL   | WBT   | NBL  | NBR   |
| Lane Configurations     | ↑↑↑   | ↑    | ↓     | ↑↑↑   | ↓    | ↓     |
| Traffic Volume (vph)    | 1352  | 27   | 18    | 1379  | 0    | 1     |
| Future Volume (vph)     | 1352  | 27   | 18    | 1379  | 0    | 1     |
| Confl. Peds. (#/hr)     |       | 29   | 29    |       | 12   | 20    |
| Confl. Bikes (#/hr)     |       |      |       |       |      | 12    |
| Peak Hour Factor        | 0.98  | 0.98 | 0.98  | 0.98  | 0.98 | 0.98  |
| Adj. Flow (vph)         | 1380  | 28   | 18    | 1407  | 0    | 1     |
| Shared Lane Traffic (%) |       |      |       |       |      |       |
| Lane Group Flow (vph)   | 1408  | 0    | 18    | 1407  | 0    | 1     |
| Turn Type               | NA    |      | pm+pt | NA    |      | Perm  |
| Protected Phases        | 2     |      | 1     | 6     |      |       |
| Permitted Phases        |       |      | 6     |       |      | 4     |
| Detector Phase          | 2     |      | 1     | 6     |      | 4     |
| Switch Phase            |       |      |       |       |      |       |
| Minimum Initial (s)     | 5.0   |      | 5.0   | 5.0   |      | 5.0   |
| Minimum Split (s)       | 25.0  |      | 10.0  | 25.0  |      | 33.0  |
| Total Split (s)         | 72.0  |      | 15.0  | 87.0  |      | 33.0  |
| Total Split (%)         | 60.0% |      | 12.5% | 72.5% |      | 27.5% |
| Yellow Time (s)         | 4.0   |      | 4.0   | 4.0   |      | 4.0   |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0   |      | 1.0   |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0   |      | 0.0   |
| Total Lost Time (s)     | 5.0   |      | 5.0   | 5.0   |      | 5.0   |
| Lead/Lag                | Lag   |      | Lead  |       |      |       |
| Lead-Lag Optimize?      | Yes   |      | Yes   |       |      |       |
| Recall Mode             | C-Max |      | None  | C-Max |      | Max   |
| Act Effect Green (s)    | 77.5  |      | 82.0  | 82.0  |      | 28.0  |
| Actuated g/C Ratio      | 0.65  |      | 0.68  | 0.68  |      | 0.23  |
| v/c Ratio               | 0.43  |      | 0.07  | 0.41  |      | 0.00  |
| Control Delay           | 2.7   |      | 5.6   | 7.0   |      | 0.0   |
| Queue Delay             | 0.0   |      | 0.0   | 0.1   |      | 0.0   |
| Total Delay             | 2.8   |      | 5.6   | 7.1   |      | 0.0   |
| LOS                     | A     |      | A     | A     |      | A     |
| Approach Delay          | 2.8   |      |       | 7.1   |      |       |
| Approach LOS            | A     |      |       | A     |      |       |
| Queue Length 50th (ft)  | 19    |      | 3     | 161   |      | 0     |
| Queue Length 95th (ft)  | 43    |      | m5    | 63    |      | 0     |
| Internal Link Dist (ft) | 362   |      |       | 356   | 125  |       |
| Turn Bay Length (ft)    |       |      | 100   |       |      |       |
| Base Capacity (vph)     | 3270  |      | 301   | 3474  |      | 489   |
| Starvation Cap Reductn  | 166   |      | 0     | 709   |      | 0     |
| Spillback Cap Reductn   | 0     |      | 0     | 0     |      | 0     |
| Storage Cap Reductn     | 0     |      | 0     | 0     |      | 0     |
| Reduced v/c Ratio       | 0.45  |      | 0.06  | 0.51  |      | 0.00  |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 70

37: N. Congress Ave & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.43

Intersection Signal Delay: 5.0 Intersection LOS: A

Intersection Capacity Utilization 58.4% ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 37: N. Congress Ave & W. 15th St



38: Brazos St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR   | SBL   | SBT   | SBR  |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|-------|-------|-------|------|
| Lane Configurations     | ↰     | ↱     | ↱    | ↰     | ↱     | ↱    | ↰     | ↱     | ↱     | ↰     | ↱     | ↱    |
| Traffic Volume (vph)    | 77    | 1088  | 47   | 26    | 1400  | 81   | 4     | 2     | 7     | 2     | 0     | 4    |
| Future Volume (vph)     | 77    | 1088  | 47   | 26    | 1400  | 81   | 4     | 2     | 7     | 2     | 0     | 4    |
| Confl. Peds. (#/hr)     | 1     |       | 9    | 9     |       | 1    | 9     |       | 4     | 4     |       | 9    |
| Confl. Bikes (#/hr)     |       |       |      |       |       | 1    |       |       |       |       |       | 17   |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97 |
| Adj. Flow (vph)         | 79    | 1122  | 48   | 27    | 1443  | 84   | 4     | 2     | 7     | 2     | 0     | 4    |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |       |       |       |      |
| Lane Group Flow (vph)   | 79    | 1170  | 0    | 27    | 1527  | 0    | 0     | 6     | 7     | 0     | 6     | 0    |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | Perm  | NA    | Perm  | Perm  | NA    |      |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |       | 4     |       |       | 8     |      |
| Permitted Phases        | 2     |       |      | 6     |       |      | 4     |       | 4     | 8     |       |      |
| Detector Phase          | 5     | 2     |      | 1     | 6     |      | 4     | 4     | 4     | 8     | 8     |      |
| Switch Phase            |       |       |      |       |       |      |       |       |       |       |       |      |
| Minimum Initial (s)     | 5.0   | 15.0  |      | 5.0   | 15.0  |      | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  |      |
| Minimum Split (s)       | 10.0  | 22.0  |      | 10.0  | 22.0  |      | 32.0  | 32.0  | 32.0  | 32.0  | 32.0  |      |
| Total Split (s)         | 15.0  | 78.0  |      | 10.0  | 73.0  |      | 32.0  | 32.0  | 32.0  | 32.0  | 32.0  |      |
| Total Split (%)         | 12.5% | 65.0% |      | 8.3%  | 60.8% |      | 26.7% | 26.7% | 26.7% | 26.7% | 26.7% |      |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |      |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      |       | 0.0   | 0.0   |       | 0.0   |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      |       | 5.0   | 5.0   |       | 5.0   |      |
| Lead/Lag                | Lead  | Lead  |      | Lag   | Lag   |      |       |       |       |       |       |      |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |       |       |       |       |       |      |
| Recall Mode             | None  | C-Max |      | None  | C-Max |      | None  | None  | None  | None  | None  |      |
| Act Effct Green (s)     | 103.0 | 105.0 |      | 99.6  | 100.6 |      |       | 10.0  | 10.0  |       | 10.0  |      |
| Actuated g/C Ratio      | 0.86  | 0.88  |      | 0.83  | 0.84  |      |       | 0.08  | 0.08  |       | 0.08  |      |
| v/c Ratio               | 0.26  | 0.27  |      | 0.07  | 0.36  |      |       | 0.05  | 0.03  |       | 0.03  |      |
| Control Delay           | 7.1   | 4.2   |      | 2.2   | 1.9   |      |       | 51.7  | 0.3   |       | 0.2   |      |
| Queue Delay             | 0.0   | 0.0   |      | 0.0   | 0.1   |      |       | 0.0   | 0.0   |       | 0.0   |      |
| Total Delay             | 7.1   | 4.3   |      | 2.2   | 1.9   |      |       | 51.7  | 0.3   |       | 0.2   |      |
| LOS                     | A     | A     |      | A     | A     |      |       | D     | A     |       | A     |      |
| Approach Delay          |       | 4.4   |      |       | 1.9   |      |       | 24.0  |       |       | 0.2   |      |
| Approach LOS            |       | A     |      |       | A     |      |       | C     |       |       | A     |      |
| Queue Length 50th (ft)  | 12    | 98    |      | 1     | 17    |      |       | 4     | 0     |       | 0     |      |
| Queue Length 95th (ft)  | 37    | 114   |      | 4     | 123   |      |       | 18    | 0     |       | 0     |      |
| Internal Link Dist (ft) |       | 356   |      |       | 297   |      |       | 199   |       |       | 273   |      |
| Turn Bay Length (ft)    | 100   |       |      | 40    |       |      |       |       | 50    |       |       |      |
| Base Capacity (vph)     | 348   | 4414  |      | 409   | 4225  |      |       | 346   | 434   |       | 413   |      |
| Starvation Cap Reductn  | 0     | 1121  |      | 0     | 872   |      |       | 0     | 0     |       | 0     |      |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 0     |      |       | 0     | 0     |       | 0     |      |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      |       | 0     | 0     |       | 0     |      |
| Reduced v/c Ratio       | 0.23  | 0.36  |      | 0.07  | 0.46  |      |       | 0.02  | 0.02  |       | 0.01  |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 65

38: Brazos St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 0.36  
Intersection Signal Delay: 3.1  
Intersection Capacity Utilization 57.6%  
Analysis Period (min) 15

Intersection LOS: A  
ICU Level of Service B

Splits and Phases: 38: Brazos St & W. 15th St



39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

|                         | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑↑   |      | ↑     | ↑↑↑   |      |      |      |      |       | ↑↑↑   | ↑     |
| Traffic Volume (vph)    | 0    | 830   | 343  | 157   | 1486  | 0    | 0    | 0    | 0    | 56    | 175   | 43    |
| Future Volume (vph)     | 0    | 830   | 343  | 157   | 1486  | 0    | 0    | 0    | 0    | 56    | 175   | 43    |
| Confl. Peds. (#/hr)     |      |       | 22   | 22    |       |      |      |      |      | 9     |       | 7     |
| Peak Hour Factor        | 0.99 | 0.99  | 0.99 | 0.99  | 0.99  | 0.99 | 0.99 | 0.99 | 0.99 | 0.99  | 0.99  | 0.99  |
| Adj. Flow (vph)         | 0    | 838   | 346  | 159   | 1501  | 0    | 0    | 0    | 0    | 57    | 177   | 43    |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 1184  | 0    | 159   | 1501  | 0    | 0    | 0    | 0    | 0     | 234   | 43    |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      | 3.0   | 10.0  |      |      |      |      | 7.0   | 7.0   | 7.0   |
| Minimum Split (s)       |      | 28.0  |      | 8.0   | 28.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (s)         |      | 68.0  |      | 20.0  | 88.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (%)         |      | 56.7% |      | 16.7% | 73.3% |      |      |      |      | 26.7% | 26.7% | 26.7% |
| Yellow Time (s)         |      | 4.0   |      | 4.0   | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      | 1.0   | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      | 0.0   | 0.0   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      | 5.0   | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      | Lead  |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      | Yes   |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      | None  | C-Max |      |      |      |      | None  | None  | None  |
| Act Effct Green (s)     |      | 86.4  |      | 99.0  | 99.0  |      |      |      |      |       | 11.0  | 11.0  |
| Actuated g/C Ratio      |      | 0.72  |      | 0.82  | 0.82  |      |      |      |      |       | 0.09  | 0.09  |
| v/c Ratio               |      | 0.34  |      | 0.40  | 0.36  |      |      |      |      |       | 0.51  | 0.22  |
| Control Delay           |      | 2.2   |      | 6.8   | 3.4   |      |      |      |      |       | 55.7  | 8.0   |
| Queue Delay             |      | 0.1   |      | 0.0   | 0.2   |      |      |      |      |       | 0.0   | 0.0   |
| Total Delay             |      | 2.3   |      | 6.8   | 3.6   |      |      |      |      |       | 55.7  | 8.0   |
| LOS                     |      | A     |      | A     | A     |      |      |      |      |       | E     | A     |
| Approach Delay          |      | 2.3   |      |       | 3.9   |      |      |      |      |       | 48.3  |       |
| Approach LOS            |      | A     |      |       | A     |      |      |      |      |       | D     |       |
| Queue Length 50th (ft)  |      | 0     |      | 26    | 101   |      |      |      |      |       | 64    | 0     |
| Queue Length 95th (ft)  |      | 0     |      | m37   | 98    |      |      |      |      |       | 91    | 20    |
| Internal Link Dist (ft) |      | 297   |      |       | 282   |      |      | 125  |      |       | 272   |       |
| Turn Bay Length (ft)    |      |       |      | 70    |       |      |      |      |      |       |       | 50    |
| Base Capacity (vph)     |      | 3491  |      | 480   | 4196  |      |      |      |      |       | 1127  | 398   |
| Starvation Cap Reductn  |      | 1030  |      | 0     | 1515  |      |      |      |      |       | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      |       | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      |       | 0     | 0     |
| Reduced v/c Ratio       |      | 0.48  |      | 0.33  | 0.56  |      |      |      |      |       | 0.21  | 0.11  |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 70  
Control Type: Actuated-Coordinated

39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

Maximum v/c Ratio: 0.51

Intersection Signal Delay: 7.3

Intersection LOS: A

Intersection Capacity Utilization 82.2%

ICU Level of Service E

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 39: San Jacinto Blvd & W. 15th St



40: Trinity St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↰     | ↱↱↱   |      |      | ↱↱↱   |      |       | ↱↱    | ↱     |      |      |      |
| Traffic Volume (vph)    | 218   | 717   | 0    | 0    | 1593  | 382  | 58    | 164   | 11    | 0    | 0    | 0    |
| Future Volume (vph)     | 218   | 717   | 0    | 0    | 1593  | 382  | 58    | 164   | 11    | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 1     |       |      |      |       | 1    | 3     |       | 6     |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       |      |       |       | 2     |      |      |      |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97 | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph)         | 225   | 739   | 0    | 0    | 1642  | 394  | 60    | 169   | 11    | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 225   | 739   | 0    | 0    | 2036  | 0    | 0     | 229   | 11    | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 1.0   | 10.0  |      |      | 1.0   |      | 10.0  | 10.0  | 10.0  |      |      |      |
| Minimum Split (s)       | 5.5   | 28.0  |      |      | 5.5   |      | 28.0  | 28.0  | 28.0  |      |      |      |
| Total Split (s)         | 20.0  | 92.0  |      |      | 72.0  |      | 28.0  | 28.0  | 28.0  |      |      |      |
| Total Split (%)         | 16.7% | 76.7% |      |      | 60.0% |      | 23.3% | 23.3% | 23.3% |      |      |      |
| Yellow Time (s)         | 3.5   | 4.0   |      |      | 3.5   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      |       | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 4.5   | 5.0   |      |      | 4.5   |      |       | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effct Green (s)     | 87.5  | 87.0  |      |      | 69.1  |      |       | 23.0  | 23.0  |      |      |      |
| Actuated g/C Ratio      | 0.73  | 0.72  |      |      | 0.58  |      |       | 0.19  | 0.19  |      |      |      |
| v/c Ratio               | 0.84  | 0.20  |      |      | 0.71  |      |       | 0.34  | 0.03  |      |      |      |
| Control Delay           | 63.7  | 3.0   |      |      | 6.2   |      |       | 43.7  | 0.2   |      |      |      |
| Queue Delay             | 0.0   | 0.1   |      |      | 0.1   |      |       | 0.0   | 0.0   |      |      |      |
| Total Delay             | 63.7  | 3.1   |      |      | 6.3   |      |       | 43.7  | 0.2   |      |      |      |
| LOS                     | E     | A     |      |      | A     |      |       | D     | A     |      |      |      |
| Approach Delay          |       | 17.2  |      |      | 6.3   |      |       | 41.7  |       |      |      |      |
| Approach LOS            |       | B     |      |      | A     |      |       | D     |       |      |      |      |
| Queue Length 50th (ft)  | 119   | 27    |      |      | 50    |      |       | 81    | 0     |      |      |      |
| Queue Length 95th (ft)  | #237  | 31    |      |      | 143   |      |       | 121   | 0     |      |      |      |
| Internal Link Dist (ft) |       | 282   |      |      | 657   |      |       | 149   |       |      | 621  |      |
| Turn Bay Length (ft)    | 100   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 289   | 3686  |      |      | 2869  |      |       | 668   | 344   |      |      |      |
| Starvation Cap Reductn  | 0     | 1699  |      |      | 74    |      |       | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      |       | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      |       | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.78  | 0.37  |      |      | 0.73  |      |       | 0.34  | 0.03  |      |      |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 80

40: Trinity St & W. 15th St

TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background

Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 12.2

Intersection LOS: B

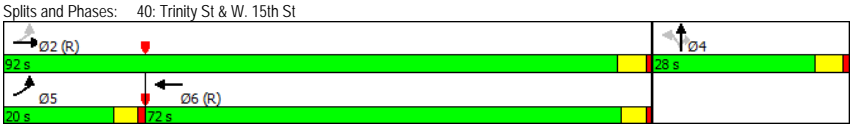
Intersection Capacity Utilization 82.2%

ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.



11: Colorado St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Intersection              |     |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 8.6 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | A   |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | +    |      |      |      | +    |      |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 4    | 26   | 34   | 0    | 21   | 7    | 5    | 0    | 15   | 20   | 44   |
| Future Vol, veh/h   | 0    | 4    | 26   | 34   | 0    | 21   | 7    | 5    | 0    | 15   | 20   | 44   |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 5    | 30   | 39   | 0    | 24   | 8    | 6    | 0    | 17   | 23   | 50   |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB  | WB  | NB  |
|----------------------------|-----|-----|-----|
| Opposing Approach          | WB  | EB  | SB  |
| Opposing Lanes             | 1   | 1   | 1   |
| Conflicting Approach Left  | SB  | NB  | EB  |
| Conflicting Lanes Left     | 1   | 1   | 1   |
| Conflicting Approach Right | NB  | SB  | WB  |
| Conflicting Lanes Right    | 1   | 1   | 1   |
| HCM Control Delay          | 7.9 | 8.1 | 7.7 |
| HCM LOS                    | A   | A   | A   |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 19%   | 6%    | 64%   | 2%    |
| Vol Thru, %            | 25%   | 41%   | 21%   | 91%   |
| Vol Right, %           | 56%   | 53%   | 15%   | 7%    |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 79    | 64    | 33    | 227   |
| LT Vol                 | 15    | 4     | 21    | 4     |
| Through Vol            | 20    | 26    | 7     | 207   |
| RT Vol                 | 44    | 34    | 5     | 16    |
| Lane Flow Rate         | 90    | 73    | 38    | 258   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.104 | 0.09  | 0.05  | 0.305 |
| Departure Headway (Hd) | 4.163 | 4.435 | 4.819 | 4.26  |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 862   | 809   | 744   | 849   |
| Service Time           | 2.182 | 2.457 | 2.844 | 2.26  |
| HCM Lane V/C Ratio     | 0.104 | 0.09  | 0.051 | 0.304 |
| HCM Control Delay      | 7.7   | 7.9   | 8.1   | 9.1   |
| HCM Lane LOS           | A     | A     | A     | A     |
| HCM 95th-tile Q        | 0.3   | 0.3   | 0.2   | 1.3   |

11: Colorado St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 4    | 207  | 16   |
| Future Vol, veh/h   | 0    | 4    | 207  | 16   |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 5    | 235  | 18   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB  |
|----------------------------|-----|
| Opposing Approach          | NB  |
| Opposing Lanes             | 1   |
| Conflicting Approach Left  | WB  |
| Conflicting Lanes Left     | 1   |
| Conflicting Approach Right | EB  |
| Conflicting Lanes Right    | 1   |
| HCM Control Delay          | 9.1 |
| HCM LOS                    | A   |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Intersection              |     |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 7.3 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | A   |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |      |      | ↕    |      |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 0    | 76   | 0    | 0    | 0    | 30   | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h   | 0    | 0    | 76   | 0    | 0    | 0    | 30   | 0    | 0    | 0    | 0    | 0    |
| Peak Hour Factor    | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 87   | 0    | 0    | 0    | 34   | 0    | 0    | 0    | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB  | WB  | NB |
|----------------------------|-----|-----|----|
| Opposing Approach          | WB  | EB  | SB |
| Opposing Lanes             | 1   | 1   | 1  |
| Conflicting Approach Left  | SB  | NB  | EB |
| Conflicting Lanes Left     | 1   | 1   | 1  |
| Conflicting Approach Right | NB  | SB  | WB |
| Conflicting Lanes Right    | 1   | 1   | 1  |
| HCM Control Delay          | 7.4 | 7.2 | 0  |
| HCM LOS                    | A   | A   | -  |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 0%    | 0%    | 0%    | 0%    |
| Vol Thru, %            | 100%  | 100%  | 100%  | 0%    |
| Vol Right, %           | 0%    | 0%    | 0%    | 100%  |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 0     | 76    | 30    | 8     |
| LT Vol                 | 0     | 0     | 0     | 0     |
| Through Vol            | 0     | 76    | 30    | 0     |
| RT Vol                 | 0     | 0     | 0     | 8     |
| Lane Flow Rate         | 0     | 87    | 34    | 9     |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0     | 0.096 | 0.038 | 0.009 |
| Departure Headway (Hd) | 4.153 | 3.976 | 4.015 | 3.544 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 0     | 905   | 893   | 1002  |
| Service Time           | 2.202 | 1.984 | 2.032 | 1.592 |
| HCM Lane V/C Ratio     | 0     | 0.096 | 0.038 | 0.009 |
| HCM Control Delay      | 7.2   | 7.4   | 7.2   | 6.6   |
| HCM Lane LOS           | N     | A     | A     | A     |
| HCM 95th-tile Q        | 0     | 0.3   | 0.1   | 0     |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      |      | ↕    |
| Traffic Vol, veh/h  | 0    | 0    | 0    | 8    |
| Future Vol, veh/h   | 0    | 0    | 0    | 8    |
| Peak Hour Factor    | 0.87 | 0.87 | 0.87 | 0.87 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 0    | 9    |
| Number of Lanes     | 0    | 0    | 0    | 1    |

| Approach                   | SB  |
|----------------------------|-----|
| Opposing Approach          | NB  |
| Opposing Lanes             | 1   |
| Conflicting Approach Left  | WB  |
| Conflicting Lanes Left     | 1   |
| Conflicting Approach Right | EB  |
| Conflicting Lanes Right    | 1   |
| HCM Control Delay          | 6.6 |
| HCM LOS                    | A   |

14: Brazos St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Intersection              |     |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 9.7 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | A   |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |      |      | ↕    |      |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 66   | 65   | 7    | 0    | 17   | 12   | 3    | 0    | 20   | 0    | 0    |
| Future Vol, veh/h   | 0    | 66   | 65   | 7    | 0    | 17   | 12   | 3    | 0    | 20   | 0    | 0    |
| Peak Hour Factor    | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 84   | 82   | 9    | 0    | 22   | 15   | 4    | 0    | 25   | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB  | WB  | NB  |
|----------------------------|-----|-----|-----|
| Opposing Approach          | WB  | EB  | SB  |
| Opposing Lanes             | 1   | 1   | 1   |
| Conflicting Approach Left  | SB  | NB  | EB  |
| Conflicting Lanes Left     | 1   | 1   | 1   |
| Conflicting Approach Right | NB  | SB  | WB  |
| Conflicting Lanes Right    | 1   | 1   | 1   |
| HCM Control Delay          | 9.3 | 8.3 | 8.2 |
| HCM LOS                    | A   | A   | A   |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 100%  | 48%   | 53%   | 0%    |
| Vol Thru, %            | 0%    | 47%   | 38%   | 93%   |
| Vol Right, %           | 0%    | 5%    | 9%    | 7%    |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 20    | 138   | 32    | 241   |
| LT Vol                 | 20    | 66    | 17    | 0     |
| Through Vol            | 0     | 65    | 12    | 224   |
| RT Vol                 | 0     | 7     | 3     | 17    |
| Lane Flow Rate         | 25    | 175   | 41    | 305   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.035 | 0.234 | 0.056 | 0.378 |
| Departure Headway (Hd) | 5.019 | 4.822 | 4.979 | 4.456 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 711   | 744   | 717   | 808   |
| Service Time           | 3.063 | 2.858 | 3.025 | 2.485 |
| HCM Lane V/C Ratio     | 0.035 | 0.235 | 0.057 | 0.377 |
| HCM Control Delay      | 8.2   | 9.3   | 8.3   | 10.2  |
| HCM Lane LOS           | A     | A     | A     | B     |
| HCM 95th-ile Q         | 0.1   | 0.9   | 0.2   | 1.8   |

14: Brazos St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 0    | 224  | 17   |
| Future Vol, veh/h   | 0    | 0    | 224  | 17   |
| Peak Hour Factor    | 0.79 | 0.79 | 0.79 | 0.79 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 284  | 22   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 10.2 |
| HCM LOS                    | B    |

16: San Jacinto Blvd & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 10.6 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↶    |      |      |      | ↷    |      |      |      |      |      |
| Traffic Vol, veh/h  | 0    | 0    | 6    | 74   | 0    | 71   | 18   | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h   | 0    | 0    | 6    | 74   | 0    | 71   | 18   | 0    | 0    | 0    | 0    | 0    |
| Peak Hour Factor    | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 6    | 79   | 0    | 76   | 19   | 0    | 0    | 0    | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    |

| Approach                   |  | EB  | WB   |
|----------------------------|--|-----|------|
| Opposing Approach          |  | WB  | EB   |
| Opposing Lanes             |  | 1   | 1    |
| Conflicting Approach Left  |  | SB  |      |
| Conflicting Lanes Left     |  | 3   | 0    |
| Conflicting Approach Right |  |     | SB   |
| Conflicting Lanes Right    |  | 0   | 3    |
| HCM Control Delay          |  | 8.9 | 10.4 |
| HCM LOS                    |  | A   | B    |

| Lane                   | EBLn1 | WBLn1 | SBLn1 | SBLn2 | SBLn3 |
|------------------------|-------|-------|-------|-------|-------|
| Vol Left, %            | 0%    | 80%   | 0%    | 0%    | 0%    |
| Vol Thru, %            | 7%    | 20%   | 100%  | 100%  | 0%    |
| Vol Right, %           | 93%   | 0%    | 0%    | 0%    | 100%  |
| Sign Control           | Stop  | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 80    | 89    | 266   | 266   | 17    |
| LT Vol                 | 0     | 71    | 0     | 0     | 0     |
| Through Vol            | 6     | 18    | 266   | 266   | 0     |
| RT Vol                 | 74    | 0     | 0     | 0     | 17    |
| Lane Flow Rate         | 85    | 95    | 283   | 283   | 18    |
| Geometry Grp           | 7     | 7     | 7     | 7     | 7     |
| Degree of Util (X)     | 0.126 | 0.167 | 0.397 | 0.397 | 0.013 |
| Departure Headway (Hd) | 5.329 | 6.344 | 5.052 | 5.052 | 2.608 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 669   | 563   | 710   | 710   | 1359  |
| Service Time           | 3.09  | 4.104 | 2.795 | 2.795 | 0.35  |
| HCM Lane V/C Ratio     | 0.127 | 0.169 | 0.399 | 0.399 | 0.013 |
| HCM Control Delay      | 8.9   | 10.4  | 11.1  | 11.1  | 5.4   |
| HCM Lane LOS           | A     | B     | B     | B     | A     |
| HCM 95th-tile Q        | 0.4   | 0.6   | 1.9   | 1.9   | 0     |

16: San Jacinto Blvd & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↶↷   | ↶    |
| Traffic Vol, veh/h  | 0    | 0    | 532  | 17   |
| Future Vol, veh/h   | 0    | 0    | 532  | 17   |
| Peak Hour Factor    | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 566  | 18   |
| Number of Lanes     | 0    | 0    | 2    | 1    |

| Approach                   |  | SB   |
|----------------------------|--|------|
| Opposing Approach          |  |      |
| Opposing Lanes             |  | 0    |
| Conflicting Approach Left  |  | WB   |
| Conflicting Lanes Left     |  | 1    |
| Conflicting Approach Right |  | EB   |
| Conflicting Lanes Right    |  | 1    |
| HCM Control Delay          |  | 10.9 |
| HCM LOS                    |  | B    |

20: Colorado St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Intersection              |     |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 8.5 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | A   |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |      |      | ↕    |      |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 30   | 0    | 34   | 0    | 0    | 0    | 0    | 0    | 15   | 41   | 0    |
| Future Vol, veh/h   | 0    | 30   | 0    | 34   | 0    | 0    | 0    | 0    | 0    | 15   | 41   | 0    |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 34   | 0    | 39   | 0    | 0    | 0    | 0    | 0    | 17   | 47   | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB  | WB | NB  |
|----------------------------|-----|----|-----|
| Opposing Approach          | WB  | EB | SB  |
| Opposing Lanes             | 1   | 1  | 1   |
| Conflicting Approach Left  | SB  | NB | EB  |
| Conflicting Lanes Left     | 1   | 1  | 1   |
| Conflicting Approach Right | NB  | SB | WB  |
| Conflicting Lanes Right    | 1   | 1  | 1   |
| HCM Control Delay          | 7.9 | 0  | 7.8 |
| HCM LOS                    | A   | -  | A   |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 27%   | 47%   | 0%    | 0%    |
| Vol Thru, %            | 73%   | 0%    | 100%  | 88%   |
| Vol Right, %           | 0%    | 53%   | 0%    | 12%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 56    | 64    | 0     | 233   |
| LT Vol                 | 15    | 30    | 0     | 0     |
| Through Vol            | 41    | 0     | 0     | 206   |
| RT Vol                 | 0     | 34    | 0     | 27    |
| Lane Flow Rate         | 64    | 73    | 0     | 265   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.078 | 0.089 | 0     | 0.297 |
| Departure Headway (Hd) | 4.422 | 4.421 | 4.737 | 4.042 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 815   | 815   | 0     | 879   |
| Service Time           | 2.422 | 2.424 | 2.744 | 2.108 |
| HCM Lane V/C Ratio     | 0.079 | 0.09  | 0     | 0.301 |
| HCM Control Delay      | 7.8   | 7.9   | 7.7   | 8.8   |
| HCM Lane LOS           | A     | A     | N     | A     |
| HCM 95th-tile Q        | 0.3   | 0.3   | 0     | 1.2   |

20: Colorado St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 0    | 206  | 27   |
| Future Vol, veh/h   | 0    | 0    | 206  | 27   |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 234  | 31   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB  |
|----------------------------|-----|
| Opposing Approach          | NB  |
| Opposing Lanes             | 1   |
| Conflicting Approach Left  | WB  |
| Conflicting Lanes Left     | 1   |
| Conflicting Approach Right | EB  |
| Conflicting Lanes Right    | 1   |
| HCM Control Delay          | 8.8 |
| HCM LOS                    | A   |

24: E. 17th St & Brazos St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Intersection              |     |
|---------------------------|-----|
| Intersection Delay, s/veh | 7.1 |
| Intersection LOS          | A   |

| Movement            | EBU  | EBL  | EBT  | WBU  | WBT  | WBR  | SBU  | SBL  | SBR  |
|---------------------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↱    |      | ↱    |      |      | ↱↲   |      |
| Traffic Vol, veh/h  | 0    | 0    | 0    | 0    | 0    | 16   | 0    | 37   | 0    |
| Future Vol, veh/h   | 0    | 0    | 0    | 0    | 0    | 16   | 0    | 37   | 0    |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 0    | 0    | 0    | 18   | 0    | 42   | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 1    | 0    | 0    | 1    | 0    |

| Approach                   | EB | WB  | SB  |
|----------------------------|----|-----|-----|
| Opposing Approach          | WB | EB  |     |
| Opposing Lanes             | 1  | 1   | 0   |
| Conflicting Approach Left  | SB |     | WB  |
| Conflicting Lanes Left     | 1  | 0   | 1   |
| Conflicting Approach Right |    | SB  | EB  |
| Conflicting Lanes Right    | 0  | 1   | 1   |
| HCM Control Delay          | 0  | 6.5 | 7.4 |
| HCM LOS                    | -  | A   | A   |

| Lane                   | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, %            | 0%    | 0%    | 100%  |
| Vol Thru, %            | 100%  | 0%    | 0%    |
| Vol Right, %           | 0%    | 100%  | 0%    |
| Sign Control           | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 0     | 16    | 37    |
| LT Vol                 | 0     | 0     | 37    |
| Through Vol            | 0     | 0     | 0     |
| RT Vol                 | 0     | 16    | 0     |
| Lane Flow Rate         | 0     | 18    | 42    |
| Geometry Grp           | 1     | 1     | 1     |
| Degree of Util (X)     | 0     | 0.017 | 0.049 |
| Departure Headway (Hd) | 4.021 | 3.406 | 4.166 |
| Convergence, Y/N       | Yes   | Yes   | Yes   |
| Cap                    | 0     | 1050  | 864   |
| Service Time           | 2.045 | 1.43  | 2.167 |
| HCM Lane V/C Ratio     | 0     | 0.017 | 0.049 |
| HCM Control Delay      | 7     | 6.5   | 7.4   |
| HCM Lane LOS           | N     | A     | A     |
| HCM 95th-ile Q         | 0     | 0.1   | 0.2   |

4: Colorado St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.2  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑↑   |      | ↑    | ↑↑   | ↑    |      |
| Traffic Vol, veh/h       | 978  | 92   | 144  | 747  | 0    | 21   |
| Future Vol, veh/h        | 978  | 92   | 144  | 747  | 0    | 21   |
| Conflicting Peds, #/hr   | 0    | 1    | 1    | 0    | 0    | 5    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | 40   | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 87   | 87   | 87   | 87   | 87   | 87   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 1124 | 106  | 166  | 859  | 0    | 24   |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |      |
|----------------------|--------|---|--------|---|--------|------|
| Conflicting Flow All | 0      | 0 | 1231   | 0 | 1938   | 621  |
| Stage 1              | -      | - | -      | - | 1178   | -    |
| Stage 2              | -      | - | -      | - | 760    | -    |
| Critical Hdwy        | -      | - | 4.14   | - | 6.84   | 6.94 |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.84   | -    |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.84   | -    |
| Follow-up Hdwy       | -      | - | 2.22   | - | 3.52   | 3.32 |
| Pot Cap-1 Maneuver   | -      | - | 562    | - | 57     | 430  |
| Stage 1              | -      | - | -      | - | 255    | -    |
| Stage 2              | -      | - | -      | - | 422    | -    |
| Platoon blocked, %   | -      | - | -      | - | -      | -    |
| Mov Cap-1 Maneuver   | -      | - | 559    | - | 40     | 428  |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 40     | -    |
| Stage 1              | -      | - | -      | - | 255    | -    |
| Stage 2              | -      | - | -      | - | 297    | -    |

| Approach             | EB | WB  | NB   |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0  | 2.3 | 13.9 |
| HCM LOS              |    |     | B    |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 428   | -   | -   | 559   | -   |
| HCM Lane V/C Ratio    | 0.056 | -   | -   | 0.296 | -   |
| HCM Control Delay (s) | 13.9  | -   | -   | 14.1  | -   |
| HCM Lane LOS          | B     | -   | -   | B     | -   |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | 1.2   | -   |

MS

Synchro 9 Report  
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9: Guadalupe St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.7  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    | ↑    |      | ↑    |      |      |      |      |      | ↑↑   |      |
| Traffic Vol, veh/h       | 0    | 12   | 46   | 43   | 9    | 0    | 0    | 0    | 0    | 23   | 971  | 18   |
| Future Vol, veh/h        | 0    | 12   | 46   | 43   | 9    | 0    | 0    | 0    | 0    | 23   | 971  | 18   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 12   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 36   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 0    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 13   | 48   | 45   | 9    | 0    | 0    | 0    | 0    | 24   | 1022 | 19   |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |   |
|----------------------|--------|------|--------|------|--------|---|
| Conflicting Flow All | -      | 1116 | 569    | 578  | 1125   | - |
| Stage 1              | -      | 1116 | -      | 0    | 0      | - |
| Stage 2              | -      | 0    | -      | 578  | 1125   | - |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | - |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | - |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | - |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | - |
| Pot Cap-1 Maneuver   | 0      | 206  | 465    | 399  | 204    | 0 |
| Stage 1              | 0      | 281  | -      | -    | -      | 0 |
| Stage 2              | 0      | -    | -      | 468  | 278    | 0 |
| Platoon blocked, %   | -      | -    | -      | -    | -      | - |
| Mov Cap-1 Maneuver   | -      | 199  | 449    | 339  | 197    | - |
| Mov Cap-2 Maneuver   | -      | 199  | -      | 339  | 197    | - |
| Stage 1              | -      | 271  | -      | -    | -      | - |
| Stage 2              | -      | -    | -      | 398  | 268    | - |

| Approach             | EB   | WB   | SB |
|----------------------|------|------|----|
| HCM Control Delay, s | 16.1 | 19.6 |    |
| HCM LOS              | C    | C    |    |

| Minor Lane/Major Mvmt | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-------|-------|-----|-----|-----|
| Capacity (veh/h)      | 199   | 449   | 301   | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.063 | 0.108 | 0.182 | -   | -   | -   |
| HCM Control Delay (s) | 24.3  | 14    | 19.6  | -   | -   | -   |
| HCM Lane LOS          | C     | B     | C     | -   | -   | -   |
| HCM 95th %tile Q(veh) | 0.2   | 0.4   | 0.7   | -   | -   | -   |

MS

Synchro 9 Report  
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10: Lavaca St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |       |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|-------|------|------|------|------|------|
| Int Delay, s/veh         | 2.2  |      |      |      |      |      |       |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL   | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      | ↕ ↕ ↕ |      |      |      |      |      |
| Traffic Vol, veh/h       | 4    | 18   | 0    | 0    | 17   | 11   | 86    | 516  | 48   | 0    | 0    | 0    |
| Future Vol, veh/h        | 4    | 18   | 0    | 0    | 17   | 11   | 86    | 516  | 48   | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 28   | 17    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free  | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -     | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 0     | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | -    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 94   | 94   | 94   | 94   | 94   | 94   | 94    | 94   | 94   | 94   | 94   | 94   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2     | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 4    | 19   | 0    | 0    | 18   | 12   | 91    | 549  | 51   | 0    | 0    | 0    |

| Major/Minor          | Minor2 |      | Minor1 |   | Major1 |      |      |   |
|----------------------|--------|------|--------|---|--------|------|------|---|
| Conflicting Flow All | 457    | 800  | -      | - | 774    | 328  | 17   | 0 |
| Stage 1              | 17     | 17   | -      | - | 757    | -    | -    | - |
| Stage 2              | 440    | 783  | -      | - | 17     | -    | -    | - |
| Critical Hdwy        | 6.44   | 6.54 | -      | - | 6.54   | 7.14 | 5.34 | - |
| Critical Hdwy Stg 1  | -      | -    | -      | - | 5.54   | -    | -    | - |
| Critical Hdwy Stg 2  | 6.74   | 5.54 | -      | - | -      | -    | -    | - |
| Follow-up Hdwy       | 3.82   | 4.02 | -      | - | 4.02   | 3.92 | 3.12 | - |
| Pot Cap-1 Maneuver   | 525    | 317  | 0      | 0 | 328    | 570  | 1133 | - |
| Stage 1              | -      | -    | 0      | 0 | 414    | -    | -    | - |
| Stage 2              | 518    | 403  | 0      | 0 | -      | -    | -    | - |
| Platoon blocked, %   | -      | -    | -      | - | -      | -    | -    | - |
| Mov Cap-1 Maneuver   | 453    | 287  | -      | - | 297    | 570  | 1133 | - |
| Mov Cap-2 Maneuver   | 453    | 287  | -      | - | 297    | -    | -    | - |
| Stage 1              | -      | -    | -      | - | 381    | -    | -    | - |
| Stage 2              | 444    | 371  | -      | - | -      | -    | -    | - |

| Approach             | EB   |  | WB   |  | NB  |  |
|----------------------|------|--|------|--|-----|--|
| HCM Control Delay, s | 17.7 |  | 15.7 |  | 1.1 |  |
| HCM LOS              | C    |  | C    |  |     |  |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1 | WBLn1 |
|-----------------------|-------|-----|-----|-------|-------|
| Capacity (veh/h)      | 1133  | -   | -   | 307   | 366   |
| HCM Lane V/C Ratio    | 0.081 | -   | -   | 0.076 | 0.081 |
| HCM Control Delay (s) | 8.5   | -   | -   | 17.7  | 15.7  |
| HCM Lane LOS          | A     | -   | -   | C     | C     |
| HCM 95th %tile Q(veh) | 0.3   | -   | -   | 0.2   | 0.3   |

MS

Synchro 9 Report  
Page 3

17: Trinity St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |       |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|-------|------|------|------|------|------|
| Int Delay, s/veh         | 4.1  |      |      |      |      |      |       |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL   | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      | ↕ ↕ ↕ |      |      |      |      |      |
| Traffic Vol, veh/h       | 20   | 0    | 0    | 0    | 0    | 0    | 186   | 205  | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 20   | 0    | 0    | 0    | 0    | 0    | 186   | 205  | 0    | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 5    | 0    | 0    | 0    | 6     | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Free | Free | Free | Free  | Free | Free | Stop | Stop | Stop |
| RT Channelized           | -    | -    | None | -    | -    | None | -     | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 115   | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | -    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 88   | 88   | 88   | 88   | 88   | 88   | 88    | 88   | 88   | 88   | 88   | 88   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2     | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 23   | 0    | 0    | 0    | 0    | 0    | 211   | 233  | 0    | 0    | 0    | 0    |

| Major/Minor          | Minor2 |       | Major2 |   | Major1 |       |   |   |
|----------------------|--------|-------|--------|---|--------|-------|---|---|
| Conflicting Flow All | 523    | 663   | -      | - | 0      | 7     | 0 | - |
| Stage 1              | 7      | 7     | -      | - | -      | -     | - | - |
| Stage 2              | 516    | 656   | -      | - | -      | -     | - | - |
| Critical Hdwy        | 6.08   | 6.53  | -      | - | -      | 4.13  | - | - |
| Critical Hdwy Stg 1  | 5.43   | 5.53  | -      | - | -      | -     | - | - |
| Critical Hdwy Stg 2  | 6.03   | 5.53  | -      | - | -      | -     | - | - |
| Follow-up Hdwy       | 3.669  | 4.019 | -      | - | -      | 2.219 | - | - |
| Pot Cap-1 Maneuver   | 523    | 381   | 0      | 0 | -      | 1613  | - | 0 |
| Stage 1              | 974    | 890   | 0      | 0 | -      | -     | - | 0 |
| Stage 2              | 532    | 461   | 0      | 0 | -      | -     | - | 0 |
| Platoon blocked, %   | -      | -     | -      | - | -      | -     | - | - |
| Mov Cap-1 Maneuver   | 449    | 0     | -      | - | -      | 1613  | - | - |
| Mov Cap-2 Maneuver   | 449    | 0     | -      | - | -      | -     | - | - |
| Stage 1              | 968    | 0     | -      | - | -      | -     | - | - |
| Stage 2              | 460    | 0     | -      | - | -      | -     | - | - |

| Approach             | EB   |  | WB |  | NB  |  |
|----------------------|------|--|----|--|-----|--|
| HCM Control Delay, s | 13.4 |  | 0  |  | 3.6 |  |
| HCM LOS              | B    |  |    |  |     |  |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | WBT | WBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1613  | -   | 449   | -   | -   |
| HCM Lane V/C Ratio    | 0.131 | -   | 0.051 | -   | -   |
| HCM Control Delay (s) | 7.6   | -   | 13.4  | -   | -   |
| HCM Lane LOS          | A     | -   | B     | -   | -   |
| HCM 95th %tile Q(veh) | 0.5   | -   | 0.2   | -   | -   |

MS

Synchro 9 Report  
Page 4

25: San Jacinto Blvd & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 3.3  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    | ↑    |      | ↑    |      |      |      |      | ↑↑   | ↑    | ↑    |
| Traffic Vol, veh/h       | 0    | 6    | 44   | 70   | 18   | 0    | 0    | 0    | 0    | 46   | 517  | 0    |
| Future Vol, veh/h        | 0    | 6    | 44   | 70   | 18   | 0    | 0    | 0    | 0    | 46   | 517  | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 22   | 0    | 0    | 0    | 0    | 0    | 0    | 4    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 40   | -    | -    | -    | -    | -    | -    | -    | -    | 50   |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 7    | 48   | 76   | 20   | 0    | 0    | 0    | 0    | 50   | 562  | 0    |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |   |
|----------------------|--------|------|--------|------|--------|---|
| Conflicting Flow All | -      | 666  | 303    | 410  | 666    | - |
| Stage 1              | -      | 662  | -      | 4    | 4      | - |
| Stage 2              | -      | 4    | -      | 406  | 662    | - |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | - |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | - |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | - |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | - |
| Pot Cap-1 Maneuver   | 0      | 379  | 693    | 526  | 379    | 0 |
| Stage 1              | 0      | 457  | -      | -    | -      | 0 |
| Stage 2              | 0      | -    | -      | 593  | 457    | 0 |
| Platoon blocked, %   | -      | -    | -      | -    | -      | - |
| Mov Cap-1 Maneuver   | -      | 361  | 693    | 465  | 361    | - |
| Mov Cap-2 Maneuver   | -      | 361  | -      | 465  | 361    | - |
| Stage 1              | -      | 436  | -      | -    | -      | - |
| Stage 2              | -      | -    | -      | 519  | 436    | - |

| Approach             | EB   | WB   | SB  |
|----------------------|------|------|-----|
| HCM Control Delay, s | 11.2 | 15.5 | 0.7 |
| HCM LOS              | B    | C    |     |

| Minor Lane/Major Mvmt | EBLn1 | EBLn2 | WBLn1 | SBL   | SBT | SBR |
|-----------------------|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h)      | 361   | 693   | 439   | 1616  | -   | -   |
| HCM Lane V/C Ratio    | 0.018 | 0.069 | 0.218 | 0.031 | -   | -   |
| HCM Control Delay (s) | 15.2  | 10.6  | 15.5  | 7.3   | 0.1 | -   |
| HCM Lane LOS          | C     | B     | C     | A     | A   | -   |
| HCM 95th %tile Q(veh) | 0.1   | 0.2   | 0.8   | 0.1   | -   | -   |

26: Trinity St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.5  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | ↑    |      | ↑↑↑  | ↑↑↑  |      |      |
| Traffic Vol, veh/h       | 21   | 0    | 0    | 373  | 0    | 0    |
| Future Vol, veh/h        | 21   | 0    | 0    | 373  | 0    | 0    |
| Conflicting Peds, #/hr   | 3    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | -    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 87   | 87   | 87   | 87   | 87   | 87   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 24   | 0    | 0    | 429  | 0    | 0    |

| Major/Minor          | Minor2 | Major1 |      |
|----------------------|--------|--------|------|
| Conflicting Flow All | 174    | -      | 0    |
| Stage 1              | 0      | -      | -    |
| Stage 2              | 174    | -      | -    |
| Critical Hdwy        | 5.74   | -      | 5.34 |
| Critical Hdwy Stg 1  | -      | -      | -    |
| Critical Hdwy Stg 2  | 6.04   | -      | -    |
| Follow-up Hdwy       | 3.82   | -      | 3.12 |
| Pot Cap-1 Maneuver   | 782    | 0      | -    |
| Stage 1              | -      | 0      | -    |
| Stage 2              | 771    | 0      | -    |
| Platoon blocked, %   | -      | -      | -    |
| Mov Cap-1 Maneuver   | 782    | -      | -    |
| Mov Cap-2 Maneuver   | 782    | -      | -    |
| Stage 1              | -      | -      | -    |
| Stage 2              | 771    | -      | -    |

| Approach             | EB  | NB |
|----------------------|-----|----|
| HCM Control Delay, s | 9.8 | 0  |
| HCM LOS              | A   |    |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 |
|-----------------------|-----|-----|-------|
| Capacity (veh/h)      | -   | -   | 782   |
| HCM Lane V/C Ratio    | -   | -   | 0.031 |
| HCM Control Delay (s) | 0   | -   | 9.8   |
| HCM Lane LOS          | A   | -   | A     |
| HCM 95th %tile Q(veh) | -   | -   | 0.1   |

27: Guadalupe St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.8  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↱    |      |      | ↱    |      |      |      |      | ↱↲   | ↱    | ↲    |
| Traffic Vol, veh/h       | 0    | 12   | 46   | 40   | 8    | 0    | 0    | 0    | 0    | 23   | 1058 | 18   |
| Future Vol, veh/h        | 0    | 12   | 46   | 40   | 8    | 0    | 0    | 0    | 0    | 23   | 1058 | 18   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 20   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 24   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 13   | 50   | 43   | 9    | 0    | 0    | 0    | 0    | 25   | 1150 | 20   |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |   |
|----------------------|--------|------|--------|------|--------|---|
| Conflicting Flow All | -      | 1224 | 619    | 652  | 1224   | - |
| Stage 1              | -      | 1224 | -      | 0    | 0      | - |
| Stage 2              | -      | 0    | -      | 652  | 1224   | - |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | - |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | - |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | - |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | - |
| Pot Cap-1 Maneuver   | 0      | 178  | 432    | 353  | 178    | 0 |
| Stage 1              | 0      | 250  | -      | -    | -      | 0 |
| Stage 2              | 0      | -    | -      | 423  | 250    | 0 |
| Platoon blocked, %   | -      | -    | -      | -    | -      | - |
| Mov Cap-1 Maneuver   | -      | 174  | 422    | 293  | 174    | - |
| Mov Cap-2 Maneuver   | -      | 174  | -      | 293  | 174    | - |
| Stage 1              | -      | 244  | -      | -    | -      | - |
| Stage 2              | -      | -    | -      | 353  | 244    | - |

| Approach             | EB   | WB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 18.7 | 22 |    |
| HCM LOS              | C    | C  |    |

| Minor Lane/Major Mvmt | EBLn1WBLn1 | SBL   | SBT | SBR |
|-----------------------|------------|-------|-----|-----|
| Capacity (veh/h)      | 326        | 263   | -   | -   |
| HCM Lane V/C Ratio    | 0.193      | 0.198 | -   | -   |
| HCM Control Delay (s) | 18.7       | 22    | -   | -   |
| HCM Lane LOS          | C          | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.7        | 0.7   | -   | -   |

29: Colorado St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.4  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↱    |      |      | ↱    |      |      |      |      | ↱↲   | ↱    | ↲    |
| Traffic Vol, veh/h       | 3    | 25   | 33   | 9    | 7    | 5    | 15   | 280  | 8    | 2    | 46   | 16   |
| Future Vol, veh/h        | 3    | 25   | 33   | 9    | 7    | 5    | 15   | 280  | 8    | 2    | 46   | 16   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 15   | 3    | 0    | 0    | 0    | 0    | 3    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 4    | 32   | 42   | 11   | 9    | 6    | 19   | 354  | 10   | 3    | 58   | 20   |

| Major/Minor          | Minor2 |       | Minor1 |       | Major1 |       | Major2 |   |
|----------------------|--------|-------|--------|-------|--------|-------|--------|---|
| Conflicting Flow All | 496    | 479   | 71     | 507   | 484    | 374   | 81     | 0 |
| Stage 1              | 76     | 76    | -      | 397   | 397    | -     | -      | - |
| Stage 2              | 420    | 403   | -      | 110   | 87     | -     | -      | - |
| Critical Hdwy        | 7.12   | 6.52  | 6.22   | 7.12  | 6.52   | 6.22  | 4.12   | - |
| Critical Hdwy Stg 1  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -      | - |
| Critical Hdwy Stg 2  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -      | - |
| Follow-up Hdwy       | 3.518  | 4.018 | 3.318  | 3.518 | 4.018  | 3.318 | 2.218  | - |
| Pot Cap-1 Maneuver   | 484    | 486   | 991    | 476   | 483    | 672   | 1517   | - |
| Stage 1              | 933    | 832   | -      | 629   | 603    | -     | -      | - |
| Stage 2              | 611    | 600   | -      | 895   | 823    | -     | -      | - |
| Platoon blocked, %   | -      | -     | -      | -     | -      | -     | -      | - |
| Mov Cap-1 Maneuver   | 458    | 475   | 988    | 426   | 472    | 662   | 1517   | - |
| Mov Cap-2 Maneuver   | 458    | 475   | -      | 426   | 472    | -     | -      | - |
| Stage 1              | 915    | 827   | -      | 619   | 593    | -     | -      | - |
| Stage 2              | 578    | 590   | -      | 822   | 818    | -     | -      | - |

| Approach             | EB   | WB   | NB  | SB  |
|----------------------|------|------|-----|-----|
| HCM Control Delay, s | 11.2 | 12.9 | 0.4 | 0.3 |
| HCM LOS              | B    | B    |     |     |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1WBLn1 | SBL   | SBT   | SBR |
|-----------------------|-------|-----|-----|------------|-------|-------|-----|
| Capacity (veh/h)      | 1517  | -   | -   | 659        | 483   | 1177  | -   |
| HCM Lane V/C Ratio    | 0.013 | -   | -   | 0.117      | 0.055 | 0.002 | -   |
| HCM Control Delay (s) | 7.4   | 0   | -   | 11.2       | 12.9  | 8.1   | 0   |
| HCM Lane LOS          | A     | A   | -   | B          | B     | A     | A   |
| HCM 95th %tile Q(veh) | 0     | -   | -   | 0.4        | 0.2   | 0     | -   |

30: N. Congress Ave  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 9    |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    |      |      | ↑    |      |      | ↑    |      |      | ↑    |      |
| Traffic Vol, veh/h       | 0    | 35   | 0    | 0    | 18   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 0    | 35   | 0    | 0    | 18   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 10   | 0    | 10   | 11   | 0    | 0    | 0    | 0    | 11   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 38   | 0    | 0    | 20   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |

| Major/Minor          | Minor2 |       |   | Minor1 |       |   | Major1 |   |   | Major2 |   |   |
|----------------------|--------|-------|---|--------|-------|---|--------|---|---|--------|---|---|
| Conflicting Flow All | -      | 1     | - | -      | 1     | - | -      | 0 | - | -      | - | 0 |
| Stage 1              | -      | 1     | - | -      | 0     | - | -      | - | - | -      | - | - |
| Stage 2              | -      | 0     | - | -      | 1     | - | -      | - | - | -      | - | - |
| Critical Hdwy        | -      | 6.52  | - | -      | 6.52  | - | -      | - | - | -      | - | - |
| Critical Hdwy Stg 1  | -      | 5.52  | - | -      | 5.52  | - | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | -      | 5.52  | - | -      | 5.52  | - | -      | - | - | -      | - | - |
| Follow-up Hdwy       | -      | 4.018 | - | -      | 4.018 | - | -      | - | - | -      | - | - |
| Pot Cap-1 Maneuver   | 0      | 895   | 0 | 0      | 895   | 0 | 0      | - | 0 | 0      | - | 0 |
| Stage 1              | 0      | 895   | 0 | 0      | -     | 0 | 0      | - | 0 | 0      | - | 0 |
| Stage 2              | 0      | -     | 0 | 0      | 895   | 0 | 0      | - | 0 | -      | 0 | 0 |
| Platoon blocked, %   | -      | -     | - | -      | -     | - | -      | - | - | -      | - | - |
| Mov Cap-1 Maneuver   | -      | 895   | - | -      | 895   | - | -      | - | - | -      | - | - |
| Mov Cap-2 Maneuver   | -      | 895   | - | -      | 895   | - | -      | - | - | -      | - | - |
| Stage 1              | -      | 895   | - | -      | -     | - | -      | - | - | -      | - | - |
| Stage 2              | -      | -     | - | -      | 895   | - | -      | - | - | -      | - | - |

| Approach             | EB  |  |  | WB  |  |  | NB |  |  | SB |  |  |
|----------------------|-----|--|--|-----|--|--|----|--|--|----|--|--|
| HCM Control Delay, s | 9.2 |  |  | 9.1 |  |  | 0  |  |  | 0  |  |  |
| HCM LOS              | A   |  |  | A   |  |  |    |  |  |    |  |  |

| Minor Lane/Major Mvmt | NBT | EBLn1 | WBLn1 | SBT |
|-----------------------|-----|-------|-------|-----|
| Capacity (veh/h)      | -   | 895   | 895   | -   |
| HCM Lane V/C Ratio    | -   | 0.043 | 0.022 | -   |
| HCM Control Delay (s) | -   | 9.2   | 9.1   | -   |
| HCM Lane LOS          | -   | A     | A     | -   |
| HCM 95th %tile Q(veh) | -   | 0.1   | 0.1   | -   |

31: Brazos St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.4  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑    |      |      | ↑    | ↑    |      |
| Traffic Vol, veh/h       | 34   | 0    | 3    | 12   | 14   | 0    |
| Future Vol, veh/h        | 34   | 0    | 3    | 12   | 14   | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 25   | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 83   | 83   | 83   | 83   | 83   | 83   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 41   | 0    | 4    | 14   | 17   | 0    |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 0      | 0 | 66     | 0 | 88     | 66    |
| Stage 1              | -      | - | -      | - | 66     | -     |
| Stage 2              | -      | - | -      | - | 22     | -     |
| Critical Hdwy        | -      | - | 4.12   | - | 7.12   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 6.12   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 6.12   | -     |
| Follow-up Hdwy       | -      | - | 2.218  | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | -      | - | 1536   | - | 897    | 998   |
| Stage 1              | -      | - | -      | - | 945    | -     |
| Stage 2              | -      | - | -      | - | 996    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | -      | - | 1536   | - | 874    | 974   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 874    | -     |
| Stage 1              | -      | - | -      | - | 945    | -     |
| Stage 2              | -      | - | -      | - | 993    | -     |

| Approach             | EB |  | WB  |  | NB  |  |
|----------------------|----|--|-----|--|-----|--|
| HCM Control Delay, s | 0  |  | 1.5 |  | 9.2 |  |
| HCM LOS              |    |  |     |  | A   |  |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 874   | -   | -   | 1536  | -   |
| HCM Lane V/C Ratio    | 0.019 | -   | -   | 0.002 | -   |
| HCM Control Delay (s) | 9.2   | -   | -   | 7.3   | 0   |
| HCM Lane LOS          | A     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 0.1   | -   | -   | 0     | -   |

32: San Jacinto Blvd & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: AM

| Intersection             |        |      |      |        |      |      |
|--------------------------|--------|------|------|--------|------|------|
| Int Delay, s/veh         | 1.5    |      |      |        |      |      |
| Movement                 | EBL    | EBR  | NBL  | NBT    | SBT  | SBR  |
| Lane Configurations      |        | ↑    |      |        | ↑↑↑  | ↑    |
| Traffic Vol, veh/h       | 0      | 44   | 0    | 0      | 298  | 33   |
| Future Vol, veh/h        | 0      | 44   | 0    | 0      | 298  | 33   |
| Conflicting Peds, #/hr   | 0      | 0    | 0    | 0      | 0    | 120  |
| Sign Control             | Stop   | Stop | Free | Free   | Free | Free |
| RT Channelized           | -      | None | -    | None   | -    | None |
| Storage Length           | -      | 0    | -    | -      | -    | 50   |
| Veh in Median Storage, # | 0      | -    | -    | -      | 0    | -    |
| Grade, %                 | 0      | -    | -    | 0      | 0    | -    |
| Peak Hour Factor         | 83     | 83   | 83   | 83     | 83   | 83   |
| Heavy Vehicles, %        | 2      | 2    | 2    | 2      | 2    | 2    |
| Mvmt Flow                | 0      | 53   | 0    | 0      | 359  | 40   |
| Major/Minor              | Minor2 |      |      | Major2 |      |      |
| Conflicting Flow All     | -      | 300  |      | -      | 0    |      |
| Stage 1                  | -      | -    |      | -      | -    |      |
| Stage 2                  | -      | -    |      | -      | -    |      |
| Critical Hdwy            | -      | 7.14 |      | -      | -    |      |
| Critical Hdwy Stg 1      | -      | -    |      | -      | -    |      |
| Critical Hdwy Stg 2      | -      | -    |      | -      | -    |      |
| Follow-up Hdwy           | -      | 3.92 |      | -      | -    |      |
| Pot Cap-1 Maneuver       | 0      | 594  |      | -      | -    |      |
| Stage 1                  | 0      | -    |      | -      | -    |      |
| Stage 2                  | 0      | -    |      | -      | -    |      |
| Platoon blocked, %       | -      | -    |      | -      | -    |      |
| Mov Cap-1 Maneuver       | -      | 526  |      | -      | -    |      |
| Mov Cap-2 Maneuver       | -      | -    |      | -      | -    |      |
| Stage 1                  | -      | -    |      | -      | -    |      |
| Stage 2                  | -      | -    |      | -      | -    |      |
| Approach                 | EB     |      |      | SB     |      |      |
| HCM Control Delay, s     | 12.6   |      |      | 0      |      |      |
| HCM LOS                  | B      |      |      |        |      |      |
| Minor Lane/Major Mvmt    | EBLn1  | SBT  | SBR  |        |      |      |
| Capacity (veh/h)         | 526    | -    | -    |        |      |      |
| HCM Lane V/C Ratio       | 0.101  | -    | -    |        |      |      |
| HCM Control Delay (s)    | 12.6   | -    | -    |        |      |      |
| HCM Lane LOS             | B      | -    | -    |        |      |      |
| HCM 95th %tile Q(veh)    | 0.3    | -    | -    |        |      |      |

1: Martin Luther King Jr. Blvd & Guadalupe St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

|                         | ←     | →     | ↖    | ↗    | ←     | ↖     | ↗    | ←    | ↖    | ↗     | ←     | ↖     | ↗ |
|-------------------------|-------|-------|------|------|-------|-------|------|------|------|-------|-------|-------|---|
| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR   | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |   |
| Lane Configurations     | ↖     | ↖     | ↖    |      | ↖     | ↖     |      |      |      | ↖     | ↖     | ↖     |   |
| Traffic Volume (vph)    | 149   | 352   | 99   | 0    | 970   | 620   | 0    | 0    | 0    | 177   | 619   | 228   |   |
| Future Volume (vph)     | 149   | 352   | 99   | 0    | 970   | 620   | 0    | 0    | 0    | 177   | 619   | 228   |   |
| Confl. Peds. (#/hr)     | 29    |       | 68   | 68   |       | 29    |      |      |      | 41    |       | 68    |   |
| Confl. Bikes (#/hr)     |       |       | 1    |      |       | 6     |      |      |      |       |       | 3     |   |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94 | 0.94 | 0.94  | 0.94  | 0.94 | 0.94 | 0.94 | 0.94  | 0.94  | 0.94  |   |
| Adj. Flow (vph)         | 159   | 374   | 105  | 0    | 1032  | 660   | 0    | 0    | 0    | 188   | 659   | 243   |   |
| Shared Lane Traffic (%) |       |       |      |      |       |       |      |      |      |       |       |       |   |
| Lane Group Flow (vph)   | 159   | 479   | 0    | 0    | 1032  | 660   | 0    | 0    | 0    | 188   | 659   | 243   |   |
| Turn Type               | Prot  | NA    |      |      | NA    | pm+ov |      |      |      | pm+pt | NA    | Perm  |   |
| Protected Phases        | 5     | 2     |      |      | 6     | 7     |      |      |      | 7     | 4     |       |   |
| Permitted Phases        |       |       |      |      | 6     |       |      |      |      | 4     |       | 4     |   |
| Detector Phase          | 5     | 2     |      |      | 6     | 7     |      |      |      | 7     | 4     | 4     |   |
| Switch Phase            |       |       |      |      |       |       |      |      |      |       |       |       |   |
| Minimum Initial (s)     | 2.0   | 15.0  |      |      | 15.0  | 10.0  |      |      |      | 10.0  | 5.0   | 5.0   |   |
| Minimum Split (s)       | 7.0   | 27.0  |      |      | 34.0  | 15.0  |      |      |      | 15.0  | 32.0  | 32.0  |   |
| Total Split (s)         | 25.0  | 92.0  |      |      | 67.0  | 43.0  |      |      |      | 43.0  | 43.0  | 43.0  |   |
| Total Split (%)         | 18.5% | 68.1% |      |      | 49.6% | 31.9% |      |      |      | 31.9% | 31.9% | 31.9% |   |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   | 4.0   |      |      |      | 4.0   | 4.0   | 4.0   |   |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   | 1.0   |      |      |      | 1.0   | 1.0   | 1.0   |   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   | 0.0   |      |      |      | 0.0   | 0.0   | 0.0   |   |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   | 5.0   |      |      |      | 5.0   | 5.0   | 5.0   |   |
| Lead/Lag                | Lag   |       |      |      | Lead  |       |      |      |      |       |       |       |   |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |       |      |      |      |       |       |       |   |
| Recall Mode             | None  | C-Max |      |      | C-Max | None  |      |      |      | None  | Max   | Max   |   |
| Act Effect Green (s)    | 20.0  | 87.0  |      |      | 62.0  | 100.0 |      |      |      | 38.0  | 38.0  | 38.0  |   |
| Actuated g/C Ratio      | 0.15  | 0.64  |      |      | 0.46  | 0.74  |      |      |      | 0.28  | 0.28  | 0.28  |   |
| v/c Ratio               | 0.61  | 0.22  |      |      | 0.64  | 0.56  |      |      |      | 0.38  | 0.66  | 0.48  |   |
| Control Delay           | 64.6  | 9.7   |      |      | 21.7  | 2.4   |      |      |      | 41.7  | 46.6  | 18.6  |   |
| Queue Delay             | 0.0   | 0.0   |      |      | 1.9   | 0.1   |      |      |      | 0.0   | 0.0   | 0.0   |   |
| Total Delay             | 64.6  | 9.7   |      |      | 23.6  | 2.6   |      |      |      | 41.7  | 46.6  | 18.6  |   |
| LOS                     | E     | A     |      |      | C     | A     |      |      |      | D     | D     | B     |   |
| Approach Delay          |       | 23.4  |      |      | 15.4  |       |      |      |      |       | 39.5  |       |   |
| Approach LOS            |       | C     |      |      | B     |       |      |      |      |       | D     |       |   |
| Queue Length 50th (ft)  | 132   | 81    |      |      | 268   | 24    |      |      |      | 133   | 268   | 63    |   |
| Queue Length 95th (ft)  | 209   | 107   |      |      | 335   | 48    |      |      |      | 205   | 337   | 147   |   |
| Internal Link Dist (ft) |       | 228   |      |      | 45    |       | 159  |      |      |       | 210   |       |   |
| Turn Bay Length (ft)    | 160   |       |      |      |       |       |      |      |      | 130   |       | 120   |   |
| Base Capacity (vph)     | 262   | 2148  |      |      | 1625  | 1177  |      |      |      | 498   | 996   | 503   |   |
| Starvation Cap Reductn  | 0     | 0     |      |      | 417   | 70    |      |      |      | 0     | 0     | 0     |   |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     | 0     |      |      |      | 0     | 0     | 0     |   |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     | 0     |      |      |      | 0     | 0     | 0     |   |
| Reduced v/c Ratio       | 0.61  | 0.22  |      |      | 0.85  | 0.60  |      |      |      | 0.38  | 0.66  | 0.48  |   |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green  
Natural Cycle: 75

MS

Synchro 9 Report  
Page 1

1: Martin Luther King Jr. Blvd & Guadalupe St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 24.6

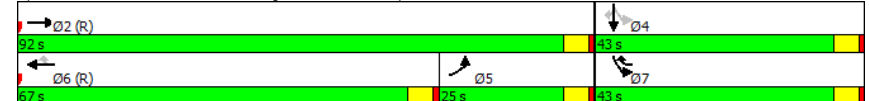
Intersection LOS: C

Intersection Capacity Utilization 70.1%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Martin Luther King Jr. Blvd & Guadalupe St



MS

Synchro 9 Report  
Page 2

3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

|                         | →     | ↖    | ↗    | ←     | ↖     | ↗     |
|-------------------------|-------|------|------|-------|-------|-------|
| Lane Group              | EBT   | EBR  | WBL  | WBT   | NBL   | NBR   |
| Lane Configurations     | ↑↑    |      |      | ↑↑    | ↖↗    | ↖↗    |
| Traffic Volume (vph)    | 508   | 0    | 0    | 1200  | 712   | 238   |
| Future Volume (vph)     | 508   | 0    | 0    | 1200  | 712   | 238   |
| Confl. Peds. (#/hr)     |       |      |      |       |       | 79    |
| Peak Hour Factor        | 0.91  | 0.91 | 0.91 | 0.91  | 0.91  | 0.91  |
| Adj. Flow (vph)         | 558   | 0    | 0    | 1319  | 782   | 262   |
| Shared Lane Traffic (%) |       |      |      |       |       |       |
| Lane Group Flow (vph)   | 558   | 0    | 0    | 1319  | 782   | 262   |
| Turn Type               | NA    |      |      | NA    | Prot  | Perm  |
| Protected Phases        | 2     |      |      | 6     | 8     |       |
| Permitted Phases        |       |      |      |       |       | 3     |
| Detector Phase          | 2     |      |      | 6     | 8     | 3     |
| Switch Phase            |       |      |      |       |       |       |
| Minimum Initial (s)     | 10.0  |      |      | 10.0  | 5.0   | 5.0   |
| Minimum Split (s)       | 30.0  |      |      | 15.0  | 10.0  | 10.0  |
| Total Split (s)         | 86.0  |      |      | 86.0  | 49.0  | 49.0  |
| Total Split (%)         | 63.7% |      |      | 63.7% | 36.3% | 36.3% |
| Yellow Time (s)         | 4.0   |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |       |      |      |       |       |       |
| Lead-Lag Optimize?      |       |      |      |       |       |       |
| Recall Mode             | C-Max |      |      | C-Max | Max   | Max   |
| Act Effect Green (s)    | 81.0  |      |      | 81.0  | 44.0  | 44.0  |
| Actuated g/C Ratio      | 0.60  |      |      | 0.60  | 0.33  | 0.33  |
| v/c Ratio               | 0.26  |      |      | 0.62  | 0.70  | 0.40  |
| Control Delay           | 14.8  |      |      | 11.6  | 60.2  | 23.0  |
| Queue Delay             | 0.0   |      |      | 0.2   | 0.0   | 0.0   |
| Total Delay             | 14.8  |      |      | 11.7  | 60.2  | 23.0  |
| LOS                     | B     |      |      | B     | E     | C     |
| Approach Delay          | 14.8  |      |      | 11.7  | 50.8  |       |
| Approach LOS            | B     |      |      | B     | D     |       |
| Queue Length 50th (ft)  | 111   |      |      | 178   | 295   | 106   |
| Queue Length 95th (ft)  | 135   |      |      | 220   | 438   | 156   |
| Internal Link Dist (ft) | 272   |      |      | 277   | 337   |       |
| Turn Bay Length (ft)    |       |      |      |       |       |       |
| Base Capacity (vph)     | 2123  |      |      | 2123  | 1118  | 649   |
| Starvation Cap Reductn  | 0     |      |      | 183   | 0     | 0     |
| Spillback Cap Reductn   | 0     |      |      | 20    | 0     | 0     |
| Storage Cap Reductn     | 0     |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       | 0.26  |      |      | 0.68  | 0.70  | 0.40  |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 5 (4%), Referenced to phase 2:EBT and 6:WBT, Start of Green  
Natural Cycle: 50  
Control Type: Actuated-Coordinated

MS

Synchro 9 Report  
Page 3

3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 26.3

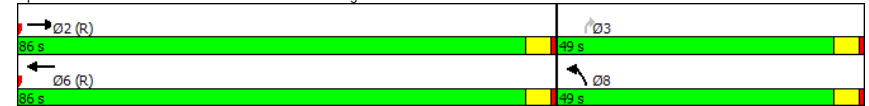
Intersection LOS: C

Intersection Capacity Utilization 61.8%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 3: Lavaca St & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 4

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

|                         | →     | ↖    | ↗     | ←      | ↖    | ↗    |
|-------------------------|-------|------|-------|--------|------|------|
| Lane Group              | EBT   | EBR  | WBL   | WBT    | NBL  | NBR  |
| Lane Configurations     | ↖↗    |      | ↖     | ↖↗     |      |      |
| Traffic Volume (vph)    | 718   | 0    | 12    | 1146   | 0    | 0    |
| Future Volume (vph)     | 718   | 0    | 12    | 1146   | 0    | 0    |
| Confl. Peds. (#/hr)     |       | 32   | 32    |        | 34   |      |
| Confl. Bikes (#/hr)     |       | 4    |       |        |      |      |
| Peak Hour Factor        | 0.94  | 0.94 | 0.94  | 0.94   | 0.94 | 0.94 |
| Adj. Flow (vph)         | 764   | 0    | 13    | 1219   | 0    | 0    |
| Shared Lane Traffic (%) |       |      |       |        |      |      |
| Lane Group Flow (vph)   | 764   | 0    | 13    | 1219   | 0    | 0    |
| Turn Type               | NA    |      | pm+pt | NA     |      |      |
| Protected Phases        | 2     |      | 1     | 6      |      |      |
| Permitted Phases        |       |      | 6     |        |      |      |
| Detector Phase          | 2     |      | 1     | 6      |      |      |
| Switch Phase            |       |      |       |        |      |      |
| Minimum Initial (s)     | 15.0  |      | 3.0   | 15.0   |      |      |
| Minimum Split (s)       | 34.0  |      | 8.0   | 20.0   |      |      |
| Total Split (s)         | 119.0 |      | 16.0  | 135.0  |      |      |
| Total Split (%)         | 88.1% |      | 11.9% | 100.0% |      |      |
| Yellow Time (s)         | 4.0   |      | 4.0   | 4.0    |      |      |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0    |      |      |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0    |      |      |
| Total Lost Time (s)     | 5.0   |      | 5.0   | 5.0    |      |      |
| Lead/Lag                | Lead  |      | Lag   |        |      |      |
| Lead-Lag Optimize?      | Yes   |      | Yes   |        |      |      |
| Recall Mode             | C-Max |      | None  | C-Max  |      |      |
| Act Effect Green (s)    | 126.6 |      | 133.0 | 135.0  |      |      |
| Actuated g/C Ratio      | 0.94  |      | 0.99  | 1.00   |      |      |
| v/c Ratio               | 0.23  |      | 0.02  | 0.34   |      |      |
| Control Delay           | 0.9   |      | 0.1   | 0.3    |      |      |
| Queue Delay             | 0.0   |      | 0.0   | 0.0    |      |      |
| Total Delay             | 0.9   |      | 0.1   | 0.3    |      |      |
| LOS                     | A     |      | A     | A      |      |      |
| Approach Delay          | 0.9   |      |       | 0.3    |      |      |
| Approach LOS            | A     |      |       | A      |      |      |
| Queue Length 50th (ft)  | 0     |      | 0     | 3      |      |      |
| Queue Length 95th (ft)  | 54    |      | m0    | 0      |      |      |
| Internal Link Dist (ft) | 366   |      |       | 377    | 331  |      |
| Turn Bay Length (ft)    |       |      | 115   |        |      |      |
| Base Capacity (vph)     | 3319  |      | 723   | 3539   |      |      |
| Starvation Cap Reductn  | 0     |      | 0     | 0      |      |      |
| Spillback Cap Reductn   | 0     |      | 0     | 0      |      |      |
| Storage Cap Reductn     | 0     |      | 0     | 0      |      |      |
| Reduced v/c Ratio       | 0.23  |      | 0.02  | 0.34   |      |      |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 45

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Synchro 9 Report  
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5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.34

Intersection Signal Delay: 0.5

Intersection LOS: A

Intersection Capacity Utilization 35.8%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: N. Congress Ave & Martin Luther King Jr. Blvd



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Synchro 9 Report  
Page 6

6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations     | ↰     | ↰↱    |      | ↰     | ↰↱    | ↰     |       | ↰     | ↰↱    |       | ↰     | ↰     |
| Traffic Volume (vph)    | 87    | 731   | 11   | 15    | 870   | 131   | 27    | 23    | 155   | 96    | 25    | 244   |
| Future Volume (vph)     | 87    | 731   | 11   | 15    | 870   | 131   | 27    | 23    | 155   | 96    | 25    | 244   |
| Confl. Peds. (#/hr)     | 43    |       | 7    | 7     |       | 43    | 22    |       | 23    | 23    |       | 22    |
| Confl. Bikes (#/hr)     |       |       | 4    |       |       | 3     |       |       |       |       |       |       |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  |
| Adj. Flow (vph)         | 90    | 754   | 11   | 15    | 897   | 135   | 28    | 24    | 160   | 99    | 26    | 252   |
| Shared Lane Traffic (%) |       |       |      |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)   | 90    | 765   | 0    | 15    | 897   | 135   | 0     | 52    | 160   | 0     | 125   | 252   |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    | Perm  | Perm  | NA    | Perm  | Perm  | NA    | Perm  |
| Protected Phases        | 5     | 2     |      | 1     | 6     |       |       | 8     |       |       | 4     |       |
| Permitted Phases        | 2     |       |      | 6     |       | 6     | 8     |       | 8     | 4     |       | 4     |
| Detector Phase          | 5     | 2     |      | 1     | 6     | 6     | 8     | 8     | 8     | 4     | 4     | 4     |
| Switch Phase            |       |       |      |       |       |       |       |       |       |       |       |       |
| Minimum Initial (s)     | 3.0   | 10.0  |      | 3.0   | 10.0  | 10.0  | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       | 8.0   | 22.0  |      | 8.0   | 28.0  | 28.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  |
| Total Split (s)         | 15.0  | 89.0  |      | 15.0  | 89.0  | 89.0  | 31.0  | 31.0  | 31.0  | 31.0  | 31.0  | 31.0  |
| Total Split (%)         | 11.1% | 65.9% |      | 11.1% | 65.9% | 65.9% | 23.0% | 23.0% | 23.0% | 23.0% | 23.0% | 23.0% |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   | 5.0   |       | 5.0   | 5.0   |       | 5.0   | 5.0   |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   | Lag   |       |       |       |       |       |       |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   | Yes   |       |       |       |       |       |       |
| Recall Mode             | None  | C-Max |      | None  | C-Max | C-Max | Max   | Max   | Max   | Max   | Max   | Max   |
| Act Effect Green (s)    | 97.9  | 94.5  |      | 92.4  | 86.6  | 86.6  |       | 26.0  | 26.0  |       | 26.0  | 26.0  |
| Actuated g/C Ratio      | 0.73  | 0.70  |      | 0.68  | 0.64  | 0.64  |       | 0.19  | 0.19  |       | 0.19  | 0.19  |
| v/c Ratio               | 0.22  | 0.31  |      | 0.03  | 0.40  | 0.15  |       | 0.18  | 0.38  |       | 0.49  | 0.52  |
| Control Delay           | 5.2   | 6.0   |      | 1.9   | 5.5   | 2.0   |       | 47.6  | 9.5   |       | 56.0  | 11.3  |
| Queue Delay             | 0.0   | 0.3   |      | 0.0   | 0.3   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Total Delay             | 5.2   | 6.3   |      | 1.9   | 5.7   | 2.0   |       | 47.6  | 9.5   |       | 56.0  | 11.3  |
| LOS                     | A     | A     |      | A     | A     | A     |       | D     | A     |       | E     | B     |
| Approach Delay          |       | 6.2   |      |       | 5.2   |       |       | 18.8  |       |       | 26.1  |       |
| Approach LOS            |       | A     |      |       | A     |       |       | B     |       |       | C     |       |
| Queue Length 50th (ft)  | 16    | 81    |      | 1     | 116   | 10    |       | 39    | 0     |       | 99    | 11    |
| Queue Length 95th (ft)  | 26    | 105   |      | m2    | 157   | 29    |       | 78    | 60    |       | 166   | 90    |
| Internal Link Dist (ft) |       | 377   |      |       | 273   |       |       | 135   |       |       | 212   |       |
| Turn Bay Length (ft)    | 160   |       |      | 100   |       | 100   |       |       | 100   |       |       |       |
| Base Capacity (vph)     | 438   | 2472  |      | 547   | 2269  | 904   |       | 288   | 419   |       | 256   | 481   |
| Starvation Cap Reductn  | 0     | 958   |      | 0     | 668   | 0     |       | 0     | 0     |       | 0     | 0     |
| Spillback Cap Reductn   | 0     | 125   |      | 0     | 0     | 0     |       | 0     | 5     |       | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Reduced v/c Ratio       | 0.21  | 0.51  |      | 0.03  | 0.56  | 0.15  |       | 0.18  | 0.39  |       | 0.49  | 0.52  |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 70

MS

Synchro 9 Report  
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6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.52

Intersection Signal Delay: 9.9

Intersection LOS: A

Intersection Capacity Utilization 78.2%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Brazos St & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
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7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑    |      | ↓     | ↑↑    |      |      |      |      | ↓     | ↑↑    | ↓     |
| Traffic Volume (vph)    | 0    | 921   | 29   | 306   | 1073  | 0    | 0    | 0    | 0    | 37    | 196   | 138   |
| Future Volume (vph)     | 0    | 921   | 29   | 306   | 1073  | 0    | 0    | 0    | 0    | 37    | 196   | 138   |
| Confl. Peds. (#/hr)     |      |       | 36   | 36    |       |      |      |      |      | 71    |       | 17    |
| Confl. Bikes (#/hr)     |      |       | 7    |       |       |      |      |      |      |       |       | 14    |
| Peak Hour Factor        | 0.93 | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93 | 0.93 | 0.93 | 0.93  | 0.93  | 0.93  |
| Adj. Flow (vph)         | 0    | 990   | 31   | 329   | 1154  | 0    | 0    | 0    | 0    | 40    | 211   | 148   |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 1021  | 0    | 329   | 1154  | 0    | 0    | 0    | 0    | 40    | 211   | 148   |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      | 3.0   | 10.0  |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       |      | 32.0  |      | 8.0   | 30.0  |      |      |      |      | 30.0  | 30.0  | 30.0  |
| Total Split (s)         |      | 78.0  |      | 25.0  | 103.0 |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (%)         |      | 57.8% |      | 18.5% | 76.3% |      |      |      |      | 23.7% | 23.7% | 23.7% |
| Yellow Time (s)         |      | 4.0   |      | 4.0   | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      | 1.0   | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      | 0.0   | 0.0   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      | 5.0   | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      | Lead  |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      | Yes   |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      | None  | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effect Green (s)    |      | 78.2  |      | 98.0  | 98.0  |      |      |      |      | 27.0  | 27.0  | 27.0  |
| Actuated g/C Ratio      |      | 0.58  |      | 0.73  | 0.73  |      |      |      |      | 0.20  | 0.20  | 0.20  |
| v/c Ratio               |      | 0.50  |      | 0.78  | 0.45  |      |      |      |      | 0.13  | 0.30  | 0.36  |
| Control Delay           |      | 12.8  |      | 35.1  | 4.5   |      |      |      |      | 45.8  | 47.3  | 12.1  |
| Queue Delay             |      | 0.5   |      | 0.5   | 0.2   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             |      | 13.3  |      | 35.6  | 4.7   |      |      |      |      | 45.8  | 47.3  | 12.1  |
| LOS                     |      | B     |      | D     | A     |      |      |      |      | D     | D     | B     |
| Approach Delay          |      | 13.3  |      |       | 11.5  |      |      |      |      |       | 34.1  |       |
| Approach LOS            |      | B     |      |       | B     |      |      |      |      |       | C     |       |
| Queue Length 50th (ft)  |      | 228   |      | 130   | 125   |      |      |      |      | 29    | 83    | 10    |
| Queue Length 95th (ft)  |      | 272   |      | m234  | m130  |      |      |      |      | 64    | 122   | 70    |
| Internal Link Dist (ft) |      | 273   |      |       | 321   |      |      | 343  |      |       | 244   |       |
| Turn Bay Length (ft)    |      |       |      | 120   |       |      |      |      |      | 100   |       | 100   |
| Base Capacity (vph)     |      | 2036  |      | 474   | 2569  |      |      |      |      | 313   | 707   | 406   |
| Starvation Cap Reductn  |      | 532   |      | 19    | 613   |      |      |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       |      | 0.68  |      | 0.72  | 0.59  |      |      |      |      | 0.13  | 0.30  | 0.36  |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 80

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Synchro 9 Report  
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7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 15.2

Intersection LOS: B

Intersection Capacity Utilization 76.8%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: San Jacinto Blvd & Martin Luther King Jr. Blvd



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Synchro 9 Report  
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8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↩     | ↩↩    |      |      | ↩↩    |      | ↩     | ↩     | ↩     |      |      |      |
| Traffic Volume (vph)    | 83    | 952   | 0    | 0    | 1116  | 51   | 214   | 314   | 337   | 0    | 0    | 0    |
| Future Volume (vph)     | 83    | 952   | 0    | 0    | 1116  | 51   | 214   | 314   | 337   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     |       |       | 33   |      |       | 87   | 17    |       | 148   |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       | 4    |       |       | 12    |      |      |      |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97 | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph)         | 86    | 981   | 0    | 0    | 1151  | 53   | 221   | 324   | 347   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       | 10%  |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 86    | 981   | 0    | 0    | 1204  | 0    | 199   | 346   | 347   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 26.0  |      |      | 26.0  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (s)         | 15.0  | 104.0 |      |      | 89.0  |      | 31.0  | 31.0  | 31.0  |      |      |      |
| Total Split (%)         | 11.1% | 77.0% |      |      | 65.9% |      | 23.0% | 23.0% | 23.0% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 99.0  | 99.0  |      |      | 86.7  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Actuated g/C Ratio      | 0.73  | 0.73  |      |      | 0.64  |      | 0.19  | 0.19  | 0.19  |      |      |      |
| v/c Ratio               | 0.28  | 0.38  |      |      | 0.54  |      | 0.64  | 1.02  | 1.00  |      |      |      |
| Control Delay           | 4.2   | 1.5   |      |      | 7.1   |      | 70.2  | 115.9 | 84.6  |      |      |      |
| Queue Delay             | 0.0   | 0.0   |      |      | 0.5   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Delay             | 4.2   | 1.6   |      |      | 7.6   |      | 70.2  | 115.9 | 84.6  |      |      |      |
| LOS                     | A     | A     |      |      | A     |      | E     | F     | F     |      |      |      |
| Approach Delay          |       | 1.8   |      |      | 7.6   |      |       | 93.5  |       |      |      |      |
| Approach LOS            |       | A     |      |      | A     |      |       | F     |       |      |      |      |
| Queue Length 50th (ft)  | 4     | 23    |      |      | 108   |      | 176   | -342  | 187   |      |      |      |
| Queue Length 95th (ft)  | 15    | 25    |      |      | 124   |      | 270   | #551  | #393  |      |      |      |
| Internal Link Dist (ft) |       | 321   |      |      | 699   |      |       | 350   |       |      | 106  |      |
| Turn Bay Length (ft)    | 120   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 336   | 2595  |      |      | 2229  |      | 313   | 339   | 348   |      |      |      |
| Starvation Cap Reductn  | 0     | 257   |      |      | 535   |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.26  | 0.42  |      |      | 0.71  |      | 0.64  | 1.02  | 1.00  |      |      |      |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green  
Natural Cycle: 60

MS

Synchro 9 Report  
Page 11

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.02

Intersection Signal Delay: 29.9

Intersection LOS: C

Intersection Capacity Utilization 76.8%

ICU Level of Service D

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 8: Trinity St & Martin Luther King Jr. Blvd



















MS

Synchro 9 Report  
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18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

|  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group   | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations  |   |  |  |   |  |   |   |   |   |   |  |   |
| Traffic Volume (vph)                                       | 0   | 20  | 11  | 85  | 94  | 0   | 0   | 0   | 0   | 27  | 1020  | 22  |
| Future Volume (vph)  | 0   | 20  | 11  | 85  | 94  | 0   | 0   | 0   | 0   | 27  | 1020  | 22  |
| Confl. Peds. (#/hr)  |   |   | 67  |   |   |   |   |   |   | 43  |   |   |
| Confl. Bikes (#/hr)  |   |   |   |   |   |   |   |   | 2   |   |   |   |
| Peak Hour Factor   | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  |
| Parking (#/hr)   |   | 0   |   |   |   |   |   |   |   |   |   |   |
| Adj. Flow (vph)  | 0   | 21  | 11  | 89  | 98  | 0   | 0   | 0   | 0   | 28  | 1063  | 23  |
| Shared Lane Traffic (%)                                    |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)                                      | 0   | 21  | 11  | 0   | 187   | 0   | 0   | 0   | 0   | 0   | 1114  | 0   |
| Turn Type  | NA  | Perm  | Perm  | NA  |   |   |   |   |   | Perm  | NA  |   |
| Protected Phases   | 4 12  |   |   | 4 12  |   |   |   |   |   |   | 2 10  |   |
| Permitted Phases   |   |   | 4 12  | 4 12  |   |   |   |   |   | 2 10  |   |   |
| Detector Phase   |   | 4 12  | 4 12  | 4 12  | 4 12  |   |   |   |   | 2 10  | 2 10  |   |
| Switch Phase   |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (%)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Yellow Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| All-Red Time (s)   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lost Time Adjust (s)                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Lost Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead/Lag   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?   |   |   |   |   |   |   |   |   |   |   |   |   |
| Recall Mode  |   |   |   |   |   |   |   |   |   |   |   |   |
| Act Effct Green (s)  |   | 25.4  | 25.4  |   | 25.4  |   |   |   |   |   | 85.6  |   |
| Actuated g/C Ratio   |   | 0.19  | 0.19  |   | 0.19  |   |   |   |   |   | 0.63  |   |
| v/c Ratio  |   | 0.07  | 0.03  |   | 0.64  |   |   |   |   |   | 0.50  |   |
| Control Delay  |   | 24.9  | 0.2   |   | 42.3  |   |   |   |   |   | 7.9   |   |
| Queue Delay  |   | 0.0   | 0.0   |   | 0.0   |   |   |   |   |   | 0.0   |   |
| Total Delay  |   | 24.9  | 0.2   |   | 42.3  |   |   |   |   |   | 7.9   |   |
| LOS  |   | C   | A   |   | D   |   |   |   |   |   | A   |   |
| Approach Delay   |   | 16.4  |   |   | 42.3  |   |   |   |   |   | 7.9   |   |
| Approach LOS   |   | B   |   |   | D   |   |   |   |   |   | A   |   |
| Queue Length 50th (ft)                                     |   | 10  | 0   |   | 101   |   |   |   |   |   | 131   |   |
| Queue Length 95th (ft)                                     |   | 25  | 0   |   | 120   |   |   |   |   |   | 192   |   |
| Internal Link Dist (ft)                                    |   | 177   |   |   | 244   |   |   | 271   |   |   | 262   |   |
| Turn Bay Length (ft)                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Base Capacity (vph)  |   | 533   | 509   |   | 497   |   |   |   |   |   | 2242  |   |
| Starvation Cap Reductn                                     |   | 0   | 0   |   | 0   |   |   |   |   |   | 0   |   |
| Spillback Cap Reductn                                      |   | 0   | 0   |   | 0   |   |   |   |   |   | 0   |   |
| Storage Cap Reductn  |   | 0   | 0   |   | 0   |   |   |   |   |   | 0   |   |
| Reduced v/c Ratio  |   | 0.04  | 0.02  |   | 0.38  |   |   |   |   |   | 0.50  |   |
| <b>Intersection Summary</b>                                |   |   |   |   |   |   |   |   |   |   |   |   |
| Cycle Length: 135  |   |   |   |   |   |   |   |   |   |   |   |   |
| Actuated Cycle Length: 135                                 |   |   |   |   |   |   |   |   |   |   |   |   |
| Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green |   |   |   |   |   |   |   |   |   |   |   |   |

MS

Synchro 9 Report  
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18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Lane Group                  | Ø2    | Ø4   | Ø10  | Ø12  |
|-----------------------------|-------|------|------|------|
| Lane Configurations         |       |      |      |      |
| Traffic Volume (vph)        |       |      |      |      |
| Future Volume (vph)         |       |      |      |      |
| Confl. Peds. (#/hr)         |       |      |      |      |
| Confl. Bikes (#/hr)         |       |      |      |      |
| Peak Hour Factor            |       |      |      |      |
| Parking (#/hr)              |       |      |      |      |
| Adj. Flow (vph)             |       |      |      |      |
| Shared Lane Traffic (%)     |       |      |      |      |
| Lane Group Flow (vph)       |       |      |      |      |
| Turn Type                   |       |      |      |      |
| Protected Phases            | 2     | 4    | 10   | 12   |
| Permitted Phases            |       |      |      |      |
| Detector Phase              |       |      |      |      |
| Switch Phase                |       |      |      |      |
| Minimum Initial (s)         | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)           | 21.0  | 21.0 | 22.5 | 22.5 |
| Total Split (s)             | 56.0  | 29.0 | 24.0 | 26.0 |
| Total Split (%)             | 41%   | 21%  | 18%  | 19%  |
| Yellow Time (s)             | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)            | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)        |       |      |      |      |
| Total Lost Time (s)         |       |      |      |      |
| Lead/Lag                    |       |      |      |      |
| Lead-Lag Optimize?          |       |      |      |      |
| Recall Mode                 | C-Max | None | None | None |
| Act Effct Green (s)         |       |      |      |      |
| Actuated g/C Ratio          |       |      |      |      |
| v/c Ratio                   |       |      |      |      |
| Control Delay               |       |      |      |      |
| Queue Delay                 |       |      |      |      |
| Total Delay                 |       |      |      |      |
| LOS                         |       |      |      |      |
| Approach Delay              |       |      |      |      |
| Approach LOS                |       |      |      |      |
| Queue Length 50th (ft)      |       |      |      |      |
| Queue Length 95th (ft)      |       |      |      |      |
| Internal Link Dist (ft)     |       |      |      |      |
| Turn Bay Length (ft)        |       |      |      |      |
| Base Capacity (vph)         |       |      |      |      |
| Starvation Cap Reductn      |       |      |      |      |
| Spillback Cap Reductn       |       |      |      |      |
| Storage Cap Reductn         |       |      |      |      |
| Reduced v/c Ratio           |       |      |      |      |
| <b>Intersection Summary</b> |       |      |      |      |

MS

Synchro 9 Report  
Page 14

18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 12.9

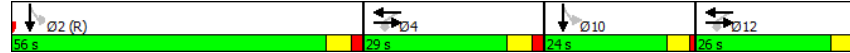
Intersection LOS: B

Intersection Capacity Utilization 69.7%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 18: Guadalupe St & E. 17th St



19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Lane Group              | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations     |      |      |      |      |      |      |      |      |      |      |      |      |
| Traffic Volume (vph)    | 10   | 44   | 0    | 0    | 54   | 26   | 63   | 997  | 52   | 0    | 0    | 0    |
| Future Volume (vph)     | 10   | 44   | 0    | 0    | 54   | 26   | 63   | 997  | 52   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 33   |      |      |      |      |      |      |      | 46   |      |      |      |
| Peak Hour Factor        | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Parking (#/hr)          | 0    |      |      |      |      |      |      |      |      |      |      |      |
| Adj. Flow (vph)         | 11   | 48   | 0    | 0    | 59   | 28   | 68   | 1084 | 57   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |      |      |      |      |      |      |      |      |      |      |      |      |
| Lane Group Flow (vph)   | 0    | 59   | 0    | 0    | 87   | 0    | 0    | 1152 | 57   | 0    | 0    | 0    |
| Turn Type               | Perm | NA   |      |      | NA   |      | Perm | NA   | Perm |      |      |      |
| Protected Phases        |      | 4 12 |      |      | 4 12 |      |      | 2 10 |      |      |      |      |
| Permitted Phases        | 4 12 |      |      |      |      |      | 2 10 |      | 2 10 |      |      |      |
| Detector Phase          | 4 12 | 4 12 |      |      | 4 12 |      | 2 10 | 2 10 | 2 10 |      |      |      |
| Switch Phase            |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Initial (s)     |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Split (s)       |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (s)         |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (%)         |      |      |      |      |      |      |      |      |      |      |      |      |
| Yellow Time (s)         |      |      |      |      |      |      |      |      |      |      |      |      |
| All-Red Time (s)        |      |      |      |      |      |      |      |      |      |      |      |      |
| Lost Time Adjust (s)    |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Lost Time (s)     |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead/Lag                |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead-Lag Optimize?      |      |      |      |      |      |      |      |      |      |      |      |      |
| Recall Mode             |      |      |      |      |      |      |      |      |      |      |      |      |
| Act Effct Green (s)     | 22.3 |      |      | 22.3 |      |      | 88.7 | 88.7 |      |      |      |      |
| Actuated g/C Ratio      | 0.17 |      |      | 0.17 |      |      | 0.66 | 0.66 |      |      |      |      |
| v/c Ratio               | 0.23 |      |      | 0.28 |      |      | 0.35 | 0.06 |      |      |      |      |
| Control Delay           | 33.3 |      |      | 24.8 |      |      | 10.6 | 4.7  |      |      |      |      |
| Queue Delay             | 0.0  |      |      | 0.0  |      |      | 0.1  | 0.0  |      |      |      |      |
| Total Delay             | 33.3 |      |      | 24.8 |      |      | 10.7 | 4.7  |      |      |      |      |
| LOS                     | C    |      |      | C    |      |      | B    | A    |      |      |      |      |
| Approach Delay          | 33.3 |      |      | 24.8 |      |      | 10.4 |      |      |      |      |      |
| Approach LOS            | C    |      |      | C    |      |      | B    |      |      |      |      |      |
| Queue Length 50th (ft)  | 28   |      |      | 38   |      |      | 183  | 13   |      |      |      |      |
| Queue Length 95th (ft)  | 50   |      |      | 66   |      |      | 135  | 17   |      |      |      |      |
| Internal Link Dist (ft) | 244  |      |      | 319  |      |      | 272  |      |      | 254  |      |      |
| Turn Bay Length (ft)    |      |      |      |      |      |      |      | 100  |      |      |      |      |
| Base Capacity (vph)     | 524  |      |      | 609  |      |      | 3435 | 908  |      |      |      |      |
| Starvation Cap Reductn  | 0    |      |      | 0    |      |      | 642  | 0    |      |      |      |      |
| Spillback Cap Reductn   | 0    |      |      | 0    |      |      | 0    | 0    |      |      |      |      |
| Storage Cap Reductn     | 0    |      |      | 0    |      |      | 0    | 0    |      |      |      |      |
| Reduced v/c Ratio       | 0.11 |      |      | 0.14 |      |      | 0.41 | 0.06 |      |      |      |      |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green

Natural Cycle: 100

19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 26.0  | 28.0 | 22.5 | 22.5 |
| Total Split (s)         | 54.0  | 28.0 | 25.0 | 28.0 |
| Total Split (%)         | 40%   | 21%  | 19%  | 21%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effect Green (s)    |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.35

Intersection Signal Delay: 12.3

Intersection LOS: B

Intersection Capacity Utilization 43.0%

ICU Level of Service A


















Analysis Period (min) 15

Splits and Phases: 19: Lavaca St & E. 17th St



28: Lavaca St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

|  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group   | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations  |   |  |   |   |  |   |   |  |  |  |   |   |
| Traffic Volume (vph)                                       | 10  | 43  | 0   | 0   | 54  | 27  | 62  | 1062  | 51  | 0   | 0   | 0   |
| Future Volume (vph)  | 10  | 43  | 0   | 0   | 54  | 27  | 62  | 1062  | 51  | 0   | 0   | 0   |
| Confl. Peds. (#/hr)  |   |   |   |   |   | 163   |   | 85  |   |   |   |   |
| Confl. Bikes (#/hr)  |   |   |   |   |   | 2   |   |   |   |   |   |   |
| Peak Hour Factor   | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  |
| Parking (#/hr)   |   |   |   |   | 0   |   |   |   |   |   |   |   |
| Adj. Flow (vph)  | 11  | 45  | 0   | 0   | 57  | 28  | 65  | 1118  | 54  | 0   | 0   | 0   |
| Shared Lane Traffic (%)                                    |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)                                      | 0   | 56  | 0   | 0   | 85  | 0   | 0   | 1183  | 54  | 0   | 0   | 0   |
| Turn Type  | Perm  | NA  |   |   | NA  |   | Perm  | NA  | Perm  |   |   |   |
| Protected Phases   |   | 4 12  |   |   | 4 12  |   |   | 2 10  |   |   |   |   |
| Permitted Phases   | 4 12  |   |   |   |   |   | 2 10  |   | 2 10  |   |   |   |
| Detector Phase   | 4 12  | 4 12  |   |   | 4 12  |   | 2 10  | 2 10  | 2 10  |   |   |   |
| Switch Phase   |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (%)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Yellow Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| All-Red Time (s)   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lost Time Adjust (s)                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Lost Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead/Lag   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?   |   |   |   |   |   |   |   |   |   |   |   |   |
| Recall Mode  |   |   |   |   |   |   |   |   |   |   |   |   |
| Act Effct Green (s)  | 20.6  |   |   |   | 20.6  |   |   | 90.4  | 90.4  |   |   |   |
| Actuated g/C Ratio   | 0.15  |   |   |   | 0.15  |   |   | 0.67  | 0.67  |   |   |   |
| v/c Ratio  | 0.21  |   |   |   | 0.35  |   |   | 0.35  | 0.05  |   |   |   |
| Control Delay  | 28.7  |   |   |   | 26.6  |   |   | 6.2   | 2.3   |   |   |   |
| Queue Delay  | 0.0   |   |   |   | 0.0   |   |   | 0.4   | 0.0   |   |   |   |
| Total Delay  | 28.7  |   |   |   | 26.6  |   |   | 6.6   | 2.3   |   |   |   |
| LOS  | C   |   |   |   | C   |   |   | A   | A   |   |   |   |
| Approach Delay   | 28.7  |   |   |   | 26.6  |   |   | 6.4   |   |   |   |   |
| Approach LOS   | C   |   |   |   | C   |   |   | A   |   |   |   |   |
| Queue Length 50th (ft)                                     | 30  |   |   |   | 38  |   |   | 145   | 6   |   |   |   |
| Queue Length 95th (ft)                                     | 54  |   |   |   | 66  |   |   | 138   | m7  |   |   |   |
| Internal Link Dist (ft)                                    | 233   |   |   |   | 60  |   |   | 281   |   |   | 272   |   |
| Turn Bay Length (ft)                                       |   |   |   |   |   |   |   |   | 100   |   |   |   |
| Base Capacity (vph)  | 570   |   |   |   | 490   |   |   | 3376  | 1089  |   |   |   |
| Starvation Cap Reductn                                     | 0   |   |   |   | 0   |   |   | 1523  | 0   |   |   |   |
| Spillback Cap Reductn                                      | 0   |   |   |   | 0   |   |   | 106   | 0   |   |   |   |
| Storage Cap Reductn  | 0   |   |   |   | 0   |   |   | 0   | 0   |   |   |   |
| Reduced v/c Ratio  | 0.10  |   |   |   | 0.17  |   |   | 0.64  | 0.05  |   |   |   |
| <b>Intersection Summary</b>                                |   |   |   |   |   |   |   |   |   |   |   |   |
| Cycle Length: 135  |   |   |   |   |   |   |   |   |   |   |   |   |
| Actuated Cycle Length: 135                                 |   |   |   |   |   |   |   |   |   |   |   |   |
| Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green |   |   |   |   |   |   |   |   |   |   |   |   |

MS

Synchro 9 Report  
Page 19

28: Lavaca St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Lane Group                  | Ø2    | Ø4   | Ø10  | Ø12  |
|-----------------------------|-------|------|------|------|
| Lane Configurations         |       |      |      |      |
| Traffic Volume (vph)        |       |      |      |      |
| Future Volume (vph)         |       |      |      |      |
| Confl. Peds. (#/hr)         |       |      |      |      |
| Confl. Bikes (#/hr)         |       |      |      |      |
| Peak Hour Factor            |       |      |      |      |
| Parking (#/hr)              |       |      |      |      |
| Adj. Flow (vph)             |       |      |      |      |
| Shared Lane Traffic (%)     |       |      |      |      |
| Lane Group Flow (vph)       |       |      |      |      |
| Turn Type                   |       |      |      |      |
| Protected Phases            | 2     | 4    | 10   | 12   |
| Permitted Phases            |       |      |      |      |
| Detector Phase              |       |      |      |      |
| Switch Phase                |       |      |      |      |
| Minimum Initial (s)         | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)           | 28.0  | 32.0 | 21.0 | 20.0 |
| Total Split (s)             | 55.0  | 32.0 | 24.0 | 24.0 |
| Total Split (%)             | 41%   | 24%  | 18%  | 18%  |
| Yellow Time (s)             | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)            | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)        |       |      |      |      |
| Total Lost Time (s)         |       |      |      |      |
| Lead/Lag                    |       |      |      |      |
| Lead-Lag Optimize?          |       |      |      |      |
| Recall Mode                 | C-Max | None | None | None |
| Act Effct Green (s)         |       |      |      |      |
| Actuated g/C Ratio          |       |      |      |      |
| v/c Ratio                   |       |      |      |      |
| Control Delay               |       |      |      |      |
| Queue Delay                 |       |      |      |      |
| Total Delay                 |       |      |      |      |
| LOS                         |       |      |      |      |
| Approach Delay              |       |      |      |      |
| Approach LOS                |       |      |      |      |
| Queue Length 50th (ft)      |       |      |      |      |
| Queue Length 95th (ft)      |       |      |      |      |
| Internal Link Dist (ft)     |       |      |      |      |
| Turn Bay Length (ft)        |       |      |      |      |
| Base Capacity (vph)         |       |      |      |      |
| Starvation Cap Reductn      |       |      |      |      |
| Spillback Cap Reductn       |       |      |      |      |
| Storage Cap Reductn         |       |      |      |      |
| Reduced v/c Ratio           |       |      |      |      |
| <b>Intersection Summary</b> |       |      |      |      |

MS

Synchro 9 Report  
Page 20

28: Lavaca St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.35

Intersection Signal Delay: 8.6

Intersection LOS: A

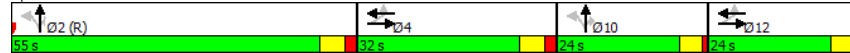
Intersection Capacity Utilization 53.4%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 28: Lavaca St & E. 16th St



34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

|                         | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑↑   |      | ↑     | ↑↑↑   |      |      |      |      |       | ↑↑↑   | ↑     |
| Traffic Volume (vph)    | 0    | 871   | 95   | 212   | 1707  | 0    | 0    | 0    | 0    | 149   | 841   | 267   |
| Future Volume (vph)     | 0    | 871   | 95   | 212   | 1707  | 0    | 0    | 0    | 0    | 149   | 841   | 267   |
| Confl. Peds. (#/hr)     |      |       | 18   | 18    |       |      |      |      |      | 20    |       |       |
| Confl. Bikes (#/hr)     |      |       |      |       |       |      |      |      |      |       |       | 27    |
| Peak Hour Factor        | 0.86 | 0.86  | 0.86 | 0.86  | 0.86  | 0.86 | 0.86 | 0.86 | 0.86 | 0.86  | 0.86  | 0.86  |
| Adj. Flow (vph)         | 0    | 1013  | 110  | 247   | 1985  | 0    | 0    | 0    | 0    | 173   | 978   | 310   |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 1123  | 0    | 247   | 1985  | 0    | 0    | 0    | 0    | 0     | 1151  | 310   |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1 3   | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1 3   | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      |       | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       |      | 25.0  |      |       | 25.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (s)         |      | 58.0  |      |       | 88.0  |      |      |      |      | 47.0  | 47.0  | 47.0  |
| Total Split (%)         |      | 43.0% |      |       | 65.2% |      |      |      |      | 34.8% | 34.8% | 34.8% |
| Yellow Time (s)         |      | 4.0   |      |       | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      |       | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      |       | 0.0   |      |      |      |      |       | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      |       | 5.0   |      |      |      |      |       | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      |       |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      |       |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      |       | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effect Green (s)    |      | 53.0  |      | 83.0  | 83.0  |      |      |      |      |       | 42.0  | 42.0  |
| Actuated g/C Ratio      |      | 0.39  |      | 0.61  | 0.61  |      |      |      |      |       | 0.31  | 0.31  |
| v/c Ratio               |      | 0.57  |      | 0.63  | 0.63  |      |      |      |      |       | 0.74  | 0.59  |
| Control Delay           |      | 33.0  |      | 24.0  | 7.3   |      |      |      |      |       | 41.6  | 29.3  |
| Queue Delay             |      | 0.0   |      | 5.5   | 0.2   |      |      |      |      |       | 0.0   | 0.0   |
| Total Delay             |      | 33.0  |      | 29.5  | 7.5   |      |      |      |      |       | 41.6  | 29.3  |
| LOS                     |      | C     |      | C     | A     |      |      |      |      |       | D     | C     |
| Approach Delay          |      | 33.0  |      |       | 9.9   |      |      |      |      |       | 39.0  |       |
| Approach LOS            |      | C     |      |       | A     |      |      |      |      |       | D     |       |
| Queue Length 50th (ft)  |      | 275   |      | 70    | 134   |      |      |      |      |       | 277   | 124   |
| Queue Length 95th (ft)  |      | 304   |      | m130  | 136   |      |      |      |      |       | 316   | 209   |
| Internal Link Dist (ft) |      | 262   |      |       | 240   |      |      | 197  |      |       | 285   |       |
| Turn Bay Length (ft)    |      |       |      | 50    |       |      |      |      |      |       |       | 100   |
| Base Capacity (vph)     |      | 1967  |      | 391   | 3126  |      |      |      |      |       | 1563  | 525   |
| Starvation Cap Reductn  |      | 0     |      | 92    | 392   |      |      |      |      |       | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      |       | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      |       | 0     | 0     |
| Reduced v/c Ratio       |      | 0.57  |      | 0.83  | 0.73  |      |      |      |      |       | 0.74  | 0.59  |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 80

34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Lane Group              | Ø1   | Ø3   |
|-------------------------|------|------|
| Lane Configurations     |      |      |
| Traffic Volume (vph)    |      |      |
| Future Volume (vph)     |      |      |
| Confl. Peds. (#/hr)     |      |      |
| Confl. Bikes (#/hr)     |      |      |
| Peak Hour Factor        |      |      |
| Adj. Flow (vph)         |      |      |
| Shared Lane Traffic (%) |      |      |
| Lane Group Flow (vph)   |      |      |
| Turn Type               |      |      |
| Protected Phases        | 1    | 3    |
| Permitted Phases        |      |      |
| Detector Phase          |      |      |
| Switch Phase            |      |      |
| Minimum Initial (s)     | 5.0  | 8.0  |
| Minimum Split (s)       | 10.0 | 13.0 |
| Total Split (s)         | 15.0 | 15.0 |
| Total Split (%)         | 11%  | 11%  |
| Yellow Time (s)         | 4.0  | 4.0  |
| All-Red Time (s)        | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |
| Total Lost Time (s)     |      |      |
| Lead/Lag                | Lead |      |
| Lead-Lag Optimize?      | Yes  |      |
| Recall Mode             | Min  | None |
| Act Effect Green (s)    |      |      |
| Actuated g/C Ratio      |      |      |
| v/c Ratio               |      |      |
| Control Delay           |      |      |
| Queue Delay             |      |      |
| Total Delay             |      |      |
| LOS                     |      |      |
| Approach Delay          |      |      |
| Approach LOS            |      |      |
| Queue Length 50th (ft)  |      |      |
| Queue Length 95th (ft)  |      |      |
| Internal Link Dist (ft) |      |      |
| Turn Bay Length (ft)    |      |      |
| Base Capacity (vph)     |      |      |
| Starvation Cap Reductn  |      |      |
| Spillback Cap Reductn   |      |      |
| Storage Cap Reductn     |      |      |
| Reduced v/c Ratio       |      |      |
| Intersection Summary    |      |      |

34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 24.1

Intersection LOS: C

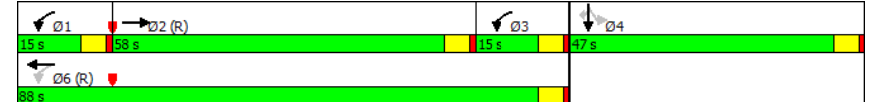
Intersection Capacity Utilization 75.3%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 34: Guadalupe St & W. 15th St



35: Lavaca St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

|                         | ←     | →     | ↖    | ↗    | ←     | ↖    | ↗     | ↖     | ↗     | ↖    | ↗    | ↖    | ↗ |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|---|
| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |   |
| Lane Configurations     | ↖     | ↖↖↖   |      |      | ↖↖↖   |      |       | ↖↖↖   | ↖     |      |      |      |   |
| Traffic Volume (vph)    | 88    | 900   | 0    | 0    | 1606  | 66   | 385   | 862   | 157   | 0    | 0    | 0    |   |
| Future Volume (vph)     | 88    | 900   | 0    | 0    | 1606  | 66   | 385   | 862   | 157   | 0    | 0    | 0    |   |
| Confl. Peds. (#/hr)     | 47    |       |      |      |       | 47   | 30    |       | 18    |      |      |      |   |
| Confl. Bikes (#/hr)     |       |       | 2    |      |       |      |       |       | 27    |      |      |      |   |
| Peak Hour Factor        | 0.90  | 0.90  | 0.90 | 0.90 | 0.90  | 0.90 | 0.90  | 0.90  | 0.90  | 0.90 | 0.90 | 0.90 |   |
| Adj. Flow (vph)         | 98    | 1000  | 0    | 0    | 1784  | 73   | 428   | 958   | 174   | 0    | 0    | 0    |   |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       |       |      |      |      |   |
| Lane Group Flow (vph)   | 98    | 1000  | 0    | 0    | 1857  | 0    | 0     | 1386  | 174   | 0    | 0    | 0    |   |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |   |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |   |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |   |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |   |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |   |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |   |
| Minimum Split (s)       | 8.0   | 28.0  |      |      | 28.0  |      | 33.0  | 33.0  | 33.0  |      |      |      |   |
| Total Split (s)         | 20.0  | 86.0  |      |      | 66.0  |      | 49.0  | 49.0  | 49.0  |      |      |      |   |
| Total Split (%)         | 14.8% | 63.7% |      |      | 48.9% |      | 36.3% | 36.3% | 36.3% |      |      |      |   |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |   |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 2.0   | 2.0   | 2.0   |      |      |      |   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |   |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 6.0   | 6.0   | 6.0   |      |      |      |   |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |   |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |   |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |   |
| Act Effect Green (s)    | 81.0  | 81.0  |      |      | 66.8  |      | 43.0  | 43.0  | 43.0  |      |      |      |   |
| Actuated g/C Ratio      | 0.60  | 0.60  |      |      | 0.49  |      | 0.32  | 0.32  | 0.32  |      |      |      |   |
| v/c Ratio               | 0.56  | 0.33  |      |      | 0.74  |      | 0.88  | 0.31  | 0.31  |      |      |      |   |
| Control Delay           | 58.9  | 3.5   |      |      | 11.9  |      | 51.3  | 13.1  | 13.1  |      |      |      |   |
| Queue Delay             | 0.0   | 0.1   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |   |
| Total Delay             | 58.9  | 3.6   |      |      | 11.9  |      | 51.3  | 13.1  | 13.1  |      |      |      |   |
| LOS                     | E     | A     |      |      | B     |      | D     | B     | B     |      |      |      |   |
| Approach Delay          |       | 8.5   |      |      | 11.9  |      | 47.0  |       |       |      |      |      |   |
| Approach LOS            |       | A     |      |      | B     |      | D     |       |       |      |      |      |   |
| Queue Length 50th (ft)  | 51    | 48    |      |      | 117   |      | 421   | 33    | 33    |      |      |      |   |
| Queue Length 95th (ft)  | m108  | 51    |      |      | 116   |      | 485   | 92    | 92    |      |      |      |   |
| Internal Link Dist (ft) |       | 240   |      |      | 335   |      | 116   |       |       |      | 281  |      |   |
| Turn Bay Length (ft)    | 50    |       |      |      |       |      |       |       |       |      |      |      |   |
| Base Capacity (vph)     | 247   | 3051  |      |      | 2495  |      | 1573  | 558   | 558   |      |      |      |   |
| Starvation Cap Reductn  | 0     | 837   |      |      | 0     |      | 0     | 0     | 0     |      |      |      |   |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |   |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |   |
| Reduced v/c Ratio       | 0.40  | 0.45  |      |      | 0.74  |      | 0.88  | 0.31  | 0.31  |      |      |      |   |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green  
Natural Cycle: 75

MS

Synchro 9 Report  
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35: Lavaca St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 23.2

Intersection LOS: C

Intersection Capacity Utilization 75.3%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 35: Lavaca St & W. 15th St



MS

Synchro 9 Report  
Page 26

36: Colorado St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Lane Group              | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR    |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|--------|
| Lane Configurations     | ←     | ←     | ←    | ←     | ←     | ←    | ←     | ←     | ←    | ←     | ←     | ←      |
| Traffic Volume (vph)    | 27    | 1060  | 21   | 22    | 1374  | 14   | 8     | 26    | 108  | 127   | 6     | 267    |
| Future Volume (vph)     | 27    | 1060  | 21   | 22    | 1374  | 14   | 8     | 26    | 108  | 127   | 6     | 267    |
| Confl. Peds. (#/hr)     | 32    |       | 34   | 34    |       | 32   | 96    |       | 6    | 6     |       | 96     |
| Confl. Bikes (#/hr)     |       |       | 1    |       |       | 2    |       |       | 2    |       |       | 1      |
| Peak Hour Factor        | 0.87  | 0.87  | 0.87 | 0.87  | 0.87  | 0.87 | 0.87  | 0.87  | 0.87 | 0.87  | 0.87  | 0.87   |
| Adj. Flow (vph)         | 31    | 1218  | 24   | 25    | 1579  | 16   | 9     | 30    | 124  | 146   | 7     | 307    |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |      |       |       |        |
| Lane Group Flow (vph)   | 31    | 1242  | 0    | 25    | 1595  | 0    | 0     | 163   | 0    | 0     | 153   | 307    |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | Perm  | NA    |      | Perm  | NA    | custom |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |       | 4     |      |       | 8     |        |
| Permitted Phases        | 2     |       |      | 6     |       |      | 4     |       |      | 8     |       | 6      |
| Detector Phase          | 5     | 2     |      | 1     | 6     |      | 4     | 4     |      | 8     | 8     | 6      |
| Switch Phase            |       |       |      |       |       |      |       |       |      |       |       |        |
| Minimum Initial (s)     | 5.0   | 15.0  |      | 5.0   | 15.0  |      | 5.0   | 5.0   |      | 5.0   | 5.0   | 15.0   |
| Minimum Split (s)       | 10.0  | 20.0  |      | 10.0  | 22.0  |      | 36.0  | 36.0  |      | 10.0  | 10.0  | 22.0   |
| Total Split (s)         | 10.0  | 79.0  |      | 10.0  | 79.0  |      | 46.0  | 46.0  |      | 46.0  | 46.0  | 79.0   |
| Total Split (%)         | 7.4%  | 58.5% |      | 7.4%  | 58.5% |      | 34.1% | 34.1% |      | 34.1% | 34.1% | 58.5%  |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0    |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0    |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      |       | 0.0   |      |       | 0.0   | 0.0    |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      |       | 5.0   |      |       | 5.0   | 5.0    |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   |      |       |       |      |       | Lag   |        |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |       |       |      |       | Yes   |        |
| Recall Mode             | None  | C-Max |      | None  | C-Max |      | Max   | Max   |      | Max   | Max   | C-Max  |
| Act Effect Green (s)    | 81.0  | 78.0  |      | 81.0  | 78.0  |      |       | 41.0  |      |       | 41.0  | 78.0   |
| Actuated g/C Ratio      | 0.60  | 0.58  |      | 0.60  | 0.58  |      |       | 0.30  |      |       | 0.30  | 0.58   |
| v/c Ratio               | 0.18  | 0.42  |      | 0.10  | 0.54  |      |       | 0.29  |      |       | 0.49  | 0.37   |
| Control Delay           | 6.2   | 6.3   |      | 5.1   | 8.7   |      |       | 13.5  |      |       | 45.1  | 2.9    |
| Queue Delay             | 0.0   | 0.2   |      | 0.0   | 0.1   |      |       | 0.0   |      |       | 0.0   | 0.0    |
| Total Delay             | 6.2   | 6.5   |      | 5.1   | 8.9   |      |       | 13.5  |      |       | 45.1  | 2.9    |
| LOS                     | A     | A     |      | A     | A     |      |       | B     |      |       | D     | A      |
| Approach Delay          |       | 6.5   |      |       | 8.8   |      |       | 13.5  |      |       | 17.0  |        |
| Approach LOS            |       | A     |      |       | A     |      |       | B     |      |       | B     |        |
| Queue Length 50th (ft)  | 0     | 102   |      | 3     | 345   |      |       | 32    |      |       | 110   | 0      |
| Queue Length 95th (ft)  | 0     | 118   |      | 6     | 157   |      |       | 83    |      |       | 175   | 37     |
| Internal Link Dist (ft) |       | 335   |      |       | 362   |      |       | 155   |      |       | 114   |        |
| Turn Bay Length (ft)    | 90    |       |      | 90    |       |      |       |       |      |       |       | 100    |
| Base Capacity (vph)     | 172   | 2927  |      | 242   | 2928  |      |       | 567   |      |       | 310   | 828    |
| Starvation Cap Reductn  | 0     | 687   |      | 0     | 352   |      |       | 0     |      |       | 0     | 0      |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 37    |      |       | 0     |      |       | 0     | 8      |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      |       | 0     |      |       | 0     | 0      |
| Reduced v/c Ratio       | 0.18  | 0.55  |      | 0.10  | 0.62  |      |       | 0.29  |      |       | 0.49  | 0.37   |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 75

MS

Synchro 9 Report  
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36: Colorado St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 9.2

Intersection LOS: A

Intersection Capacity Utilization 87.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 36: Colorado St & W. 15th St



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Synchro 9 Report  
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37: N. Congress Ave & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

|                         | →     | ↖    | ↗     | ←     | ↖    | ↗     |
|-------------------------|-------|------|-------|-------|------|-------|
| Lane Group              | EBT   | EBR  | WBL   | WBT   | NBL  | NBR   |
| Lane Configurations     | ↑↑↑   |      | ↖     | ↑↑↑   |      | ↗     |
| Traffic Volume (vph)    | 1353  | 0    | 0     | 1175  | 0    | 1     |
| Future Volume (vph)     | 1353  | 0    | 0     | 1175  | 0    | 1     |
| Confl. Peds. (#/hr)     |       | 48   | 48    |       | 40   | 14    |
| Confl. Bikes (#/hr)     |       |      |       |       |      | 4     |
| Peak Hour Factor        | 0.86  | 0.86 | 0.86  | 0.86  | 0.86 | 0.86  |
| Adj. Flow (vph)         | 1573  | 0    | 0     | 1366  | 0    | 1     |
| Shared Lane Traffic (%) |       |      |       |       |      |       |
| Lane Group Flow (vph)   | 1573  | 0    | 0     | 1366  | 0    | 1     |
| Turn Type               | NA    |      | pm+pt | NA    |      | Perm  |
| Protected Phases        | 2     |      | 1     | 6     |      |       |
| Permitted Phases        |       |      | 6     |       |      | 4     |
| Detector Phase          | 2     |      | 1     | 6     |      | 4     |
| Switch Phase            |       |      |       |       |      |       |
| Minimum Initial (s)     | 5.0   |      | 5.0   | 5.0   |      | 5.0   |
| Minimum Split (s)       | 25.0  |      | 10.0  | 25.0  |      | 33.0  |
| Total Split (s)         | 92.0  |      | 10.0  | 102.0 |      | 33.0  |
| Total Split (%)         | 68.1% |      | 7.4%  | 75.6% |      | 24.4% |
| Yellow Time (s)         | 4.0   |      | 4.0   | 4.0   |      | 4.0   |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0   |      | 1.0   |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0   |      | 0.0   |
| Total Lost Time (s)     | 5.0   |      | 5.0   | 5.0   |      | 5.0   |
| Lead/Lag                | Lag   |      | Lead  |       |      |       |
| Lead-Lag Optimize?      | Yes   |      | Yes   |       |      |       |
| Recall Mode             | C-Max |      | None  | C-Max |      | Max   |
| Act Effect Green (s)    | 97.0  |      |       | 97.0  |      | 28.0  |
| Actuated g/C Ratio      | 0.72  |      |       | 0.72  |      | 0.21  |
| v/c Ratio               | 0.43  |      |       | 0.37  |      | 0.00  |
| Control Delay           | 4.5   |      |       | 10.3  |      | 0.0   |
| Queue Delay             | 0.0   |      |       | 0.1   |      | 0.0   |
| Total Delay             | 4.5   |      |       | 10.5  |      | 0.0   |
| LOS                     | A     |      |       | B     |      | A     |
| Approach Delay          | 4.5   |      |       | 10.5  |      |       |
| Approach LOS            | A     |      |       | B     |      |       |
| Queue Length 50th (ft)  | 78    |      |       | 321   |      | 0     |
| Queue Length 95th (ft)  | 90    |      |       | 77    |      | 0     |
| Internal Link Dist (ft) | 362   |      |       | 356   | 125  |       |
| Turn Bay Length (ft)    |       |      |       |       |      |       |
| Base Capacity (vph)     | 3653  |      |       | 3653  |      | 394   |
| Starvation Cap Reductn  | 408   |      |       | 1059  |      | 0     |
| Spillback Cap Reductn   | 0     |      |       | 292   |      | 0     |
| Storage Cap Reductn     | 0     |      |       | 0     |      | 0     |
| Reduced v/c Ratio       | 0.48  |      |       | 0.53  |      | 0.00  |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 70

MS

Synchro 9 Report  
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37: N. Congress Ave & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.43

Intersection Signal Delay: 7.3

Intersection LOS: A

Intersection Capacity Utilization 57.8%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 37: N. Congress Ave & W. 15th St



MS

Synchro 9 Report  
Page 30

## 38: Brazos St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2020 Background

Timing Plan: PM

|                         | ↖     | →     | ↘    | ↙     | ←     | ↖    | ↗     | ↘     | ↙     | ↓     | ↘     | ↙    |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|-------|-------|-------|------|
| Lane Group              | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR   | SBL   | SBT   | SBR  |
| Lane Configurations     | ↖ ↗   | ↖ ↗   |      | ↖ ↗   | ↖ ↗   |      |       | ↖ ↗   | ↖ ↗   |       | ↖ ↗   |      |
| Traffic Volume (vph)    | 5     | 1341  | 37   | 9     | 1034  | 5    | 130   | 3     | 114   | 63    | 3     | 85   |
| Future Volume (vph)     | 5     | 1341  | 37   | 9     | 1034  | 5    | 130   | 3     | 114   | 63    | 3     | 85   |
| Confl. Peds. (#/hr)     | 8     |       | 9    | 9     |       | 8    | 5     |       | 19    | 19    |       | 5    |
| Confl. Bikes (#/hr)     |       |       |      |       |       | 1    |       |       |       |       |       | 1    |
| Peak Hour Factor        | 0.93  | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93 |
| Adj. Flow (vph)         | 5     | 1442  | 40   | 10    | 1112  | 5    | 140   | 3     | 123   | 68    | 3     | 91   |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |       |       |       |      |
| Lane Group Flow (vph)   | 5     | 1482  | 0    | 10    | 1117  | 0    | 0     | 143   | 123   | 0     | 162   | 0    |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | Perm  | NA    | Perm  | Perm  | NA    |      |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |       | 4     |       |       | 8     |      |
| Permitted Phases        | 2     |       |      | 6     |       |      | 4     |       | 4     | 8     |       |      |
| Detector Phase          | 5     | 2     |      | 1     | 6     |      | 4     | 4     | 4     | 8     | 8     |      |
| Switch Phase            |       |       |      |       |       |      |       |       |       |       |       |      |
| Minimum Initial (s)     | 5.0   | 15.0  |      | 5.0   | 15.0  |      | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  |      |
| Minimum Split (s)       | 10.0  | 22.0  |      | 10.0  | 22.0  |      | 32.0  | 32.0  | 32.0  | 32.0  | 32.0  |      |
| Total Split (s)         | 12.0  | 77.0  |      | 12.0  | 77.0  |      | 46.0  | 46.0  | 46.0  | 46.0  | 46.0  |      |
| Total Split (%)         | 8.9%  | 57.0% |      | 8.9%  | 57.0% |      | 34.1% | 34.1% | 34.1% | 34.1% | 34.1% |      |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |      |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      |       | 0.0   | 0.0   |       | 0.0   |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      |       | 5.0   | 5.0   |       | 5.0   |      |
| Lead/Lag                | Lead  | Lead  |      | Lag   | Lag   |      |       |       |       |       |       |      |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |       |       |       |       |       |      |
| Recall Mode             | None  | C-Max |      | None  | C-Max |      | None  | None  | None  | None  | None  |      |
| Act Effect Green (s)    | 99.4  | 99.4  |      | 99.6  | 99.6  |      | 23.2  | 23.2  |       |       | 23.2  |      |
| Actuated g/C Ratio      | 0.74  | 0.74  |      | 0.74  | 0.74  |      | 0.17  | 0.17  |       |       | 0.17  |      |
| v/c Ratio               | 0.01  | 0.40  |      | 0.04  | 0.30  |      | 0.84  | 0.36  |       |       | 0.72  |      |
| Control Delay           | 5.0   | 3.6   |      | 12.2  | 11.2  |      | 89.7  | 15.2  |       |       | 53.3  |      |
| Queue Delay             | 0.0   | 0.0   |      | 0.0   | 0.1   |      | 0.0   | 0.0   |       |       | 0.0   |      |
| Total Delay             | 5.0   | 3.7   |      | 12.2  | 11.3  |      | 89.7  | 15.2  |       |       | 53.3  |      |
| LOS                     | A     | A     |      | B     | B     |      | F     | B     |       |       | D     |      |
| Approach Delay          |       | 3.7   |      |       | 11.3  |      | 55.3  |       |       |       | 53.3  |      |
| Approach LOS            |       | A     |      |       | B     |      | E     |       |       |       | D     |      |
| Queue Length 50th (ft)  | 0     | 42    |      | 3     | 140   |      | 123   | 18    |       |       | 95    |      |
| Queue Length 95th (ft)  | m2    | 87    |      | m11   | 281   |      | 190   | 69    |       |       | 165   |      |
| Internal Link Dist (ft) |       | 356   |      |       | 297   |      | 199   |       |       |       | 273   |      |
| Turn Bay Length (ft)    | 100   |       |      | 40    |       |      |       | 50    |       |       |       |      |
| Base Capacity (vph)     | 363   | 3726  |      | 289   | 3748  |      | 302   | 530   |       |       | 361   |      |
| Starvation Cap Reductn  | 0     | 445   |      | 0     | 1345  |      | 0     | 0     |       |       | 0     |      |
| Spillback Cap Reductn   | 0     | 138   |      | 0     | 0     |      | 0     | 2     |       |       | 1     |      |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      | 0     | 0     |       |       | 0     |      |
| Reduced v/c Ratio       | 0.01  | 0.45  |      | 0.03  | 0.46  |      | 0.47  | 0.23  |       |       | 0.45  |      |

## Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 65

MS

Synchro 9 Report  
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## 38: Brazos St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2020 Background

Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 13.6

Intersection LOS: B

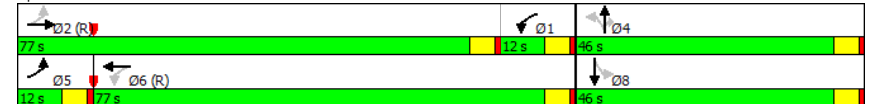
Intersection Capacity Utilization 65.8%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 38: Brazos St &amp; W. 15th St



MS

Synchro 9 Report  
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39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

|                         | ↖    | →     | ↘    | ↙     | ←     | ↖    | ↗    | ↘    | ↙    | ↖     | ↗     | ↘     | ↙ |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|---|
| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |   |
| Lane Configurations     |      | ↖↖↖   |      | ↙     | ↖↖↖   |      |      |      |      |       | ↖↖↖   | ↙     |   |
| Traffic Volume (vph)    | 0    | 1635  | 112  | 65    | 842   | 0    | 0    | 0    | 0    | 269   | 624   | 304   |   |
| Future Volume (vph)     | 0    | 1635  | 112  | 65    | 842   | 0    | 0    | 0    | 0    | 269   | 624   | 304   |   |
| Confl. Peds. (#/hr)     |      |       | 11   | 11    |       |      |      |      |      | 31    |       | 5     |   |
| Confl. Bikes (#/hr)     |      |       |      |       |       |      |      |      |      |       |       | 2     |   |
| Peak Hour Factor        | 0.93 | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93 | 0.93 | 0.93 | 0.93  | 0.93  | 0.93  |   |
| Adj. Flow (vph)         | 0    | 1758  | 120  | 70    | 905   | 0    | 0    | 0    | 0    | 289   | 671   | 327   |   |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |   |
| Lane Group Flow (vph)   | 0    | 1878  | 0    | 70    | 905   | 0    | 0    | 0    | 0    | 0     | 960   | 327   |   |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |   |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |       | 4     |       |   |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |   |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4     | 4     | 4     |   |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |   |
| Minimum Initial (s)     |      | 10.0  |      | 3.0   | 10.0  |      |      |      |      | 7.0   | 7.0   | 7.0   |   |
| Minimum Split (s)       |      | 28.0  |      | 8.0   | 28.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |   |
| Total Split (s)         |      | 80.0  |      | 15.0  | 95.0  |      |      |      |      | 40.0  | 40.0  | 40.0  |   |
| Total Split (%)         |      | 59.3% |      | 11.1% | 70.4% |      |      |      |      | 29.6% | 29.6% | 29.6% |   |
| Yellow Time (s)         |      | 4.0   |      | 4.0   | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |   |
| All-Red Time (s)        |      | 1.0   |      | 1.0   | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |   |
| Lost Time Adjust (s)    |      | 0.0   |      | 0.0   | 0.0   |      |      |      |      |       | 0.0   | 0.0   |   |
| Total Lost Time (s)     |      | 5.0   |      | 5.0   | 5.0   |      |      |      |      |       | 5.0   | 5.0   |   |
| Lead/Lag                |      | Lag   |      | Lead  |       |      |      |      |      |       |       |       |   |
| Lead-Lag Optimize?      |      | Yes   |      | Yes   |       |      |      |      |      |       |       |       |   |
| Recall Mode             |      | C-Max |      | None  | C-Max |      |      |      |      | None  | None  | None  |   |
| Act Effect Green (s)    |      | 81.1  |      | 91.4  | 91.4  |      |      |      |      | 33.6  | 33.6  | 33.6  |   |
| Actuated g/C Ratio      |      | 0.60  |      | 0.68  | 0.68  |      |      |      |      | 0.25  | 0.25  | 0.25  |   |
| v/c Ratio               |      | 0.62  |      | 0.40  | 0.26  |      |      |      |      | 0.78  | 0.71  | 0.71  |   |
| Control Delay           |      | 8.6   |      | 26.1  | 7.6   |      |      |      |      | 52.2  | 40.7  | 40.7  |   |
| Queue Delay             |      | 0.2   |      | 0.0   | 0.2   |      |      |      |      | 0.0   | 0.1   | 0.1   |   |
| Total Delay             |      | 8.7   |      | 26.1  | 7.7   |      |      |      |      | 52.2  | 40.8  | 40.8  |   |
| LOS                     |      | A     |      | C     | A     |      |      |      |      | D     | D     | D     |   |
| Approach Delay          |      | 8.7   |      |       | 9.0   |      |      |      |      |       | 49.3  |       |   |
| Approach LOS            |      | A     |      |       | A     |      |      |      |      |       | D     |       |   |
| Queue Length 50th (ft)  |      | 145   |      | 29    | 93    |      |      |      |      | 284   | 183   | 183   |   |
| Queue Length 95th (ft)  |      | 286   |      | m61   | 113   |      |      |      |      | 338   | 296   | 296   |   |
| Internal Link Dist (ft) |      | 297   |      |       | 282   |      |      | 125  |      | 272   |       |       |   |
| Turn Bay Length (ft)    |      |       |      | 70    |       |      |      |      |      |       |       | 50    |   |
| Base Capacity (vph)     |      | 3022  |      | 203   | 3442  |      |      |      |      | 1280  | 475   | 475   |   |
| Starvation Cap Reductn  |      | 319   |      | 0     | 1386  |      |      |      |      | 0     | 0     | 0     |   |
| Spillback Cap Reductn   |      | 0     |      | 0     | 153   |      |      |      |      | 0     | 3     | 3     |   |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |   |
| Reduced v/c Ratio       |      | 0.69  |      | 0.34  | 0.44  |      |      |      |      | 0.75  | 0.69  | 0.69  |   |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 70

MS

Synchro 9 Report  
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39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 21.4

Intersection LOS: C

Intersection Capacity Utilization 68.5%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 39: San Jacinto Blvd & W. 15th St



MS

Synchro 9 Report  
Page 34

## 40: Trinity St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2020 Background

Timing Plan: PM

| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     |       |       |      |      |       |      |       |       |       |      |      |      |
| Traffic Volume (vph)    | 88    | 1595  | 0    | 0    | 736   | 96   | 176   | 303   | 278   | 0    | 0    | 0    |
| Future Volume (vph)     | 88    | 1595  | 0    | 0    | 736   | 96   | 176   | 303   | 278   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 2     |       |      |      |       | 2    | 7     |       | 8     |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       |      |       |       | 8     |      |      |      |
| Peak Hour Factor        | 0.96  | 0.96  | 0.96 | 0.96 | 0.96  | 0.96 | 0.96  | 0.96  | 0.96  | 0.96 | 0.96 | 0.96 |
| Adj. Flow (vph)         | 92    | 1661  | 0    | 0    | 767   | 100  | 183   | 316   | 290   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 92    | 1661  | 0    | 0    | 867   | 0    | 0     | 499   | 290   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 28.0  |      |      | 28.0  |      | 35.0  | 35.0  | 35.0  |      |      |      |
| Total Split (s)         | 10.0  | 100.0 |      |      | 90.0  |      | 35.0  | 35.0  | 35.0  |      |      |      |
| Total Split (%)         | 7.4%  | 74.1% |      |      | 66.7% |      | 25.9% | 25.9% | 25.9% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 95.0  | 95.0  |      |      | 85.0  |      | 30.0  | 30.0  | 30.0  |      |      |      |
| Actuated g/C Ratio      | 0.70  | 0.70  |      |      | 0.63  |      | 0.22  | 0.22  | 0.22  |      |      |      |
| v/c Ratio               | 0.22  | 0.46  |      |      | 0.27  |      | 0.65  | 0.75  | 0.75  |      |      |      |
| Control Delay           | 4.5   | 4.5   |      |      | 7.1   |      | 52.3  | 52.6  | 52.6  |      |      |      |
| Queue Delay             | 0.0   | 0.1   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Delay             | 4.5   | 4.6   |      |      | 7.1   |      | 52.3  | 52.6  | 52.6  |      |      |      |
| LOS                     | A     | A     |      |      | A     |      | D     | D     | D     |      |      |      |
| Approach Delay          |       | 4.6   |      |      | 7.1   |      | 52.4  |       |       |      |      |      |
| Approach LOS            |       | A     |      |      | A     |      | D     |       |       |      |      |      |
| Queue Length 50th (ft)  | 12    | 81    |      |      | 83    |      | 211   | 195   | 195   |      |      |      |
| Queue Length 95th (ft)  | m19   | 88    |      |      | m83   |      | 273   | #322  | #322  |      |      |      |
| Internal Link Dist (ft) |       | 282   |      |      | 641   |      | 149   |       |       | 621  |      |      |
| Turn Bay Length (ft)    | 100   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 409   | 3578  |      |      | 3154  |      | 769   | 385   | 385   |      |      |      |
| Starvation Cap Reductn  | 0     | 748   |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.22  | 0.59  |      |      | 0.27  |      | 0.65  | 0.75  | 0.75  |      |      |      |

## Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 75

MS

Synchro 9 Report  
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## 40: Trinity St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2020 Background

Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 16.3

Intersection LOS: B

Intersection Capacity Utilization 68.5%

ICU Level of Service C

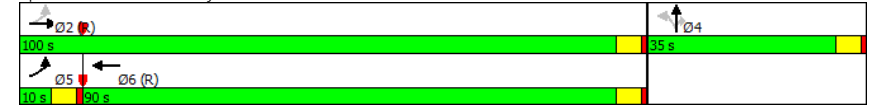
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 40: Trinity St &amp; W. 15th St



MS

Synchro 9 Report  
Page 36

11: Colorado St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Intersection              |     |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 9.9 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | A   |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | +    |      |      |      | +    |      |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 6    | 70   | 14   | 0    | 62   | 36   | 9    | 0    | 15   | 89   | 151  |
| Future Vol, veh/h   | 0    | 6    | 70   | 14   | 0    | 62   | 36   | 9    | 0    | 15   | 89   | 151  |
| Peak Hour Factor    | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 8    | 90   | 18   | 0    | 79   | 46   | 12   | 0    | 19   | 114  | 194  |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB  | WB  | NB   |
|----------------------------|-----|-----|------|
| Opposing Approach          | WB  | EB  | SB   |
| Opposing Lanes             | 1   | 1   | 1    |
| Conflicting Approach Left  | SB  | NB  | EB   |
| Conflicting Lanes Left     | 1   | 1   | 1    |
| Conflicting Approach Right | NB  | SB  | WB   |
| Conflicting Lanes Right    | 1   | 1   | 1    |
| HCM Control Delay          | 9.3 | 9.7 | 10.5 |
| HCM LOS                    | A   | A   | B    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 6%    | 7%    | 58%   | 14%   |
| Vol Thru, %            | 35%   | 78%   | 34%   | 55%   |
| Vol Right, %           | 59%   | 16%   | 8%    | 31%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 255   | 90    | 107   | 132   |
| LT Vol                 | 15    | 6     | 62    | 18    |
| Through Vol            | 89    | 70    | 36    | 73    |
| RT Vol                 | 151   | 14    | 9     | 41    |
| Lane Flow Rate         | 327   | 115   | 137   | 169   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.404 | 0.166 | 0.201 | 0.226 |
| Departure Headway (Hd) | 4.451 | 5.172 | 5.28  | 4.806 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 801   | 685   | 672   | 740   |
| Service Time           | 2.516 | 3.265 | 3.371 | 2.884 |
| HCM Lane V/C Ratio     | 0.408 | 0.168 | 0.204 | 0.228 |
| HCM Control Delay      | 10.5  | 9.3   | 9.7   | 9.3   |
| HCM Lane LOS           | B     | A     | A     | A     |
| HCM 95th-ile Q         | 2     | 0.6   | 0.7   | 0.9   |

11: Colorado St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 18   | 73   | 41   |
| Future Vol, veh/h   | 0    | 18   | 73   | 41   |
| Peak Hour Factor    | 0.78 | 0.78 | 0.78 | 0.78 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 23   | 94   | 53   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB  |
|----------------------------|-----|
| Opposing Approach          | NB  |
| Opposing Lanes             | 1   |
| Conflicting Approach Left  | WB  |
| Conflicting Lanes Left     | 1   |
| Conflicting Approach Right | EB  |
| Conflicting Lanes Right    | 1   |
| HCM Control Delay          | 9.3 |
| HCM LOS                    | A   |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Intersection              |     |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 8.8 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | A   |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |      |      | ↕    |      |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 0    | 240  | 0    | 0    | 0    | 166  | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h   | 0    | 0    | 240  | 0    | 0    | 0    | 166  | 0    | 0    | 0    | 0    | 0    |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 279  | 0    | 0    | 0    | 193  | 0    | 0    | 0    | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB  | WB  | NB |
|----------------------------|-----|-----|----|
| Opposing Approach          | WB  | EB  | SB |
| Opposing Lanes             | 1   | 1   | 1  |
| Conflicting Approach Left  | SB  | NB  | EB |
| Conflicting Lanes Left     | 1   | 1   | 1  |
| Conflicting Approach Right | NB  | SB  | WB |
| Conflicting Lanes Right    | 1   | 1   | 1  |
| HCM Control Delay          | 9.1 | 8.4 | 0  |
| HCM LOS                    | A   | A   | -  |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 0%    | 0%    | 0%    | 0%    |
| Vol Thru, %            | 100%  | 100%  | 100%  | 0%    |
| Vol Right, %           | 0%    | 0%    | 0%    | 100%  |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 0     | 240   | 166   | 12    |
| LT Vol                 | 0     | 0     | 0     | 0     |
| Through Vol            | 0     | 240   | 166   | 0     |
| RT Vol                 | 0     | 0     | 0     | 12    |
| Lane Flow Rate         | 0     | 279   | 193   | 14    |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0     | 0.318 | 0.223 | 0.017 |
| Departure Headway (Hd) | 4.964 | 4.102 | 4.165 | 4.337 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 0     | 871   | 853   | 830   |
| Service Time           | 2.965 | 2.155 | 2.235 | 2.337 |
| HCM Lane V/C Ratio     | 0     | 0.32  | 0.226 | 0.017 |
| HCM Control Delay      | 8     | 9.1   | 8.4   | 7.4   |
| HCM Lane LOS           | N     | A     | A     | A     |
| HCM 95th-tile Q        | 0     | 1.4   | 0.9   | 0.1   |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      |      | ↕    |
| Traffic Vol, veh/h  | 0    | 0    | 0    | 12   |
| Future Vol, veh/h   | 0    | 0    | 0    | 12   |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 0    | 14   |
| Number of Lanes     | 0    | 0    | 0    | 1    |

| Approach                   | SB  |
|----------------------------|-----|
| Opposing Approach          | NB  |
| Opposing Lanes             | 1   |
| Conflicting Approach Left  | WB  |
| Conflicting Lanes Left     | 1   |
| Conflicting Approach Right | EB  |
| Conflicting Lanes Right    | 1   |
| HCM Control Delay          | 7.4 |
| HCM LOS                    | A   |

14: Brazos St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 12.9 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |      |      | ↕    |      |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 29   | 174  | 25   | 0    | 10   | 44   | 5    | 0    | 183  | 160  | 0    |
| Future Vol, veh/h   | 0    | 29   | 174  | 25   | 0    | 10   | 44   | 5    | 0    | 183  | 160  | 0    |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 34   | 202  | 29   | 0    | 12   | 51   | 6    | 0    | 213  | 186  | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB  | NB   |
|----------------------------|------|-----|------|
| Opposing Approach          | WB   | EB  | SB   |
| Opposing Lanes             | 1    | 1   | 1    |
| Conflicting Approach Left  | SB   | NB  | EB   |
| Conflicting Lanes Left     | 1    | 1   | 1    |
| Conflicting Approach Right | NB   | SB  | WB   |
| Conflicting Lanes Right    | 1    | 1   | 1    |
| HCM Control Delay          | 12.1 | 9.6 | 15.2 |
| HCM LOS                    | B    | A   | C    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 53%   | 13%   | 17%   | 0%    |
| Vol Thru, %            | 47%   | 76%   | 75%   | 46%   |
| Vol Right, %           | 0%    | 11%   | 8%    | 54%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 343   | 228   | 59    | 123   |
| LT Vol                 | 183   | 29    | 10    | 0     |
| Through Vol            | 160   | 174   | 44    | 56    |
| RT Vol                 | 0     | 25    | 5     | 67    |
| Lane Flow Rate         | 399   | 265   | 69    | 143   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.578 | 0.402 | 0.111 | 0.205 |
| Departure Headway (Hd) | 5.213 | 5.453 | 5.84  | 5.172 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 694   | 660   | 613   | 692   |
| Service Time           | 3.242 | 3.489 | 3.888 | 3.213 |
| HCM Lane V/C Ratio     | 0.575 | 0.402 | 0.113 | 0.207 |
| HCM Control Delay      | 15.2  | 12.1  | 9.6   | 9.6   |
| HCM Lane LOS           | C     | B     | A     | A     |
| HCM 95th-ile Q         | 3.7   | 1.9   | 0.4   | 0.8   |

14: Brazos St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 0    | 56   | 67   |
| Future Vol, veh/h   | 0    | 0    | 56   | 67   |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 65   | 78   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB  |
|----------------------------|-----|
| Opposing Approach          | NB  |
| Opposing Lanes             | 1   |
| Conflicting Approach Left  | WB  |
| Conflicting Lanes Left     | 1   |
| Conflicting Approach Right | EB  |
| Conflicting Lanes Right    | 1   |
| HCM Control Delay          | 9.6 |
| HCM LOS                    | A   |

16: San Jacinto Blvd & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Intersection              |    |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 11 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B  |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↰    |      |      |      | ↱    |      |      |      |      |      |
| Traffic Vol, veh/h  | 0    | 0    | 48   | 155  | 0    | 35   | 23   | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h   | 0    | 0    | 48   | 155  | 0    | 35   | 23   | 0    | 0    | 0    | 0    | 0    |
| Peak Hour Factor    | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 51   | 163  | 0    | 37   | 24   | 0    | 0    | 0    | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    |

| Approach                   |  | EB   | WB |
|----------------------------|--|------|----|
| Opposing Approach          |  | WB   | EB |
| Opposing Lanes             |  | 1    | 1  |
| Conflicting Approach Left  |  | SB   |    |
| Conflicting Lanes Left     |  | 3    | 0  |
| Conflicting Approach Right |  |      | SB |
| Conflicting Lanes Right    |  | 0    | 3  |
| HCM Control Delay          |  | 10.6 | 10 |
| HCM LOS                    |  | B    | A  |

| Lane                   | EBLn1 | WBLn1 | SBLn1 | SBLn2 | SBLn3 |
|------------------------|-------|-------|-------|-------|-------|
| Vol Left, %            | 0%    | 60%   | 0%    | 0%    | 0%    |
| Vol Thru, %            | 24%   | 40%   | 100%  | 100%  | 0%    |
| Vol Right, %           | 76%   | 0%    | 0%    | 0%    | 100%  |
| Sign Control           | Stop  | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 203   | 58    | 254   | 254   | 12    |
| LT Vol                 | 0     | 35    | 0     | 0     | 0     |
| Through Vol            | 48    | 23    | 254   | 254   | 0     |
| RT Vol                 | 155   | 0     | 0     | 0     | 12    |
| Lane Flow Rate         | 214   | 61    | 267   | 267   | 13    |
| Geometry Grp           | 7     | 7     | 7     | 7     | 7     |
| Degree of Util (X)     | 0.318 | 0.108 | 0.391 | 0.391 | 0.01  |
| Departure Headway (Hd) | 5.356 | 6.383 | 5.28  | 5.28  | 2.831 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 667   | 557   | 678   | 678   | 1243  |
| Service Time           | 3.126 | 4.173 | 3.047 | 3.047 | 0.597 |
| HCM Lane V/C Ratio     | 0.321 | 0.11  | 0.394 | 0.394 | 0.01  |
| HCM Control Delay      | 10.6  | 10    | 11.4  | 11.4  | 5.6   |
| HCM Lane LOS           | B     | A     | B     | B     | A     |
| HCM 95th-tile Q        | 1.4   | 0.4   | 1.9   | 1.9   | 0     |

16: San Jacinto Blvd & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↰↱   | ↱    |
| Traffic Vol, veh/h  | 0    | 0    | 507  | 12   |
| Future Vol, veh/h   | 0    | 0    | 507  | 12   |
| Peak Hour Factor    | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 534  | 13   |
| Number of Lanes     | 0    | 0    | 2    | 1    |

| Approach                   |  | SB   |
|----------------------------|--|------|
| Opposing Approach          |  |      |
| Opposing Lanes             |  | 0    |
| Conflicting Approach Left  |  | WB   |
| Conflicting Lanes Left     |  | 1    |
| Conflicting Approach Right |  | EB   |
| Conflicting Lanes Right    |  | 1    |
| HCM Control Delay          |  | 11.3 |
| HCM LOS                    |  | B    |

20: Colorado St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Intersection              |     |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 8.5 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | A   |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | +    |      |      |      | +    |      |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 77   | 0    | 15   | 0    | 0    | 0    | 0    | 0    | 15   | 129  | 0    |
| Future Vol, veh/h   | 0    | 77   | 0    | 15   | 0    | 0    | 0    | 0    | 0    | 15   | 129  | 0    |
| Peak Hour Factor    | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 94   | 0    | 18   | 0    | 0    | 0    | 0    | 0    | 18   | 157  | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB  | WB | NB  |
|----------------------------|-----|----|-----|
| Opposing Approach          | WB  | EB | SB  |
| Opposing Lanes             | 1   | 1  | 1   |
| Conflicting Approach Left  | SB  | NB | EB  |
| Conflicting Lanes Left     | 1   | 1  | 1   |
| Conflicting Approach Right | NB  | SB | WB  |
| Conflicting Lanes Right    | 1   | 1  | 1   |
| HCM Control Delay          | 8.7 | 0  | 8.7 |
| HCM LOS                    | A   | -  | A   |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 10%   | 84%   | 0%    | 0%    |
| Vol Thru, %            | 90%   | 0%    | 100%  | 47%   |
| Vol Right, %           | 0%    | 16%   | 0%    | 53%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 144   | 92    | 0     | 159   |
| LT Vol                 | 15    | 77    | 0     | 0     |
| Through Vol            | 129   | 0     | 0     | 74    |
| RT Vol                 | 0     | 15    | 0     | 85    |
| Lane Flow Rate         | 176   | 112   | 0     | 194   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.216 | 0.15  | 0     | 0.22  |
| Departure Headway (Hd) | 4.429 | 4.8   | 4.885 | 4.084 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 811   | 748   | 0     | 880   |
| Service Time           | 2.448 | 2.823 | 2.916 | 2.101 |
| HCM Lane V/C Ratio     | 0.217 | 0.15  | 0     | 0.22  |
| HCM Control Delay      | 8.7   | 8.7   | 7.9   | 8.3   |
| HCM Lane LOS           | A     | A     | N     | A     |
| HCM 95th-tile Q        | 0.8   | 0.5   | 0     | 0.8   |

20: Colorado St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 0    | 74   | 85   |
| Future Vol, veh/h   | 0    | 0    | 74   | 85   |
| Peak Hour Factor    | 0.82 | 0.82 | 0.82 | 0.82 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 90   | 104  |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB  |
|----------------------------|-----|
| Opposing Approach          | NB  |
| Opposing Lanes             | 1   |
| Conflicting Approach Left  | WB  |
| Conflicting Lanes Left     | 1   |
| Conflicting Approach Right | EB  |
| Conflicting Lanes Right    | 1   |
| HCM Control Delay          | 8.3 |
| HCM LOS                    | A   |

24: E. 17th St & Brazos St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Intersection              |     |
|---------------------------|-----|
| Intersection Delay, s/veh | 7.5 |
| Intersection LOS          | A   |

| Movement            | EBU  | EBL  | EBT  | WBU  | WBT  | WBR  | SBU  | SBL  | SBR  |
|---------------------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↶    |      | ↷    |      |      | ↶    |      |
| Traffic Vol, veh/h  | 0    | 0    | 0    | 0    | 0    | 50   | 0    | 94   | 0    |
| Future Vol, veh/h   | 0    | 0    | 0    | 0    | 0    | 50   | 0    | 94   | 0    |
| Peak Hour Factor    | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 0    | 0    | 0    | 62   | 0    | 116  | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 1    | 0    | 0    | 1    | 0    |

| Approach                   | EB | WB  | SB  |
|----------------------------|----|-----|-----|
| Opposing Approach          | WB | EB  |     |
| Opposing Lanes             | 1  | 1   | 0   |
| Conflicting Approach Left  | SB |     | WB  |
| Conflicting Lanes Left     | 1  | 0   | 1   |
| Conflicting Approach Right |    | SB  | EB  |
| Conflicting Lanes Right    | 0  | 1   | 1   |
| HCM Control Delay          | 0  | 6.8 | 7.9 |
| HCM LOS                    | -  | A   | A   |

| Lane                   | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, %            | 0%    | 0%    | 100%  |
| Vol Thru, %            | 100%  | 0%    | 0%    |
| Vol Right, %           | 0%    | 100%  | 0%    |
| Sign Control           | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 0     | 50    | 94    |
| LT Vol                 | 0     | 0     | 94    |
| Through Vol            | 0     | 0     | 0     |
| RT Vol                 | 0     | 50    | 0     |
| Lane Flow Rate         | 0     | 62    | 116   |
| Geometry Grp           | 1     | 1     | 1     |
| Degree of Util (X)     | 0     | 0.061 | 0.137 |
| Departure Headway (Hd) | 4.185 | 3.535 | 4.242 |
| Convergence, Y/N       | Yes   | Yes   | Yes   |
| Cap                    | 0     | 1001  | 848   |
| Service Time           | 2.259 | 1.602 | 2.254 |
| HCM Lane V/C Ratio     | 0     | 0.062 | 0.137 |
| HCM Control Delay      | 7.3   | 6.8   | 7.9   |
| HCM Lane LOS           | N     | A     | A     |
| HCM 95th-ile Q         | 0     | 0.2   | 0.5   |

4: Colorado St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.9  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑↑   |      | ↑    | ↑↑   | ↑    |      |
| Traffic Vol, veh/h       | 626  | 33   | 32   | 1219 | 2    | 116  |
| Future Vol, veh/h        | 626  | 33   | 32   | 1219 | 2    | 116  |
| Conflicting Peds, #/hr   | 0    | 8    | 8    | 0    | 0    | 11   |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | 40   | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 94   | 94   | 94   | 94   | 94   | 94   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 666  | 35   | 34   | 1297 | 2    | 123  |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |      |
|----------------------|--------|---|--------|---|--------|------|
| Conflicting Flow All | 0      | 0 | 709    | 0 | 1408   | 370  |
| Stage 1              | -      | - | -      | - | 692    | -    |
| Stage 2              | -      | - | -      | - | 716    | -    |
| Critical Hdwy        | -      | - | 4.14   | - | 6.84   | 6.94 |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.84   | -    |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.84   | -    |
| Follow-up Hdwy       | -      | - | 2.22   | - | 3.52   | 3.32 |
| Pot Cap-1 Maneuver   | -      | - | 886    | - | 130    | 627  |
| Stage 1              | -      | - | -      | - | 458    | -    |
| Stage 2              | -      | - | -      | - | 445    | -    |
| Platoon blocked, %   | -      | - | -      | - | -      | -    |
| Mov Cap-1 Maneuver   | -      | - | 877    | - | 124    | 616  |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 124    | -    |
| Stage 1              | -      | - | -      | - | 455    | -    |
| Stage 2              | -      | - | -      | - | 428    | -    |

| Approach             | EB | WB  | NB |
|----------------------|----|-----|----|
| HCM Control Delay, s | 0  | 0.2 | 13 |
| HCM LOS              |    |     | B  |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 577   | -   | -   | 877   | -   |
| HCM Lane V/C Ratio    | 0.218 | -   | -   | 0.039 | -   |
| HCM Control Delay (s) | 13    | -   | -   | 9.3   | -   |
| HCM Lane LOS          | B     | -   | -   | A     | -   |
| HCM 95th %tile Q(veh) | 0.8   | -   | -   | 0.1   | -   |

9: Guadalupe St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 8.2  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    | ↑    |      | ↑    |      |      |      |      | ↑↑   |      |      |
| Traffic Vol, veh/h       | 0    | 20   | 11   | 84   | 94   | 0    | 0    | 0    | 0    | 26   | 964  | 22   |
| Future Vol, veh/h        | 0    | 20   | 11   | 84   | 94   | 0    | 0    | 0    | 0    | 26   | 964  | 22   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 54   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 41   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 0    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 21   | 11   | 87   | 97   | 0    | 0    | 0    | 0    | 27   | 994  | 23   |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |      |
|----------------------|--------|------|--------|------|--------|------|
| Conflicting Flow All | -      | 1100 | 603    | 615  | 1111   | 0    |
| Stage 1              | -      | 1100 | -      | 0    | 0      | -    |
| Stage 2              | -      | 0    | -      | 615  | 1111   | -    |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | 4.14 |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | -    |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | -    |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | 2.22 |
| Pot Cap-1 Maneuver   | 0      | 211  | 442    | 375  | 208    | 0    |
| Stage 1              | 0      | 286  | -      | -    | 0      | -    |
| Stage 2              | 0      | -    | -      | 445  | 283    | 0    |
| Platoon blocked, %   | -      | -    | -      | -    | -      | -    |
| Mov Cap-1 Maneuver   | -      | 203  | 425    | 337  | 200    | -    |
| Mov Cap-2 Maneuver   | -      | 203  | -      | 337  | 200    | -    |
| Stage 1              | -      | 275  | -      | -    | -      | -    |
| Stage 2              | -      | -    | -      | 401  | 272    | -    |

| Approach             | EB   | WB   | SB |
|----------------------|------|------|----|
| HCM Control Delay, s | 20.8 | 52.4 |    |
| HCM LOS              | C    | F    |    |

| Minor Lane/Major Mvmt | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-------|-------|-----|-----|-----|
| Capacity (veh/h)      | 203   | 425   | 247   | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.102 | 0.027 | 0.743 | -   | -   | -   |
| HCM Control Delay (s) | 24.7  | 13.7  | 52.4  | -   | -   | -   |
| HCM Lane LOS          | C     | B     | F     | -   | -   | -   |
| HCM 95th %tile Q(veh) | 0.3   | 0.1   | 5.2   | -   | -   | -   |

10: Lavaca St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |       |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|-------|------|------|------|------|------|
| Int Delay, s/veh         | 4    |      |      |      |      |      |       |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL   | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      | ↕ ↕ ↕ |      |      |      |      |      |
| Traffic Vol, veh/h       | 10   | 43   | 0    | 0    | 54   | 26   | 63    | 900  | 52   | 0    | 0    | 0    |
| Future Vol, veh/h        | 10   | 43   | 0    | 0    | 54   | 26   | 63    | 900  | 52   | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 21   | 25    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free  | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -     | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 0     | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | -    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 95   | 95   | 95   | 95   | 95   | 95   | 95    | 95   | 95   | 95   | 95   | 95   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2     | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 11   | 45   | 0    | 0    | 57   | 27   | 66    | 947  | 55   | 0    | 0    | 0    |

| Major/Minor          | Minor2 |      | Minor1 |   | Major1 |      |      |   |
|----------------------|--------|------|--------|---|--------|------|------|---|
| Conflicting Flow All | 586    | 1160 | -      | - | 1132   | 522  | 25   | 0 |
| Stage 1              | 25     | 25   | -      | - | 1107   | -    | -    | - |
| Stage 2              | 561    | 1135 | -      | - | 25     | -    | -    | - |
| Critical Hdwy        | 6.44   | 6.54 | -      | - | 6.54   | 7.14 | 5.34 | - |
| Critical Hdwy Stg 1  | -      | -    | -      | - | 5.54   | -    | -    | - |
| Critical Hdwy Stg 2  | 6.74   | 5.54 | -      | - | -      | -    | -    | - |
| Follow-up Hdwy       | 3.82   | 4.02 | -      | - | 4.02   | 3.92 | 3.12 | - |
| Pot Cap-1 Maneuver   | 444    | 194  | 0      | 0 | 202    | 428  | 1124 | - |
| Stage 1              | -      | -    | 0      | 0 | 284    | -    | -    | - |
| Stage 2              | 437    | 275  | 0      | 0 | -      | -    | -    | - |
| Platoon blocked, %   | -      | -    | -      | - | -      | -    | -    | - |
| Mov Cap-1 Maneuver   | 297    | 178  | -      | - | 186    | 428  | 1124 | - |
| Mov Cap-2 Maneuver   | 297    | 178  | -      | - | 186    | -    | -    | - |
| Stage 1              | -      | -    | -      | - | 267    | -    | -    | - |
| Stage 2              | 303    | 259  | -      | - | -      | -    | -    | - |

| Approach             | EB   |  | WB   |  | NB  |  |
|----------------------|------|--|------|--|-----|--|
| HCM Control Delay, s | 31.1 |  | 29.8 |  | 0.5 |  |
| HCM LOS              | D    |  | D    |  |     |  |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1 | WBLn1 |
|-----------------------|-------|-----|-----|-------|-------|
| Capacity (veh/h)      | 1124  | -   | -   | 193   | 228   |
| HCM Lane V/C Ratio    | 0.059 | -   | -   | 0.289 | 0.369 |
| HCM Control Delay (s) | 8.4   | -   | -   | 31.1  | 29.8  |
| HCM Lane LOS          | A     | -   | -   | D     | D     |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | 1.1   | 1.6   |

MS

Synchro 9 Report  
Page 3

17: Trinity St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |       |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|-------|------|------|------|------|------|
| Int Delay, s/veh         | 4.5  |      |      |      |      |      |       |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL   | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      | ↕ ↕ ↕ |      |      |      |      |      |
| Traffic Vol, veh/h       | 129  | 0    | 0    | 0    | 0    | 0    | 140   | 488  | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 129  | 0    | 0    | 0    | 0    | 0    | 140   | 488  | 0    | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 18   | 0    | 0    | 0    | 21    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Free | Free | Free | Free  | Free | Free | Stop | Stop | Stop |
| RT Channelized           | -    | -    | None | -    | -    | None | -     | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 115   | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | -    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 85   | 85   | 85   | 85   | 85   | 85   | 85    | 85   | 85   | 85   | 85   | 85   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2     | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 152  | 0    | 0    | 0    | 0    | 0    | 165   | 574  | 0    | 0    | 0    | 0    |

| Major/Minor          | Minor2 |       | Major2 |   | Major1 |       |   |   |
|----------------------|--------|-------|--------|---|--------|-------|---|---|
| Conflicting Flow All | 581    | 926   | -      | - | 0      | 22    | 0 | - |
| Stage 1              | 22     | 22    | -      | - | -      | -     | - | - |
| Stage 2              | 559    | 904   | -      | - | -      | -     | - | - |
| Critical Hdwy        | 6.08   | 6.53  | -      | - | -      | 4.13  | - | - |
| Critical Hdwy Stg 1  | 5.43   | 5.53  | -      | - | -      | -     | - | - |
| Critical Hdwy Stg 2  | 6.03   | 5.53  | -      | - | -      | -     | - | - |
| Follow-up Hdwy       | 3.669  | 4.019 | -      | - | -      | 2.219 | - | - |
| Pot Cap-1 Maneuver   | 487    | 268   | 0      | 0 | -      | 1593  | - | 0 |
| Stage 1              | 960    | 877   | 0      | 0 | -      | -     | - | 0 |
| Stage 2              | 505    | 355   | 0      | 0 | -      | -     | - | 0 |
| Platoon blocked, %   | -      | -     | -      | - | -      | -     | - | - |
| Mov Cap-1 Maneuver   | 419    | 0     | -      | - | -      | 1593  | - | - |
| Mov Cap-2 Maneuver   | 419    | 0     | -      | - | -      | -     | - | - |
| Stage 1              | 941    | 0     | -      | - | -      | -     | - | - |
| Stage 2              | 444    | 0     | -      | - | -      | -     | - | - |

| Approach             | EB   |  | WB |  | NB  |  |
|----------------------|------|--|----|--|-----|--|
| HCM Control Delay, s | 18.4 |  | 0  |  | 1.7 |  |
| HCM LOS              | C    |  |    |  |     |  |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | WBT | WBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1593  | -   | 419   | -   | -   |
| HCM Lane V/C Ratio    | 0.103 | -   | 0.362 | -   | -   |
| HCM Control Delay (s) | 7.5   | -   | 18.4  | -   | -   |
| HCM Lane LOS          | A     | -   | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.3   | -   | 1.6   | -   | -   |

MS

Synchro 9 Report  
Page 4

25: San Jacinto Blvd & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 9.4  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    | ↑    |      | ↑    |      |      |      |      | ↑↑   | ↑    | ↑    |
| Traffic Vol, veh/h       | 0    | 49   | 61   | 35   | 23   | 0    | 0    | 0    | 0    | 104  | 851  | 0    |
| Future Vol, veh/h        | 0    | 49   | 61   | 35   | 23   | 0    | 0    | 0    | 0    | 104  | 851  | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 19   | 0    | 0    | 0    | 0    | 0    | 0    | 94   | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 50   | -    | -    | -    | -    | -    | -    | -    | -    | 50   |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 58   | 72   | 41   | 27   | 0    | 0    | 0    | 0    | 122  | 1001 | 0    |

| Major/Minor          | Minor2 |      |      | Minor1 |      |   | Major2 |   |   |
|----------------------|--------|------|------|--------|------|---|--------|---|---|
| Conflicting Flow All | -      | 1340 | 520  | 887    | 1340 | - | 94     | 0 | 0 |
| Stage 1              | -      | 1246 | -    | 94     | 94   | - | -      | - | - |
| Stage 2              | -      | 94   | -    | 793    | 1246 | - | -      | - | - |
| Critical Hdwy        | -      | 6.54 | 6.94 | 7.54   | 6.54 | - | 4.14   | - | - |
| Critical Hdwy Stg 1  | -      | 5.54 | -    | -      | -    | - | -      | - | - |
| Critical Hdwy Stg 2  | -      | -    | -    | 6.54   | 5.54 | - | -      | - | - |
| Follow-up Hdwy       | -      | 4.02 | 3.32 | 3.52   | 4.02 | - | 2.22   | - | - |
| Pot Cap-1 Maneuver   | 0      | 151  | 501  | 239    | 151  | 0 | 1498   | - | - |
| Stage 1              | 0      | 244  | -    | -      | -    | 0 | -      | - | - |
| Stage 2              | 0      | -    | -    | 348    | 244  | 0 | -      | - | - |
| Platoon blocked, %   | -      | -    | -    | -      | -    | - | -      | - | - |
| Mov Cap-1 Maneuver   | -      | 112  | 501  | 97     | 112  | - | 1498   | - | - |
| Mov Cap-2 Maneuver   | -      | 112  | -    | 97     | 112  | - | -      | - | - |
| Stage 1              | -      | 199  | -    | -      | -    | - | -      | - | - |
| Stage 2              | -      | -    | -    | 173    | 199  | - | -      | - | - |

| Approach             | EB   | WB | SB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 37.3 | 93 | 1.1 |
| HCM LOS              | E    | F  |     |

| Minor Lane/Major Mvmt | EBLn1 | EBLn2 | WBLn1 | SBL   | SBT | SBR |
|-----------------------|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h)      | 112   | 501   | 102   | 1498  | -   | -   |
| HCM Lane V/C Ratio    | 0.515 | 0.143 | 0.669 | 0.082 | -   | -   |
| HCM Control Delay (s) | 67.1  | 13.4  | 93    | 7.6   | 0.3 | -   |
| HCM Lane LOS          | F     | B     | F     | A     | A   | -   |
| HCM 95th %tile Q(veh) | 2.4   | 0.5   | 3.4   | 0.3   | -   | -   |

26: Trinity St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.3  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | ↓    |      | ↑↑↑  | ↑↑↑  |      |      |
| Traffic Vol, veh/h       | 129  | 0    | 0    | 501  | 0    | 0    |
| Future Vol, veh/h        | 129  | 0    | 0    | 501  | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | -    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 83   | 83   | 83   | 83   | 83   | 83   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 155  | 0    | 0    | 604  | 0    | 0    |

| Major/Minor          | Minor2 | Major1 |      |   |
|----------------------|--------|--------|------|---|
| Conflicting Flow All | 241    | -      | 0    | 0 |
| Stage 1              | 0      | -      | -    | - |
| Stage 2              | 241    | -      | -    | - |
| Critical Hdwy        | 5.74   | -      | 5.34 | - |
| Critical Hdwy Stg 1  | -      | -      | -    | - |
| Critical Hdwy Stg 2  | 6.04   | -      | -    | - |
| Follow-up Hdwy       | 3.82   | -      | 3.12 | - |
| Pot Cap-1 Maneuver   | 727    | 0      | -    | - |
| Stage 1              | -      | 0      | -    | - |
| Stage 2              | 713    | 0      | -    | - |
| Platoon blocked, %   | -      | -      | -    | - |
| Mov Cap-1 Maneuver   | 727    | -      | -    | - |
| Mov Cap-2 Maneuver   | 727    | -      | -    | - |
| Stage 1              | -      | -      | -    | - |
| Stage 2              | 713    | -      | -    | - |

| Approach             | EB   | NB |
|----------------------|------|----|
| HCM Control Delay, s | 11.3 | 0  |
| HCM LOS              | B    |    |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 |
|-----------------------|-----|-----|-------|
| Capacity (veh/h)      | -   | -   | 727   |
| HCM Lane V/C Ratio    | -   | -   | 0.214 |
| HCM Control Delay (s) | 0   | -   | 11.3  |
| HCM Lane LOS          | A   | -   | B     |
| HCM 95th %tile Q(veh) | -   | -   | 0.8   |

27: Guadalupe St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 19   |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↱    |      |      | ↱    |      |      |      |      | ↱↲   | ↱    | ↲    |
| Traffic Vol, veh/h       | 0    | 20   | 11   | 85   | 94   | 0    | 0    | 0    | 0    | 26   | 1053 | 23   |
| Future Vol, veh/h        | 0    | 20   | 11   | 85   | 94   | 0    | 0    | 0    | 0    | 26   | 1053 | 23   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 24   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 42   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 23   | 13   | 98   | 108  | 0    | 0    | 0    | 0    | 30   | 1210 | 26   |

| Major/Minor          | Minor2 |      |      | Minor1 |      |   | Major2 |   |   |
|----------------------|--------|------|------|--------|------|---|--------|---|---|
| Conflicting Flow All | -      | 1312 | 671  | 700    | 1312 | - | 0      | 0 | 0 |
| Stage 1              | -      | 1312 | -    | 0      | 0    | - | -      | - | - |
| Stage 2              | -      | 0    | -    | 700    | 1312 | - | -      | - | - |
| Critical Hdwy        | -      | 6.54 | 6.94 | 7.54   | 6.54 | - | 4.14   | - | - |
| Critical Hdwy Stg 1  | -      | 5.54 | -    | -      | -    | - | -      | - | - |
| Critical Hdwy Stg 2  | -      | -    | -    | 6.54   | 5.54 | - | -      | - | - |
| Follow-up Hdwy       | -      | 4.02 | 3.32 | 3.52   | 4.02 | - | 2.22   | - | - |
| Pot Cap-1 Maneuver   | 0      | 157  | 399  | 326    | 157  | 0 | -      | - | - |
| Stage 1              | 0      | 227  | -    | -      | -    | 0 | -      | - | - |
| Stage 2              | 0      | -    | -    | 396    | 227  | 0 | -      | - | - |
| Platoon blocked, %   | -      | -    | -    | -      | -    | - | -      | - | - |
| Mov Cap-1 Maneuver   | -      | 151  | 383  | 278    | 151  | - | -      | - | - |
| Mov Cap-2 Maneuver   | -      | 151  | -    | 278    | 151  | - | -      | - | - |
| Stage 1              | -      | 218  | -    | -      | -    | - | -      | - | - |
| Stage 2              | -      | -    | -    | 343    | 218  | - | -      | - | - |

| Approach             | EB |  | WB    |  | SB |  |
|----------------------|----|--|-------|--|----|--|
| HCM Control Delay, s | 28 |  | 134.3 |  |    |  |
| HCM LOS              | D  |  | F     |  |    |  |

| Minor Lane/Major Mvmt | EBLn1WBLn1  | SBL | SBT | SBR |
|-----------------------|-------------|-----|-----|-----|
| Capacity (veh/h)      | 192 193     | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.186 1.066 | -   | -   | -   |
| HCM Control Delay (s) | 28 134.3    | -   | -   | -   |
| HCM Lane LOS          | D F         | -   | -   | -   |
| HCM 95th %tile Q(veh) | 0.7 9.6     | -   | -   | -   |

29: Colorado St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 5.2  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↱    |      |      | ↱    |      |      |      |      | ↱↲   | ↱    | ↲    |
| Traffic Vol, veh/h       | 6    | 69   | 14   | 18   | 35   | 8    | 15   | 66   | 41   | 9    | 360  | 41   |
| Future Vol, veh/h        | 6    | 69   | 14   | 18   | 35   | 8    | 15   | 66   | 41   | 9    | 360  | 41   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 15   | 85   | 0    | 0    | 0    | 0    | 85   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 8    | 88   | 18   | 23   | 45   | 10   | 19   | 85   | 53   | 12   | 462  | 53   |

| Major/Minor          | Minor2 |       |       | Minor1 |       |       | Major1 |   |   | Major2 |   |   |
|----------------------|--------|-------|-------|--------|-------|-------|--------|---|---|--------|---|---|
| Conflicting Flow All | 788    | 772   | 573   | 713    | 771   | 126   | 599    | 0 | 0 | 137    | 0 | 0 |
| Stage 1              | 596    | 596   | -     | 149    | 149   | -     | -      | - | - | -      | - | - |
| Stage 2              | 192    | 176   | -     | 564    | 622   | -     | -      | - | - | -      | - | - |
| Critical Hdwy        | 7.12   | 6.52  | 6.22  | 7.12   | 6.52  | 6.22  | 4.12   | - | - | 4.12   | - | - |
| Critical Hdwy Stg 1  | 6.12   | 5.52  | -     | 6.12   | 5.52  | -     | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | 6.12   | 5.52  | -     | 6.12   | 5.52  | -     | -      | - | - | -      | - | - |
| Follow-up Hdwy       | 3.518  | 4.018 | 3.318 | 3.518  | 4.018 | 3.318 | 2.218  | - | - | 2.218  | - | - |
| Pot Cap-1 Maneuver   | 309    | 330   | 519   | 347    | 331   | 924   | 978    | - | - | 1447   | - | - |
| Stage 1              | 490    | 492   | -     | 854    | 774   | -     | -      | - | - | -      | - | - |
| Stage 2              | 810    | 753   | -     | 510    | 479   | -     | -      | - | - | -      | - | - |
| Platoon blocked, %   | -      | -     | -     | -      | -     | -     | -      | - | - | -      | - | - |
| Mov Cap-1 Maneuver   | 238    | 293   | 477   | 250    | 294   | 911   | 978    | - | - | 1426   | - | - |
| Mov Cap-2 Maneuver   | 238    | 293   | -     | 250    | 294   | -     | -      | - | - | -      | - | - |
| Stage 1              | 441    | 447   | -     | 836    | 758   | -     | -      | - | - | -      | - | - |
| Stage 2              | 727    | 737   | -     | 389    | 435   | -     | -      | - | - | -      | - | - |

| Approach             | EB   |  | WB   |  | NB  |  | SB  |  |
|----------------------|------|--|------|--|-----|--|-----|--|
| HCM Control Delay, s | 23.5 |  | 20.8 |  | 1.1 |  | 0.2 |  |
| HCM LOS              | C    |  | C    |  |     |  |     |  |

| Minor Lane/Major Mvmt | NBL  | NBT | NBR | EBLn1WBLn1        | SBL | SBT | SBR |
|-----------------------|------|-----|-----|-------------------|-----|-----|-----|
| Capacity (veh/h)      | 978  | -   | -   | 307 305 1426      | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.02 | -   | -   | 0.372 0.256 0.008 | -   | -   | -   |
| HCM Control Delay (s) | 8.8  | 0   | -   | 23.5 20.8 7.5     | 0   | -   | -   |
| HCM Lane LOS          | A    | A   | -   | C C A A           | -   | -   | -   |
| HCM 95th %tile Q(veh) | 0.1  | -   | -   | 1.7 1 0           | -   | -   | -   |

30: N. Congress Ave  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 9.8  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    |      |      | ↑    |      |      | ↑    |      |      | ↑    |      |
| Traffic Vol, veh/h       | 0    | 122  | 0    | 0    | 123  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 0    | 122  | 0    | 0    | 123  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 57   | 0    | 25   | 21   | 0    | 0    | 0    | 0    | 21   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 151  | 0    | 0    | 152  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |

| Major/Minor          | Minor2 |       | Minor1 |   | Major1 |   | Major2 |   |
|----------------------|--------|-------|--------|---|--------|---|--------|---|
| Conflicting Flow All | -      | 1     | -      | - | 1      | - | -      | 0 |
| Stage 1              | -      | 1     | -      | - | 0      | - | -      | - |
| Stage 2              | -      | 0     | -      | - | 1      | - | -      | - |
| Critical Hdwy        | -      | 6.52  | -      | - | 6.52   | - | -      | - |
| Critical Hdwy Stg 1  | -      | 5.52  | -      | - | 5.52   | - | -      | - |
| Critical Hdwy Stg 2  | -      | 5.52  | -      | - | 5.52   | - | -      | - |
| Follow-up Hdwy       | -      | 4.018 | -      | - | 4.018  | - | -      | - |
| Pot Cap-1 Maneuver   | 0      | 895   | 0      | 0 | 895    | 0 | 0      | - |
| Stage 1              | 0      | 895   | 0      | 0 | -      | 0 | 0      | - |
| Stage 2              | 0      | -     | 0      | 0 | 895    | 0 | 0      | - |
| Platoon blocked, %   | -      | -     | -      | - | -      | - | -      | - |
| Mov Cap-1 Maneuver   | -      | 895   | -      | - | 895    | - | -      | - |
| Mov Cap-2 Maneuver   | -      | 895   | -      | - | 895    | - | -      | - |
| Stage 1              | -      | 895   | -      | - | -      | - | -      | - |
| Stage 2              | -      | -     | -      | - | 895    | - | -      | - |

| Approach             | EB  | WB  | NB | SB |
|----------------------|-----|-----|----|----|
| HCM Control Delay, s | 9.8 | 9.8 | 0  | 0  |
| HCM LOS              | A   | A   |    |    |

| Minor Lane/Major Mvmt | NBT | EBLn1 | WBLn1 | SBT |
|-----------------------|-----|-------|-------|-----|
| Capacity (veh/h)      | -   | 895   | 895   | -   |
| HCM Lane V/C Ratio    | -   | 0.168 | 0.17  | -   |
| HCM Control Delay (s) | -   | 9.8   | 9.8   | -   |
| HCM Lane LOS          | -   | A     | A     | -   |
| HCM 95th %tile Q(veh) | -   | 0.6   | 0.6   | -   |

31: Brazos St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.8  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑    |      |      | ↑    | ↑    |      |
| Traffic Vol, veh/h       | 79   | 0    | 15   | 44   | 36   | 0    |
| Future Vol, veh/h        | 79   | 0    | 15   | 44   | 36   | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 1    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 58   | 58   | 58   | 58   | 58   | 58   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 136  | 0    | 26   | 76   | 62   | 0    |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 0      | 0 | 137    | 0 | 265    | 137   |
| Stage 1              | -      | - | -      | - | 137    | -     |
| Stage 2              | -      | - | -      | - | 128    | -     |
| Critical Hdwy        | -      | - | 4.12   | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | -      | - | 2.218  | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | -      | - | 1447   | - | 724    | 911   |
| Stage 1              | -      | - | -      | - | 890    | -     |
| Stage 2              | -      | - | -      | - | 898    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | -      | - | 1447   | - | 710    | 910   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 710    | -     |
| Stage 1              | -      | - | -      | - | 889    | -     |
| Stage 2              | -      | - | -      | - | 881    | -     |

| Approach             | EB | WB  | NB   |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0  | 1.9 | 10.6 |
| HCM LOS              |    |     | B    |




















| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 710   | -   | -   | 1447  | -   |
| HCM Lane V/C Ratio    | 0.087 | -   | -   | 0.018 | -   |
| HCM Control Delay (s) | 10.6  | -   | -   | 7.5   | 0   |
| HCM Lane LOS          | B     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 0.3   | -   | -   | 0.1   | -   |

32: San Jacinto Blvd & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background  
Timing Plan: PM

| Intersection             |        |        |      |      |      |      |   |
|--------------------------|--------|--------|------|------|------|------|---|
| Int Delay, s/veh         |        | 0.9    |      |      |      |      |   |
| Movement                 | EBL    | EBR    | NBL  | NBT  | SBT  | SBR  |   |
| Lane Configurations      |        | ↑      |      |      | ↑↑↑  | ↑    |   |
| Traffic Vol, veh/h       | 0      | 60     | 0    | 0    | 1015 | 30   |   |
| Future Vol, veh/h        | 0      | 60     | 0    | 0    | 1015 | 30   |   |
| Conflicting Peds, #/hr   | 0      | 0      | 0    | 0    | 0    | 15   |   |
| Sign Control             | Stop   | Stop   | Free | Free | Free | Free |   |
| RT Channelized           | -      | None   | -    | None | -    | None |   |
| Storage Length           | -      | 0      | -    | -    | -    | 50   |   |
| Veh in Median Storage, # | 0      | -      | -    | -    | 0    | -    |   |
| Grade, %                 | 0      | -      | -    | 0    | 0    | -    |   |
| Peak Hour Factor         | 89     | 89     | 89   | 89   | 89   | 89   |   |
| Heavy Vehicles, %        | 2      | 2      | 2    | 2    | 2    | 2    |   |
| Mvmt Flow                | 0      | 67     | 0    | 0    | 1140 | 34   |   |
| Major/Minor              |        |        |      |      |      |      |   |
|                          | Minor2 | Major2 |      |      |      |      |   |
| Conflicting Flow All     | -      | 585    | -    |      |      |      | 0 |
| Stage 1                  | -      | -      | -    |      |      |      | - |
| Stage 2                  | -      | -      | -    |      |      |      | - |
| Critical Hdwy            | -      | 7.14   | -    |      |      |      | - |
| Critical Hdwy Stg 1      | -      | -      | -    |      |      |      | - |
| Critical Hdwy Stg 2      | -      | -      | -    |      |      |      | - |
| Follow-up Hdwy           | -      | 3.92   | -    |      |      |      | - |
| Pot Cap-1 Maneuver       | 0      | 389    | -    |      |      |      | - |
| Stage 1                  | 0      | -      | -    |      |      |      | - |
| Stage 2                  | 0      | -      | -    |      |      |      | - |
| Platoon blocked, %       |        |        | -    |      |      |      | - |
| Mov Cap-1 Maneuver       | -      | 383    | -    |      |      |      | - |
| Mov Cap-2 Maneuver       | -      | -      | -    |      |      |      | - |
| Stage 1                  | -      | -      | -    |      |      |      | - |
| Stage 2                  | -      | -      | -    |      |      |      | - |
|                          |        |        |      |      |      |      |   |
| Approach                 | EB     | SB     |      |      |      |      |   |
| HCM Control Delay, s     | 16.4   | 0      |      |      |      |      |   |
| HCM LOS                  | C      |        |      |      |      |      |   |
|                          |        |        |      |      |      |      |   |
| Minor Lane/Major Mvmt    | EBLn1  | SBT    | SBR  |      |      |      |   |
| Capacity (veh/h)         | 383    | -      | -    |      |      |      |   |
| HCM Lane V/C Ratio       | 0.176  | -      | -    |      |      |      |   |
| HCM Control Delay (s)    | 16.4   | -      | -    |      |      |      |   |
| HCM Lane LOS             | C      | -      | -    |      |      |      |   |
| HCM 95th %tile Q(veh)    | 0.6    | -      | -    |      |      |      |   |

1: Martin Luther King Jr. Blvd & Guadalupe St  
TIA for Texas Capitol Complex Master Plan 2018 Update

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     |  |  |   |   |  |  |   |   |   |  |  |  |
| Traffic Volume (vph)    | 66  | 749   | 313   | 0   | 527   | 318   | 0   | 0   | 0   | 285   | 681   | 129   |
| Future Volume (vph)     | 66  | 749   | 313   | 0   | 527   | 318   | 0   | 0   | 0   | 285   | 681   | 129   |
| Confl. Peds. (#/hr)     | 27  |   | 19  | 19  |   | 27  |   |   |   | 28  |   | 19  |
| Confl. Bikes (#/hr)     |   |   | 1   |   |   | 1   |   |   |   |   |   | 1   |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  |
| Adj. Flow (vph)         | 70  | 797   | 333   | 0   | 561   | 338   | 0   | 0   | 0   | 303   | 724   | 137   |
| Shared Lane Traffic (%) |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)   | 70  | 1130  | 0   | 0   | 561   | 338   | 0   | 0   | 0   | 303   | 724   | 137   |
| Turn Type               | Prot  | NA  |   |   | NA  | pm+ov   |   |   |   | pm+pt   | NA  | Perm  |
| Protected Phases        | 5   | 2   |   |   | 6   | 7   |   |   |   | 7   | 4   |   |
| Permitted Phases        |   |   |   |   |   | 6   |   |   |   | 4   |   | 4   |
| Detector Phase          | 5   | 2   |   |   | 6   | 7   |   |   |   | 7   | 4   | 4   |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     | 2.0   | 15.0  |   |   | 15.0  | 10.0  |   |   |   | 10.0  | 5.0   | 5.0   |
| Minimum Split (s)       | 7.0   | 27.0  |   |   | 34.0  | 15.0  |   |   |   | 15.0  | 32.0  | 32.0  |
| Total Split (s)         | 18.0  | 75.0  |   |   | 57.0  | 45.0  |   |   |   | 45.0  | 45.0  | 45.0  |
| Total Split (%)         | 15.0%   | 62.5%   |   |   | 47.5%   | 37.5%   |   |   |   | 37.5%   | 37.5%   | 37.5%   |
| Yellow Time (s)         | 4.0   | 4.0   |   |   | 4.0   | 4.0   |   |   |   | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |   |   | 1.0   | 1.0   |   |   |   | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |   |   | 0.0   | 0.0   |   |   |   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   | 5.0   |   |   | 5.0   | 5.0   |   |   |   | 5.0   | 5.0   | 5.0   |
| Lead/Lag                | Lag   |   |   |   | Lead  |   |   |   |   |   |   |   |
| Lead-Lag Optimize?      | Yes   |   |   |   | Yes   |   |   |   |   |   |   |   |
| Recall Mode             | None  | C-Max   |   |   | C-Max   | None  |   |   |   | None  | Max   | Max   |
| Act Effect Green (s)    | 11.6  | 70.0  |   |   | 55.6  | 95.6  |   |   |   | 40.0  | 40.0  | 40.0  |
| Actuated g/C Ratio      | 0.10  | 0.58  |   |   | 0.46  | 0.80  |   |   |   | 0.33  | 0.33  | 0.33  |
| v/c Ratio               | 0.41  | 0.57  |   |   | 0.34  | 0.27  |   |   |   | 0.51  | 0.61  | 0.24  |
| Control Delay           | 57.7  | 16.3  |   |   | 22.5  | 1.3   |   |   |   | 35.9  | 36.3  | 11.6  |
| Queue Delay             | 0.0   | 0.0   |   |   | 0.0   | 0.1   |   |   |   | 0.0   | 0.0   | 0.0   |
| Total Delay             | 57.7  | 16.3  |   |   | 22.5  | 1.3   |   |   |   | 35.9  | 36.3  | 11.6  |
| LOS                     | E   | B   |   |   | C   | A   |   |   |   | D   | D   | B   |
| Approach Delay          |   | 18.7  |   |   | 14.5  |   |   |   |   |   | 33.3  |   |
| Approach LOS            |   | B   |   |   | B   |   |   |   |   |   | C   |   |
| Queue Length 50th (ft)  | 51  | 260   |   |   | 146   | 0   |   |   |   | 188   | 246   | 23  |
| Queue Length 95th (ft)  | 99  | 323   |   |   | 206   | 31  |   |   |   | 278   | 311   | 70  |
| Internal Link Dist (ft) |   | 228   |   |   | 45  |   |   | 159   |   |   | 210   |   |
| Turn Bay Length (ft)    | 160   |   |   |   |   |   |   |   |   | 130   |   | 120   |
| Base Capacity (vph)     | 191   | 1970  |   |   | 1639  | 1274  |   |   |   | 590   | 1179  | 567   |
| Starvation Cap Reductn  | 0   | 0   |   |   | 0   | 140   |   |   |   | 0   | 0   | 0   |
| Spillback Cap Reductn   | 0   | 0   |   |   | 0   | 0   |   |   |   | 0   | 0   | 0   |
| Storage Cap Reductn     | 0   | 0   |   |   | 0   | 0   |   |   |   | 0   | 0   | 0   |
| Reduced v/c Ratio       | 0.37  | 0.57  |   |   | 0.34  | 0.30  |   |   |   | 0.51  | 0.61  | 0.24  |

## Intersection Summary

|   |
|---|
| Cycle Length: 120   |
| Actuated Cycle Length: 120  |
| Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green |
| Natural Cycle: 75   |

1: Martin Luther King Jr. Blvd & Guadalupe St  
TIA for Texas Capitol Complex Master Plan 2018 Update

Control Type: Actuated-Coordinated

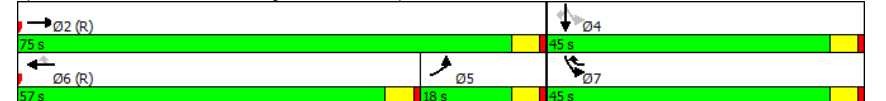
Maximum v/c Ratio: 0.61

|                                 |                     |
|---------------------------------|---------------------|
| Intersection Signal Delay: 22.7 | Intersection LOS: C |
|---------------------------------|---------------------|

Intersection Capacity Utilization 62.8% ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: Martin Luther King Jr. Blvd & Guadalupe St



3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

|                         | →     | ↖    | ↗    | ←     | ↖     | ↗     |
|-------------------------|-------|------|------|-------|-------|-------|
| Lane Group              | EBT   | EBR  | WBL  | WBT   | NBL   | NBR   |
| Lane Configurations     | ↑↑    |      |      | ↑↑    | ↑↑    | ↑     |
| Traffic Volume (vph)    | 1033  | 0    | 0    | 706   | 343   | 219   |
| Future Volume (vph)     | 1033  | 0    | 0    | 706   | 343   | 219   |
| Confl. Peds. (#/hr)     |       |      |      |       |       | 10    |
| Peak Hour Factor        | 0.86  | 0.86 | 0.86 | 0.86  | 0.86  | 0.86  |
| Adj. Flow (vph)         | 1201  | 0    | 0    | 821   | 399   | 255   |
| Shared Lane Traffic (%) |       |      |      |       |       |       |
| Lane Group Flow (vph)   | 1201  | 0    | 0    | 821   | 399   | 255   |
| Turn Type               | NA    |      |      | NA    | Prot  | Perm  |
| Protected Phases        | 2     |      |      | 6     | 8     |       |
| Permitted Phases        |       |      |      |       |       | 3     |
| Detector Phase          | 2     |      |      | 6     | 8     | 3     |
| Switch Phase            |       |      |      |       |       |       |
| Minimum Initial (s)     | 10.0  |      |      | 10.0  | 5.0   | 5.0   |
| Minimum Split (s)       | 30.0  |      |      | 15.0  | 10.0  | 29.0  |
| Total Split (s)         | 87.0  |      |      | 87.0  | 33.0  | 33.0  |
| Total Split (%)         | 72.5% |      |      | 72.5% | 27.5% | 27.5% |
| Yellow Time (s)         | 4.0   |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |       |      |      |       |       |       |
| Lead-Lag Optimize?      |       |      |      |       |       |       |
| Recall Mode             | C-Max |      |      | C-Max | Max   | Max   |
| Act Effect Green (s)    | 82.0  |      |      | 82.0  | 28.0  | 28.0  |
| Actuated g/C Ratio      | 0.68  |      |      | 0.68  | 0.23  | 0.23  |
| v/c Ratio               | 0.50  |      |      | 0.34  | 0.50  | 0.58  |
| Control Delay           | 8.7   |      |      | 5.7   | 59.4  | 47.5  |
| Queue Delay             | 0.2   |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             | 9.0   |      |      | 5.7   | 59.4  | 47.5  |
| LOS                     | A     |      |      | A     | E     | D     |
| Approach Delay          | 9.0   |      |      | 5.7   | 54.7  |       |
| Approach LOS            | A     |      |      | A     | D     |       |
| Queue Length 50th (ft)  | 155   |      |      | 61    | 166   | 141   |
| Queue Length 95th (ft)  | 167   |      |      | 66    | 201   | 161   |
| Internal Link Dist (ft) | 272   |      |      | 277   | 337   |       |
| Turn Bay Length (ft)    |       |      |      |       |       |       |
| Base Capacity (vph)     | 2418  |      |      | 2418  | 801   | 440   |
| Starvation Cap Reductn  | 486   |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   | 0     |      |      | 0     | 0     | 0     |
| Storage Cap Reductn     | 0     |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       | 0.62  |      |      | 0.34  | 0.50  | 0.58  |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green  
Natural Cycle: 60  
Control Type: Actuated-Coordinated

MS

Synchro 9 Report  
Page 3

3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 19.1

Intersection LOS: B

Intersection Capacity Utilization 56.9%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 3: Lavaca St & Martin Luther King Jr. Blvd

|          |      |
|----------|------|
| → Ø2 (R) | ↖ Ø3 |
| 87 s     | 33 s |
| ← Ø6 (R) | ↗ Ø8 |
| 87 s     | 33 s |

MS

Synchro 9 Report  
Page 4

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

|                         | →     | ↖    | ↗     | ←      | ↖    | ↗    |
|-------------------------|-------|------|-------|--------|------|------|
| Lane Group              | EBT   | EBR  | WBL   | WBT    | NBL  | NBR  |
| Lane Configurations     | ↖↗    |      | ↖     | ↖↗     |      |      |
| Traffic Volume (vph)    | 1089  | 0    | 8     | 956    | 0    | 0    |
| Future Volume (vph)     | 1089  | 0    | 8     | 956    | 0    | 0    |
| Confl. Peds. (#/hr)     |       | 6    | 6     |        | 1    |      |
| Confl. Bikes (#/hr)     |       | 1    |       |        |      |      |
| Peak Hour Factor        | 0.89  | 0.89 | 0.89  | 0.89   | 0.89 | 0.89 |
| Adj. Flow (vph)         | 1224  | 0    | 9     | 1074   | 0    | 0    |
| Shared Lane Traffic (%) |       |      |       |        |      |      |
| Lane Group Flow (vph)   | 1224  | 0    | 9     | 1074   | 0    | 0    |
| Turn Type               | NA    |      | pm+pt | NA     |      |      |
| Protected Phases        | 2     |      | 1     | 6      |      |      |
| Permitted Phases        |       |      | 6     |        |      |      |
| Detector Phase          | 2     |      | 1     | 6      |      |      |
| Switch Phase            |       |      |       |        |      |      |
| Minimum Initial (s)     | 15.0  |      | 1.0   | 5.0    |      |      |
| Minimum Split (s)       | 34.0  |      | 5.5   | 29.0   |      |      |
| Total Split (s)         | 107.0 |      | 13.0  | 120.0  |      |      |
| Total Split (%)         | 89.2% |      | 10.8% | 100.0% |      |      |
| Yellow Time (s)         | 4.0   |      | 3.5   | 4.0    |      |      |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0    |      |      |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0    |      |      |
| Total Lost Time (s)     | 5.0   |      | 4.5   | 5.0    |      |      |
| Lead/Lag                | Lead  |      | Lag   |        |      |      |
| Lead-Lag Optimize?      | Yes   |      | Yes   |        |      |      |
| Recall Mode             | C-Max |      | None  | C-Max  |      |      |
| Act Effect Green (s)    | 116.4 |      | 119.1 | 120.0  |      |      |
| Actuated g/C Ratio      | 0.97  |      | 0.99  | 1.00   |      |      |
| v/c Ratio               | 0.36  |      | 0.02  | 0.30   |      |      |
| Control Delay           | 0.5   |      | 0.0   | 0.2    |      |      |
| Queue Delay             | 0.0   |      | 0.0   | 0.0    |      |      |
| Total Delay             | 0.5   |      | 0.0   | 0.2    |      |      |
| LOS                     | A     |      | A     | A      |      |      |
| Approach Delay          | 0.5   |      |       | 0.2    |      |      |
| Approach LOS            | A     |      |       | A      |      |      |
| Queue Length 50th (ft)  | 0     |      | 0     | 0      |      |      |
| Queue Length 95th (ft)  | 47    |      | m0    | 0      |      |      |
| Internal Link Dist (ft) | 366   |      |       | 377    | 331  |      |
| Turn Bay Length (ft)    |       |      | 115   |        |      |      |
| Base Capacity (vph)     | 3433  |      | 501   | 3539   |      |      |
| Starvation Cap Reductn  | 0     |      | 0     | 0      |      |      |
| Spillback Cap Reductn   | 0     |      | 0     | 0      |      |      |
| Storage Cap Reductn     | 0     |      | 0     | 0      |      |      |
| Reduced v/c Ratio       | 0.36  |      | 0.02  | 0.30   |      |      |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 40

MS

Synchro 9 Report  
Page 5

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.36

Intersection Signal Delay: 0.4

Intersection LOS: A

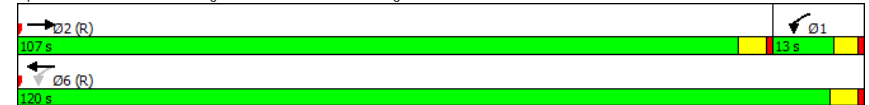
Intersection Capacity Utilization 34.3%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: N. Congress Ave & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 6

6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations     | ↰     | ↰↱    |      | ↰     | ↰↱    | ↰     |       | ↰     | ↰     | ↰     | ↰     | ↰     |
| Traffic Volume (vph)    | 137   | 734   | 226  | 288   | 948   | 135   | 19    | 0     | 35    | 42    | 1     | 10    |
| Future Volume (vph)     | 137   | 734   | 226  | 288   | 948   | 135   | 19    | 0     | 35    | 42    | 1     | 10    |
| Confl. Peds. (#/hr)     | 18    |       | 8    | 8     |       | 18    | 23    |       | 7     | 7     |       | 23    |
| Confl. Bikes (#/hr)     |       |       | 3    |       |       | 3     |       |       |       |       |       | 1     |
| Peak Hour Factor        | 0.84  | 0.84  | 0.84 | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  |
| Adj. Flow (vph)         | 163   | 874   | 269  | 343   | 1129  | 161   | 23    | 0     | 42    | 50    | 1     | 12    |
| Shared Lane Traffic (%) |       |       |      |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)   | 163   | 1143  | 0    | 343   | 1129  | 161   | 0     | 23    | 42    | 0     | 51    | 12    |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    | Perm  | Perm  | NA    | Perm  | Perm  | NA    | Perm  |
| Protected Phases        | 5     | 2     |      | 1     | 6     |       |       | 8     |       |       | 4     |       |
| Permitted Phases        | 2     |       |      | 6     |       | 6     | 8     |       | 8     | 4     |       | 4     |
| Detector Phase          | 5     | 2     |      | 1     | 6     | 6     | 8     | 8     | 8     | 4     | 4     | 4     |
| Switch Phase            |       |       |      |       |       |       |       |       |       |       |       |       |
| Minimum Initial (s)     | 1.0   | 10.0  |      | 1.0   | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  |
| Minimum Split (s)       | 5.5   | 22.0  |      | 5.5   | 28.0  | 28.0  | 22.0  | 22.0  | 22.0  | 28.0  | 28.0  | 28.0  |
| Total Split (s)         | 20.0  | 70.0  |      | 20.0  | 70.0  | 70.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  |
| Total Split (%)         | 16.7% | 58.3% |      | 16.7% | 58.3% | 58.3% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% |
| Yellow Time (s)         | 3.5   | 4.0   |      | 3.5   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Total Lost Time (s)     | 4.5   | 5.0   |      | 4.5   | 5.0   | 5.0   |       | 5.0   | 5.0   |       | 5.0   | 5.0   |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   | Lag   |       |       |       |       |       |       |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   | Yes   |       |       |       |       |       |       |
| Recall Mode             | None  | C-Max |      | None  | C-Max | C-Max | Max   | Max   | Max   | Max   | Max   | Max   |
| Act Effect Green (s)    | 75.2  | 65.7  |      | 85.5  | 71.5  | 71.5  |       | 25.0  | 25.0  |       | 25.0  | 25.0  |
| Actuated g/C Ratio      | 0.63  | 0.55  |      | 0.71  | 0.60  | 0.60  |       | 0.21  | 0.21  |       | 0.21  | 0.21  |
| v/c Ratio               | 0.48  | 0.61  |      | 0.89  | 0.54  | 0.18  |       | 0.08  | 0.11  |       | 0.18  | 0.03  |
| Control Delay           | 11.5  | 12.7  |      | 47.6  | 11.8  | 3.9   |       | 39.4  | 6.2   |       | 41.1  | 0.2   |
| Queue Delay             | 0.0   | 0.4   |      | 0.0   | 0.3   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Total Delay             | 11.5  | 13.1  |      | 47.6  | 12.1  | 3.9   |       | 39.4  | 6.2   |       | 41.1  | 0.2   |
| LOS                     | B     | B     |      | D     | B     | A     |       | D     | A     |       | D     | A     |
| Approach Delay          |       | 12.9  |      |       | 18.8  |       |       | 17.9  |       |       | 33.3  |       |
| Approach LOS            |       | B     |      |       | B     |       |       | B     |       |       | C     |       |
| Queue Length 50th (ft)  | 25    | 184   |      | 133   | 201   | 12    |       | 15    | 0     |       | 33    | 0     |
| Queue Length 95th (ft)  | 56    | 157   |      | #227  | 207   | 20    |       | 35    | 16    |       | 65    | 0     |
| Internal Link Dist (ft) |       | 377   |      |       | 273   |       |       | 135   |       |       | 212   |       |
| Turn Bay Length (ft)    | 160   |       |      | 100   |       | 100   |       |       | 100   |       |       |       |
| Base Capacity (vph)     | 434   | 1871  |      | 396   | 2109  | 915   |       | 271   | 367   |       | 284   | 360   |
| Starvation Cap Reductn  | 0     | 281   |      | 0     | 409   | 0     |       | 0     | 0     |       | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Reduced v/c Ratio       | 0.38  | 0.72  |      | 0.87  | 0.66  | 0.18  |       | 0.08  | 0.11  |       | 0.18  | 0.03  |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 80

MS

Synchro 9 Report  
Page 7

6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 16.5

Intersection LOS: B

Intersection Capacity Utilization 74.9%

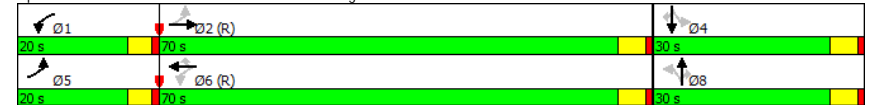
ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: Brazos St & Martin Luther King Jr. Blvd















MS

Synchro 9 Report  
Page 8

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     |   | ↑↑  |   | ↓   | ↑↑  |   |   |   |   | ↓   | ↑↑  | ↓   |
| Traffic Volume (vph)    | 0   | 709   | 166   | 491   | 1361  | 0   | 0   | 0   | 0   | 35  | 50  | 54  |
| Future Volume (vph)     | 0   | 709   | 166   | 491   | 1361  | 0   | 0   | 0   | 0   | 35  | 50  | 54  |
| Confl. Peds. (#/hr)     |   |   | 52  | 52  |   |   |   |   |   | 7   |   | 47  |
| Confl. Bikes (#/hr)     |   |   | 2   |   |   |   |   |   |   |   |   | 28  |
| Peak Hour Factor        | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  |
| Adj. Flow (vph)         | 0   | 762   | 178   | 528   | 1463  | 0   | 0   | 0   | 0   | 38  | 54  | 58  |
| Shared Lane Traffic (%) |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)   | 0   | 940   | 0   | 528   | 1463  | 0   | 0   | 0   | 0   | 38  | 54  | 58  |
| Turn Type               |   | NA  |   | pm+pt   | NA  |   |   |   |   | Perm  | NA  | Perm  |
| Protected Phases        |   | 2   |   | 1   | 6   |   |   |   |   |   | 4   |   |
| Permitted Phases        |   |   |   | 6   |   |   |   |   |   | 4   |   | 4   |
| Detector Phase          |   | 2   |   | 1   | 6   |   |   |   |   | 4   | 4   | 4   |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     |   | 5.0   |   |   | 10.0  |   |   |   |   | 10.0  | 10.0  | 10.0  |
| Minimum Split (s)       |   | 30.0  |   |   | 30.0  |   |   |   |   | 28.0  | 28.0  | 28.0  |
| Total Split (s)         |   | 62.0  |   |   | 92.0  |   |   |   |   | 28.0  | 28.0  | 28.0  |
| Total Split (%)         |   | 51.7%   |   |   | 76.7%   |   |   |   |   | 23.3%   | 23.3%   | 23.3%   |
| Yellow Time (s)         |   | 4.0   |   |   | 4.0   |   |   |   |   | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |   | 1.0   |   |   | 1.0   |   |   |   |   | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |   | 0.0   |   |   | 0.0   |   |   |   |   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |   | 5.0   |   |   | 5.0   |   |   |   |   | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |   | Lag   |   |   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?      |   | Yes   |   |   |   |   |   |   |   |   |   |   |
| Recall Mode             |   | C-Max   |   |   | C-Max   |   |   |   |   | Max   | Max   | Max   |
| Act Effect Green (s)    |   | 57.0  |   |   | 87.5  | 87.0  |   |   |   | 23.0  | 23.0  | 23.0  |
| Actuated g/C Ratio      |   | 0.48  |   |   | 0.73  | 0.72  |   |   |   | 0.19  | 0.19  | 0.19  |
| v/c Ratio               |   | 0.58  |   |   | 1.04  | 0.57  |   |   |   | 0.11  | 0.08  | 0.16  |
| Control Delay           |   | 15.3  |   |   | 60.5  | 5.9   |   |   |   | 41.3  | 40.3  | 1.8   |
| Queue Delay             |   | 0.4   |   |   | 24.4  | 0.5   |   |   |   | 0.0   | 0.0   | 0.0   |
| Total Delay             |   | 15.7  |   |   | 84.9  | 6.4   |   |   |   | 41.3  | 40.3  | 1.8   |
| LOS                     |   | B   |   |   | F   | A   |   |   |   | D   | D   | A   |
| Approach Delay          |   | 15.7  |   |   |   | 27.2  |   |   |   |   | 25.7  |   |
| Approach LOS            |   | B   |   |   |   | C   |   |   |   |   | C   |   |
| Queue Length 50th (ft)  |   | 112   |   |   | -275  | 123   |   |   |   | 25  | 18  | 0   |
| Queue Length 95th (ft)  |   | 127   |   |   | m#370   | m126  |   |   |   | 56  | 36  | 6   |
| Internal Link Dist (ft) |   | 273   |   |   |   | 321   |   |   | 343   |   | 244   |   |
| Turn Bay Length (ft)    |   |   |   |   | 120   |   |   |   |   | 100   |   | 100   |
| Base Capacity (vph)     |   | 1624  |   |   | 510   | 2565  |   |   |   | 335   | 678   | 354   |
| Starvation Cap Reductn  |   | 252   |   |   | 74  | 577   |   |   |   | 0   | 0   | 0   |
| Spillback Cap Reductn   |   | 0   |   |   | 0   | 13  |   |   |   | 0   | 0   | 0   |
| Storage Cap Reductn     |   | 0   |   |   | 0   | 0   |   |   |   | 0   | 0   | 0   |
| Reduced v/c Ratio       |   | 0.69  |   |   | 1.21  | 0.74  |   |   |   | 0.11  | 0.08  | 0.16  |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 90

MS

Synchro 9 Report  
Page 9

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Lane Group              | 01   | 09   |
|-------------------------|------|------|
| Lane Configurations     |      |      |
| Traffic Volume (vph)    |      |      |
| Future Volume (vph)     |      |      |
| Confl. Peds. (#/hr)     |      |      |
| Confl. Bikes (#/hr)     |      |      |
| Peak Hour Factor        |      |      |
| Adj. Flow (vph)         |      |      |
| Shared Lane Traffic (%) |      |      |
| Lane Group Flow (vph)   |      |      |
| Turn Type               |      |      |
| Protected Phases        | 1    | 9    |
| Permitted Phases        |      |      |
| Detector Phase          |      |      |
| Switch Phase            |      |      |
| Minimum Initial (s)     | 1.0  | 5.0  |
| Minimum Split (s)       | 5.5  | 9.5  |
| Total Split (s)         | 15.0 | 15.0 |
| Total Split (%)         | 13%  | 13%  |
| Yellow Time (s)         | 3.5  | 3.5  |
| All-Red Time (s)        | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |
| Total Lost Time (s)     |      |      |
| Lead/Lag                | Lead |      |
| Lead-Lag Optimize?      | Yes  |      |
| Recall Mode             | None | None |
| Act Effect Green (s)    |      |      |
| Actuated g/C Ratio      |      |      |
| v/c Ratio               |      |      |
| Control Delay           |      |      |
| Queue Delay             |      |      |
| Total Delay             |      |      |
| LOS                     |      |      |
| Approach Delay          |      |      |
| Approach LOS            |      |      |
| Queue Length 50th (ft)  |      |      |
| Queue Length 95th (ft)  |      |      |
| Internal Link Dist (ft) |      |      |
| Turn Bay Length (ft)    |      |      |
| Base Capacity (vph)     |      |      |
| Starvation Cap Reductn  |      |      |
| Spillback Cap Reductn   |      |      |
| Storage Cap Reductn     |      |      |
| Reduced v/c Ratio       |      |      |

Intersection Summary

MS

Synchro 9 Report  
Page 10

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.04

Intersection Signal Delay: 23.6

Intersection LOS: C

Intersection Capacity Utilization 88.5%

ICU Level of Service E

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

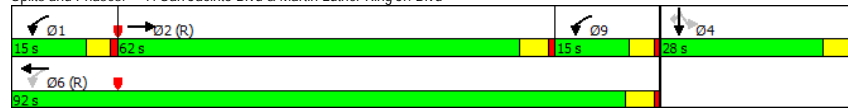
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: San Jacinto Blvd & Martin Luther King Jr. Blvd



8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↩     | ↩↩    |      |      | ↩↩    | ↩    | ↩     | ↩     | ↩     |      | ↩    | ↩    |
| Traffic Volume (vph)    | 149   | 523   | 0    | 0    | 1776  | 57   | 66    | 82    | 107   | 0    | 0    | 0    |
| Future Volume (vph)     | 149   | 523   | 0    | 0    | 1776  | 57   | 66    | 82    | 107   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     |       |       | 34   |      |       | 57   | 33    |       | 27    |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       | 4    |       |       | 4     |      |      |      |
| Peak Hour Factor        | 0.89  | 0.89  | 0.89 | 0.89 | 0.89  | 0.89 | 0.89  | 0.89  | 0.89  | 0.89 | 0.89 | 0.89 |
| Adj. Flow (vph)         | 167   | 588   | 0    | 0    | 1996  | 64   | 74    | 92    | 120   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      | 10%   |       |       |      |      |      |
| Lane Group Flow (vph)   | 167   | 588   | 0    | 0    | 2060  | 0    | 67    | 99    | 120   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 1.0   | 10.0  |      |      | 1.0   |      | 10.0  | 10.0  | 10.0  |      |      |      |
| Minimum Split (s)       | 5.5   | 26.0  |      |      | 5.5   |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (s)         | 15.0  | 94.0  |      |      | 79.0  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (%)         | 12.5% | 78.3% |      |      | 65.8% |      | 21.7% | 21.7% | 21.7% |      |      |      |
| Yellow Time (s)         | 3.5   | 4.0   |      |      | 3.5   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 4.5   | 5.0   |      |      | 4.5   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 89.5  | 89.0  |      |      | 75.1  |      | 21.0  | 21.0  | 21.0  |      |      |      |
| Actuated g/C Ratio      | 0.75  | 0.74  |      |      | 0.63  |      | 0.18  | 0.18  | 0.18  |      |      |      |
| v/c Ratio               | 0.80  | 0.22  |      |      | 0.94  |      | 0.24  | 0.32  | 0.34  |      |      |      |
| Control Delay           | 73.6  | 1.0   |      |      | 11.4  |      | 40.9  | 42.0  | 9.0   |      |      |      |
| Queue Delay             | 0.0   | 0.1   |      |      | 3.2   |      | 0.2   | 0.0   | 0.0   |      |      |      |
| Total Delay             | 73.6  | 1.1   |      |      | 14.6  |      | 41.1  | 42.0  | 9.0   |      |      |      |
| LOS                     | E     | A     |      |      | B     |      | D     | D     | A     |      |      |      |
| Approach Delay          |       | 17.1  |      |      | 14.6  |      |       | 28.0  |       |      |      |      |
| Approach LOS            |       | B     |      |      | B     |      |       | C     |       |      |      |      |
| Queue Length 50th (ft)  | 95    | 13    |      |      | 158   |      | 45    | 68    | 4     |      |      |      |
| Queue Length 95th (ft)  | #188  | 15    |      |      | m91   |      | m68   | m98   | m29   |      |      |      |
| Internal Link Dist (ft) |       | 321   |      |      | 675   |      |       | 350   |       |      | 106  |      |
| Turn Bay Length (ft)    | 120   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 217   | 2624  |      |      | 2201  |      | 277   | 307   | 358   |      |      |      |
| Starvation Cap Reductn  | 0     | 936   |      |      | 3     |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 89    |      | 37    | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.77  | 0.35  |      |      | 0.98  |      | 0.28  | 0.32  | 0.34  |      |      |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 100

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay: 16.5

Intersection LOS: B

Intersection Capacity Utilization 88.5%

ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Trinity St & Martin Luther King Jr. Blvd



18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

|                         | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations     |      | ↑    | ↑    |      | ↑    |      |      |      |      |      | ↑    | ↑    |
| Traffic Volume (vph)    | 0    | 14   | 46   | 51   | 9    | 0    | 0    | 0    | 0    | 127  | 1036 | 18   |
| Future Volume (vph)     | 0    | 14   | 46   | 51   | 9    | 0    | 0    | 0    | 0    | 127  | 1036 | 18   |
| Confl. Peds. (#/hr)     |      |      | 18   |      |      |      |      |      |      |      | 44   |      |
| Peak Hour Factor        | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Parking (#/hr)          |      | 0    |      |      |      |      |      |      |      |      |      |      |
| Adj. Flow (vph)         | 0    | 15   | 50   | 55   | 10   | 0    | 0    | 0    | 0    | 138  | 1126 | 20   |
| Shared Lane Traffic (%) |      |      |      |      |      |      |      |      |      |      |      |      |
| Lane Group Flow (vph)   | 0    | 15   | 50   | 0    | 65   | 0    | 0    | 0    | 0    | 0    | 1284 | 0    |
| Turn Type               |      | NA   | Perm | Perm | NA   |      |      |      |      | Perm | NA   |      |
| Protected Phases        |      | 4 12 |      |      | 4 12 |      |      |      |      |      | 2 10 |      |
| Permitted Phases        |      |      | 4 12 | 4 12 |      |      |      |      |      | 2 10 |      |      |
| Detector Phase          |      | 4 12 | 4 12 | 4 12 | 4 12 |      |      |      |      | 2 10 | 2 10 |      |
| Switch Phase            |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Initial (s)     |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Split (s)       |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (s)         |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (%)         |      |      |      |      |      |      |      |      |      |      |      |      |
| Yellow Time (s)         |      |      |      |      |      |      |      |      |      |      |      |      |
| All-Red Time (s)        |      |      |      |      |      |      |      |      |      |      |      |      |
| Lost Time Adjust (s)    |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Lost Time (s)     |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead/Lag                |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead-Lag Optimize?      |      |      |      |      |      |      |      |      |      |      |      |      |
| Recall Mode             |      |      |      |      |      |      |      |      |      |      |      |      |
| Act Effect Green (s)    |      | 21.4 | 21.4 |      | 21.4 |      |      |      |      |      | 83.3 |      |
| Actuated g/C Ratio      |      | 0.18 | 0.18 |      | 0.18 |      |      |      |      |      | 0.69 |      |
| v/c Ratio               |      | 0.05 | 0.15 |      | 0.26 |      |      |      |      |      | 0.54 |      |
| Control Delay           |      | 20.6 | 3.7  |      | 27.3 |      |      |      |      |      | 7.2  |      |
| Queue Delay             |      | 0.0  | 0.0  |      | 0.0  |      |      |      |      |      | 0.0  |      |
| Total Delay             |      | 20.6 | 3.7  |      | 27.3 |      |      |      |      |      | 7.2  |      |
| LOS                     |      | C    | A    |      | C    |      |      |      |      |      | A    |      |
| Approach Delay          |      | 7.6  |      |      | 27.3 |      |      |      |      |      | 7.2  |      |
| Approach LOS            |      | A    |      |      | C    |      |      |      |      |      | A    |      |
| Queue Length 50th (ft)  |      | 5    | 0    |      | 37   |      |      |      |      |      | 156  |      |
| Queue Length 95th (ft)  |      | 16   | 12   |      | 51   |      |      |      |      |      | 191  |      |
| Internal Link Dist (ft) |      | 177  |      |      | 244  |      |      | 271  |      |      | 262  |      |
| Turn Bay Length (ft)    |      |      |      |      |      |      |      |      |      |      |      |      |
| Base Capacity (vph)     |      | 754  | 714  |      | 626  |      |      |      |      |      | 2398 |      |
| Starvation Cap Reductn  |      | 0    | 0    |      | 0    |      |      |      |      |      | 0    |      |
| Spillback Cap Reductn   |      | 0    | 0    |      | 0    |      |      |      |      |      | 0    |      |
| Storage Cap Reductn     |      | 0    | 0    |      | 0    |      |      |      |      |      | 0    |      |
| Reduced v/c Ratio       |      | 0.02 | 0.07 |      | 0.10 |      |      |      |      |      | 0.54 |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green

Natural Cycle: 95

18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 23.0  | 23.0 | 22.5 | 22.5 |
| Total Split (s)         | 26.0  | 43.0 | 28.0 | 23.0 |
| Total Split (%)         | 22%   | 36%  | 23%  | 19%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effect Green (s)    |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 8.1

Intersection LOS: A

Intersection Capacity Utilization 73.6%

ICU Level of Service D






















Analysis Period (min) 15

Splits and Phases: 18: Guadalupe St & E. 17th St



19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

|  |  |  |  |  |  |  |  |    |  |  |  |  |  |  |  |
|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group   | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |   |   |   |
| Lane Configurations  |   |  |   |   |  |   |   |    |  |   |   |   |   |   |   |
| Traffic Volume (vph)                                       | 4   | 121   | 0   | 0   | 27  | 26  | 86  | 768   | 130   | 0   | 0   | 0   |   |   |   |
| Future Volume (vph)  | 4   | 121   | 0   | 0   | 27  | 26  | 86  | 768   | 130   | 0   | 0   | 0   |   |   |   |
| Confl. Peds. (#/hr)  | 30  |   |   |   |   |   |   | 32  |   |   |   |   |   |   |   |
| Peak Hour Factor   | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  |   |   |   |
| Parking (#/hr)   |   | 0   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Adj. Flow (vph)  | 5   | 146   | 0   | 0   | 33  | 31  | 104   | 925   | 157   | 0   | 0   | 0   |   |   |   |
| Shared Lane Traffic (%)                                    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)                                      | 0   | 151   | 0   | 0   | 64  | 0   | 0   | 1029  | 157   | 0   | 0   | 0   |   |   |   |
| Turn Type  | Perm  | NA  |   |   | NA  |   | Perm  | NA  | Perm  |   |   |   |   |   |   |
| Protected Phases   |   | 4 12  |   |   | 4 12  |   |   | 2 10  |   |   |   |   |   |   |   |
| Permitted Phases   | 4 12  |   |   |   |   |   | 2 10  |   | 2 10  |   |   |   |   |   |   |
| Detector Phase   | 4 12  | 4 12  |   |   | 4 12  |   | 2 10  | 2 10  | 2 10  |   |   |   |   |   |   |
| Switch Phase   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (%)  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Yellow Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| All-Red Time (s)   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lost Time Adjust (s)                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Lost Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead/Lag   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Recall Mode  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Act Effect Green (s)                                       |   | 25.6  |   |   | 25.6  |   |   | 70.4  | 70.4  |   |   |   |   |   |   |
| Actuated g/C Ratio   |   | 0.21  |   |   | 0.21  |   |   | 0.59  | 0.59  |   |   |   |   |   |   |
| v/c Ratio  |   | 0.43  |   |   | 0.16  |   |   | 0.35  | 0.18  |   |   |   |   |   |   |
| Control Delay  |   | 29.1  |   |   | 12.7  |   |   | 11.5  | 6.6   |   |   |   |   |   |   |
| Queue Delay  |   | 0.0   |   |   | 0.0   |   |   | 0.0   | 0.0   |   |   |   |   |   |   |
| Total Delay  |   | 29.1  |   |   | 12.7  |   |   | 11.6  | 6.6   |   |   |   |   |   |   |
| LOS  |   | C   |   |   | B   |   |   | B   | A   |   |   |   |   |   |   |
| Approach Delay   |   | 29.1  |   |   | 12.7  |   |   | 10.9  |   |   |   |   |   |   |   |
| Approach LOS   |   | C   |   |   | B   |   |   | B   |   |   |   |   |   |   |   |
| Queue Length 50th (ft)                                     |   | 64  |   |   | 14  |   |   | 161   | 47  |   |   |   |   |   |   |
| Queue Length 95th (ft)                                     |   | 84  |   |   | 29  |   |   | 114   | 47  |   |   |   |   |   |   |
| Internal Link Dist (ft)                                    |   | 244   |   |   | 319   |   |   | 272   |   |   | 254   |   |   |   |   |
| Turn Bay Length (ft)                                       |   |   |   |   |   |   |   |   | 100   |   |   |   |   |   |   |
| Base Capacity (vph)  |   | 595   |   |   | 644   |   |   | 3162  | 918   |   |   |   |   |   |   |
| Starvation Cap Reductn                                     |   | 0   |   |   | 0   |   |   | 471   | 0   |   |   |   |   |   |   |
| Spillback Cap Reductn                                      |   | 0   |   |   | 0   |   |   | 0   | 0   |   |   |   |   |   |   |
| Storage Cap Reductn  |   | 0   |   |   | 0   |   |   | 0   | 0   |   |   |   |   |   |   |
| Reduced v/c Ratio  |   | 0.25  |   |   | 0.10  |   |   | 0.38  | 0.17  |   |   |   |   |   |   |
| Intersection Summary                                       |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Cycle Length: 120  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Actuated Cycle Length: 120                                 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Natural Cycle: 100   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

MS

Synchro 9 Report  
Page 17

19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 26.0  | 28.0 | 22.5 | 22.5 |
| Total Split (s)         | 38.0  | 29.0 | 27.0 | 26.0 |
| Total Split (%)         | 32%   | 24%  | 23%  | 22%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effect Green (s)    |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

MS

Synchro 9 Report  
Page 18

19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.43

Intersection Signal Delay: 12.9

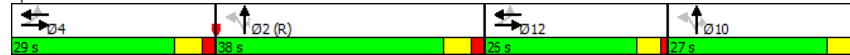
Intersection LOS: B

Intersection Capacity Utilization 39.2%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 19: Lavaca St & E. 17th St



28: Lavaca St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Lane Group  | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|---|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations                                       |      | ↑    |      |      | ↑    |      |      | ↑↑↑  | ↑    |      |      |      |
| Traffic Volume (vph)                                      | 4    | 18   | 0    | 0    | 17   | 14   | 86   | 955  | 48   | 0    | 0    | 0    |
| Future Volume (vph)                                       | 4    | 18   | 0    | 0    | 17   | 14   | 86   | 955  | 48   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)                                       |      |      |      |      |      | 10   | 57   |      |      |      |      |      |
| Confl. Bikes (#/hr)                                       |      |      |      |      |      | 2    |      |      |      |      |      |      |
| Peak Hour Factor  | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 |
| Parking (#/hr)  |      |      |      |      | 0    |      |      |      |      |      |      |      |
| Adj. Flow (vph)   | 5    | 21   | 0    | 0    | 20   | 17   | 102  | 1137 | 57   | 0    | 0    | 0    |
| Shared Lane Traffic (%)                                   |      |      |      |      |      |      |      |      |      |      |      |      |
| Lane Group Flow (vph)                                     | 0    | 26   | 0    | 0    | 37   | 0    | 0    | 1239 | 57   | 0    | 0    | 0    |
| Turn Type   | Perm | NA   |      |      | NA   |      | Perm | NA   | Perm |      |      |      |
| Protected Phases  |      | 4 12 |      |      | 4 12 |      |      | 2 10 |      |      |      |      |
| Permitted Phases  | 4 12 |      |      |      |      |      | 2 10 |      | 2 10 |      |      |      |
| Detector Phase  | 4 12 | 4 12 |      |      | 4 12 |      | 2 10 | 2 10 | 2 10 |      |      |      |
| Switch Phase  |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Initial (s)                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Split (s)   |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (s)   |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (%)   |      |      |      |      |      |      |      |      |      |      |      |      |
| Yellow Time (s)   |      |      |      |      |      |      |      |      |      |      |      |      |
| All-Red Time (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Lost Time Adjust (s)                                      |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Lost Time (s)                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead/Lag  |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead-Lag Optimize?  |      |      |      |      |      |      |      |      |      |      |      |      |
| Recall Mode   |      |      |      |      |      |      |      |      |      |      |      |      |
| Act Effct Green (s)                                       |      | 19.6 |      |      | 19.6 |      |      | 85.0 | 85.0 |      |      |      |
| Actuated g/C Ratio  |      | 0.16 |      |      | 0.16 |      |      | 0.71 | 0.71 |      |      |      |
| v/c Ratio   |      | 0.09 |      |      | 0.14 |      |      | 0.35 | 0.05 |      |      |      |
| Control Delay   |      | 24.3 |      |      | 14.9 |      |      | 2.6  | 0.2  |      |      |      |
| Queue Delay   |      | 0.0  |      |      | 0.0  |      |      | 0.1  | 0.0  |      |      |      |
| Total Delay   |      | 24.3 |      |      | 14.9 |      |      | 2.8  | 0.2  |      |      |      |
| LOS   |      | C    |      |      | B    |      |      | A    | A    |      |      |      |
| Approach Delay  |      | 24.3 |      |      | 14.9 |      |      | 2.7  |      |      |      |      |
| Approach LOS  |      | C    |      |      | B    |      |      | A    |      |      |      |      |
| Queue Length 50th (ft)                                    |      | 11   |      |      | 8    |      |      | 39   | 0    |      |      |      |
| Queue Length 95th (ft)                                    |      | m21  |      |      | m25  |      |      | 41   | m0   |      |      |      |
| Internal Link Dist (ft)                                   |      | 233  |      |      | 60   |      |      | 281  |      |      | 272  |      |
| Turn Bay Length (ft)                                      |      |      |      |      |      |      |      |      | 100  |      |      |      |
| Base Capacity (vph)                                       |      | 635  |      |      | 566  |      |      | 3539 | 1140 |      |      |      |
| Starvation Cap Reductn                                    |      | 0    |      |      | 0    |      |      | 1029 | 0    |      |      |      |
| Spillback Cap Reductn                                     |      | 0    |      |      | 0    |      |      | 0    | 0    |      |      |      |
| Storage Cap Reductn                                       |      | 0    |      |      | 0    |      |      | 0    | 0    |      |      |      |
| Reduced v/c Ratio   |      | 0.04 |      |      | 0.07 |      |      | 0.49 | 0.05 |      |      |      |
| <b>Intersection Summary</b>                               |      |      |      |      |      |      |      |      |      |      |      |      |
| Cycle Length: 120   |      |      |      |      |      |      |      |      |      |      |      |      |
| Actuated Cycle Length: 120                                |      |      |      |      |      |      |      |      |      |      |      |      |
| Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green |      |      |      |      |      |      |      |      |      |      |      |      |

28: Lavaca St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Confl. Bikes (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 28.0  | 32.0 | 21.0 | 20.0 |
| Total Split (s)         | 42.0  | 32.0 | 21.0 | 25.0 |
| Total Split (%)         | 35%   | 27%  | 18%  | 21%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effct Green (s)     |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

28: Lavaca St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.35

Intersection Signal Delay: 3.4

Intersection LOS: A

Intersection Capacity Utilization 45.3%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 28: Lavaca St & E. 16th St



34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑↑   |      | ↓     | ↑↑↑   |      |      |      |      |       | ↑↑↑   | ↓     |
| Traffic Volume (vph)    | 0    | 1641  | 317  | 195   | 947   | 0    | 0    | 0    | 0    | 101   | 669   | 73    |
| Future Volume (vph)     | 0    | 1641  | 317  | 195   | 947   | 0    | 0    | 0    | 0    | 101   | 669   | 73    |
| Confl. Peds. (#/hr)     |      |       | 31   | 31    |       |      |      |      |      | 29    |       |       |
| Confl. Bikes (#/hr)     |      |       |      |       |       | 1    |      |      |      |       |       | 20    |
| Peak Hour Factor        | 0.98 | 0.98  | 0.98 | 0.98  | 0.98  | 0.98 | 0.98 | 0.98 | 0.98 | 0.98  | 0.98  | 0.98  |
| Adj. Flow (vph)         | 0    | 1674  | 323  | 199   | 966   | 0    | 0    | 0    | 0    | 103   | 683   | 74    |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 1997  | 0    | 199   | 966   | 0    | 0    | 0    | 0    | 0     | 786   | 74    |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1 3   | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1 3   | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      |       | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       |      | 25.0  |      |       | 25.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (s)         |      | 56.0  |      |       | 84.0  |      |      |      |      | 36.0  | 36.0  | 36.0  |
| Total Split (%)         |      | 46.7% |      |       | 70.0% |      |      |      |      | 30.0% | 30.0% | 30.0% |
| Yellow Time (s)         |      | 4.0   |      |       | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      |       | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      |       | 0.0   |      |      |      |      |       | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      |       | 5.0   |      |      |      |      |       | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      |       |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      |       |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      |       | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effect Green (s)    |      | 51.2  |      |       | 79.0  |      |      |      |      |       | 31.0  | 31.0  |
| Actuated g/C Ratio      |      | 0.43  |      |       | 0.66  |      |      |      |      |       | 0.26  | 0.26  |
| v/c Ratio               |      | 0.94  |      |       | 0.61  |      |      |      |      |       | 0.61  | 0.16  |
| Control Delay           |      | 42.7  |      |       | 38.3  |      |      |      |      |       | 36.5  | 4.8   |
| Queue Delay             |      | 0.2   |      |       | 11.1  |      |      |      |      |       | 0.4   | 0.0   |
| Total Delay             |      | 42.9  |      |       | 49.4  |      |      |      |      |       | 36.9  | 4.8   |
| LOS                     |      | D     |      |       | D     |      |      |      |      |       | D     | A     |
| Approach Delay          |      | 42.9  |      |       |       | 11.5 |      |      |      |       | 34.1  |       |
| Approach LOS            |      | D     |      |       |       | B    |      |      |      |       | C     |       |
| Queue Length 50th (ft)  |      | 527   |      |       | 100   | 34   |      |      |      |       | 200   | 2     |
| Queue Length 95th (ft)  |      | #645  |      |       | 173   | 39   |      |      |      |       | 238   | 21    |
| Internal Link Dist (ft) |      | 262   |      |       |       | 240  |      |      | 197  |       | 285   |       |
| Turn Bay Length (ft)    |      |       |      |       | 50    |      |      |      |      |       |       | 100   |
| Base Capacity (vph)     |      | 2118  |      |       | 327   | 3347 |      |      |      |       | 1297  | 459   |
| Starvation Cap Reductn  |      | 0     |      |       | 100   | 931  |      |      |      |       | 0     | 0     |
| Spillback Cap Reductn   |      | 6     |      |       | 0     | 0    |      |      |      |       | 144   | 0     |
| Storage Cap Reductn     |      | 0     |      |       | 0     | 0    |      |      |      |       | 0     | 0     |
| Reduced v/c Ratio       |      | 0.95  |      |       | 0.88  | 0.40 |      |      |      |       | 0.68  | 0.16  |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 90

MS

Synchro 9 Report  
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34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Lane Group              | Ø1   | Ø3   |
|-------------------------|------|------|
| Lane Configurations     |      |      |
| Traffic Volume (vph)    |      |      |
| Future Volume (vph)     |      |      |
| Confl. Peds. (#/hr)     |      |      |
| Confl. Bikes (#/hr)     |      |      |
| Peak Hour Factor        |      |      |
| Adj. Flow (vph)         |      |      |
| Shared Lane Traffic (%) |      |      |
| Lane Group Flow (vph)   |      |      |
| Turn Type               |      |      |
| Protected Phases        | 1    | 3    |
| Permitted Phases        |      |      |
| Detector Phase          |      |      |
| Switch Phase            |      |      |
| Minimum Initial (s)     | 8.0  | 5.0  |
| Minimum Split (s)       | 13.0 | 10.0 |
| Total Split (s)         | 14.0 | 14.0 |
| Total Split (%)         | 12%  | 12%  |
| Yellow Time (s)         | 4.0  | 4.0  |
| All-Red Time (s)        | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |
| Total Lost Time (s)     |      |      |
| Lead/Lag                | Lead |      |
| Lead-Lag Optimize?      | Yes  |      |
| Recall Mode             | Min  | None |
| Act Effect Green (s)    |      |      |
| Actuated g/C Ratio      |      |      |
| v/c Ratio               |      |      |
| Control Delay           |      |      |
| Queue Delay             |      |      |
| Total Delay             |      |      |
| LOS                     |      |      |
| Approach Delay          |      |      |
| Approach LOS            |      |      |
| Queue Length 50th (ft)  |      |      |
| Queue Length 95th (ft)  |      |      |
| Internal Link Dist (ft) |      |      |
| Turn Bay Length (ft)    |      |      |
| Base Capacity (vph)     |      |      |
| Starvation Cap Reductn  |      |      |
| Spillback Cap Reductn   |      |      |
| Storage Cap Reductn     |      |      |
| Reduced v/c Ratio       |      |      |

Intersection Summary

MS

Synchro 9 Report  
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34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay: 31.9

Intersection LOS: C

Intersection Capacity Utilization 85.0%

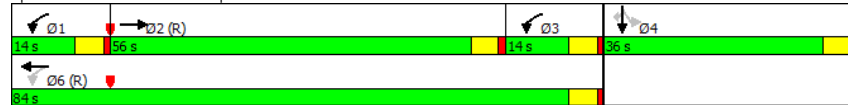
ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 34: Guadalupe St & W. 15th St



35: Lavaca St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↰     | ↰↰↰   |      |      | ↰↰↰   |      |       | ↰↰↰   | ↰     |      |      |      |
| Traffic Volume (vph)    | 273   | 1396  | 0    | 0    | 1024  | 127  | 128   | 657   | 155   | 0    | 0    | 0    |
| Future Volume (vph)     | 273   | 1396  | 0    | 0    | 1024  | 127  | 128   | 657   | 155   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 36    |       |      |      |       | 36   | 17    |       | 46    |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       |      |       |       | 10    |      |      |      |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94 | 0.94 | 0.94  | 0.94 | 0.94  | 0.94  | 0.94  | 0.94 | 0.94 | 0.94 |
| Adj. Flow (vph)         | 290   | 1485  | 0    | 0    | 1089  | 135  | 136   | 699   | 165   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 290   | 1485  | 0    | 0    | 1224  | 0    | 0     | 835   | 165   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 28.0  |      |      | 28.0  |      | 33.0  | 33.0  | 33.0  |      |      |      |
| Total Split (s)         | 19.0  | 79.0  |      |      | 60.0  |      | 41.0  | 41.0  | 41.0  |      |      |      |
| Total Split (%)         | 15.8% | 65.8% |      |      | 50.0% |      | 34.2% | 34.2% | 34.2% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 2.0   | 2.0   | 2.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 6.0   | 6.0   | 6.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 74.0  | 74.0  |      |      | 55.3  |      |       | 35.0  | 35.0  |      |      |      |
| Actuated g/C Ratio      | 0.62  | 0.62  |      |      | 0.46  |      |       | 0.29  | 0.29  |      |      |      |
| v/c Ratio               | 0.87  | 0.47  |      |      | 0.53  |      |       | 0.57  | 0.35  |      |      |      |
| Control Delay           | 56.5  | 2.6   |      |      | 10.8  |      |       | 37.9  | 22.5  |      |      |      |
| Queue Delay             | 3.4   | 0.3   |      |      | 0.1   |      |       | 0.0   | 0.0   |      |      |      |
| Total Delay             | 59.9  | 2.9   |      |      | 10.9  |      |       | 37.9  | 22.5  |      |      |      |
| LOS                     | E     | A     |      |      | B     |      |       | D     | C     |      |      |      |
| Approach Delay          |       | 12.2  |      |      | 10.9  |      |       | 35.4  |       |      |      |      |
| Approach LOS            |       | B     |      |      | B     |      |       | D     |       |      |      |      |
| Queue Length 50th (ft)  | 153   | 35    |      |      | 69    |      |       | 201   | 60    |      |      |      |
| Queue Length 95th (ft)  | m173  | m47   |      |      | 78    |      |       | 246   | 122   |      |      |      |
| Internal Link Dist (ft) |       | 240   |      |      | 335   |      |       | 116   |       |      | 281  |      |
| Turn Bay Length (ft)    | 50    |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 336   | 3135  |      |      | 2301  |      |       | 1465  | 470   |      |      |      |
| Starvation Cap Reductn  | 15    | 916   |      |      | 161   |      |       | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      |       | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      |       | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.90  | 0.67  |      |      | 0.57  |      |       | 0.57  | 0.35  |      |      |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 75

35: Lavaca St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 17.6

Intersection LOS: B

Intersection Capacity Utilization 85.0%

ICU Level of Service E

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 35: Lavaca St & W. 15th St



36: Colorado St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR    |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|--------|
| Lane Group              | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR    |
| Lane Configurations     | ↔     | ↔     | ↔    | ↔     | ↔     | ↔    | ↔     | ↔     | ↔    | ↔     | ↔     | ↔      |
| Traffic Volume (vph)    | 184   | 1352  | 51   | 70    | 1086  | 136  | 1     | 21    | 21   | 5     | 19    | 20     |
| Future Volume (vph)     | 184   | 1352  | 51   | 70    | 1086  | 136  | 1     | 21    | 21   | 5     | 19    | 20     |
| Confl. Peds. (#/hr)     | 6     |       | 80   | 80    |       | 6    | 4     |       | 33   | 33    |       | 4      |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94 | 0.94  | 0.94  | 0.94 | 0.94  | 0.94  | 0.94 | 0.94  | 0.94  | 0.94   |
| Adj. Flow (vph)         | 196   | 1438  | 54   | 74    | 1155  | 145  | 1     | 22    | 22   | 5     | 20    | 21     |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |      |       |       |        |
| Lane Group Flow (vph)   | 196   | 1492  | 0    | 74    | 1300  | 0    | 0     | 45    | 0    | 0     | 25    | 21     |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | Perm  | NA    |      | Perm  | NA    | custom |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |       | 4     |      |       | 8     |        |
| Permitted Phases        | 2     |       |      | 6     |       |      | 4     |       |      | 8     |       | 6      |
| Detector Phase          | 5     | 2     |      | 1     | 6     |      | 4     | 4     |      | 8     | 8     | 6      |
| Switch Phase            |       |       |      |       |       |      |       |       |      |       |       |        |
| Minimum Initial (s)     | 5.0   | 15.0  |      | 5.0   | 15.0  |      | 5.0   | 5.0   |      | 5.0   | 5.0   | 15.0   |
| Minimum Split (s)       | 10.0  | 22.0  |      | 10.0  | 30.0  |      | 32.0  | 32.0  |      | 32.0  | 32.0  | 30.0   |
| Total Split (s)         | 15.0  | 72.0  |      | 15.0  | 72.0  |      | 33.0  | 33.0  |      | 33.0  | 33.0  | 72.0   |
| Total Split (%)         | 12.5% | 60.0% |      | 12.5% | 60.0% |      | 27.5% | 27.5% |      | 27.5% | 27.5% | 60.0%  |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0    |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0    |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0    |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      | 5.0   | 5.0   |      | 5.0   | 5.0   | 5.0    |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   |      |       |       |      |       |       | Lag    |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |       |       |      |       |       | Yes    |
| Recall Mode             | None  | C-Max |      | None  | C-Max |      | Max   | Max   |      | Max   | Max   | C-Max  |
| Act Effct Green (s)     | 79.8  | 72.0  |      | 74.8  | 67.6  |      |       | 28.0  |      |       | 28.0  | 67.6   |
| Actuated g/C Ratio      | 0.66  | 0.60  |      | 0.62  | 0.56  |      |       | 0.23  |      |       | 0.23  | 0.56   |
| v/c Ratio               | 0.64  | 0.50  |      | 0.30  | 0.46  |      |       | 0.11  |      |       | 0.06  | 0.02   |
| Control Delay           | 29.2  | 4.3   |      | 9.7   | 8.5   |      |       | 22.8  |      |       | 36.4  | 0.1    |
| Queue Delay             | 0.0   | 0.1   |      | 0.0   | 0.1   |      |       | 0.0   |      |       | 0.0   | 0.0    |
| Total Delay             | 29.2  | 4.4   |      | 9.7   | 8.5   |      |       | 22.8  |      |       | 36.4  | 0.1    |
| LOS                     | C     | A     |      | A     | A     |      |       | C     |      |       | D     | A      |
| Approach Delay          |       | 7.3   |      |       | 8.6   |      |       | 22.8  |      |       | 19.8  |        |
| Approach LOS            |       | A     |      |       | A     |      |       | C     |      |       | B     |        |
| Queue Length 50th (ft)  | 44    | 71    |      | 9     | 149   |      |       | 14    |      |       | 15    | 0      |
| Queue Length 95th (ft)  | 113   | 92    |      | 22    | 206   |      |       | 46    |      |       | 39    | 0      |
| Internal Link Dist (ft) |       | 335   |      |       | 362   |      |       | 155   |      |       | 114   |        |
| Turn Bay Length (ft)    | 90    |       |      | 90    |       |      |       |       |      |       |       | 100    |
| Base Capacity (vph)     | 312   | 3006  |      | 285   | 2819  |      |       | 410   |      |       | 416   | 904    |
| Starvation Cap Reductn  | 0     | 371   |      | 0     | 365   |      |       | 0     |      |       | 0     | 0      |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 0     |      |       | 0     |      |       | 0     | 0      |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      |       | 0     |      |       | 0     | 0      |
| Reduced v/c Ratio       | 0.63  | 0.57  |      | 0.26  | 0.53  |      |       | 0.11  |      |       | 0.06  | 0.02   |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

36: Colorado St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 8.2

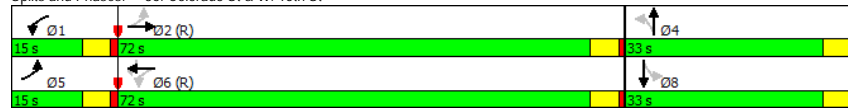
Intersection LOS: A

Intersection Capacity Utilization 79.9%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 36: Colorado St & W. 15th St



37: N. Congress Ave & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

|                         | →     | ↖    | ↗     | ←     | ↖    | ↗     |
|-------------------------|-------|------|-------|-------|------|-------|
| Lane Group              | EBT   | EBR  | WBL   | WBT   | NBL  | NBR   |
| Lane Configurations     | ↑↑↑   | ↑    | ↓     | ↑↑↑   | ↓    | ↑     |
| Traffic Volume (vph)    | 1352  | 27   | 18    | 1379  | 0    | 1     |
| Future Volume (vph)     | 1352  | 27   | 18    | 1379  | 0    | 1     |
| Confl. Peds. (#/hr)     |       | 29   | 29    |       | 12   | 20    |
| Confl. Bikes (#/hr)     |       |      |       |       |      | 12    |
| Peak Hour Factor        | 0.98  | 0.98 | 0.98  | 0.98  | 0.98 | 0.98  |
| Adj. Flow (vph)         | 1380  | 28   | 18    | 1407  | 0    | 1     |
| Shared Lane Traffic (%) |       |      |       |       |      |       |
| Lane Group Flow (vph)   | 1408  | 0    | 18    | 1407  | 0    | 1     |
| Turn Type               | NA    |      | pm+pt | NA    |      | Perm  |
| Protected Phases        | 2     |      | 1     | 6     |      |       |
| Permitted Phases        |       |      | 6     |       |      | 4     |
| Detector Phase          | 2     |      | 1     | 6     |      | 4     |
| Switch Phase            |       |      |       |       |      |       |
| Minimum Initial (s)     | 5.0   |      | 5.0   | 5.0   |      | 5.0   |
| Minimum Split (s)       | 25.0  |      | 10.0  | 25.0  |      | 33.0  |
| Total Split (s)         | 72.0  |      | 15.0  | 87.0  |      | 33.0  |
| Total Split (%)         | 60.0% |      | 12.5% | 72.5% |      | 27.5% |
| Yellow Time (s)         | 4.0   |      | 4.0   | 4.0   |      | 4.0   |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0   |      | 1.0   |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0   |      | 0.0   |
| Total Lost Time (s)     | 5.0   |      | 5.0   | 5.0   |      | 5.0   |
| Lead/Lag                | Lag   |      | Lead  |       |      |       |
| Lead-Lag Optimize?      | Yes   |      | Yes   |       |      |       |
| Recall Mode             | C-Max |      | None  | C-Max |      | Max   |
| Act Effect Green (s)    | 77.5  |      | 82.0  | 82.0  |      | 28.0  |
| Actuated g/C Ratio      | 0.65  |      | 0.68  | 0.68  |      | 0.23  |
| v/c Ratio               | 0.43  |      | 0.07  | 0.41  |      | 0.00  |
| Control Delay           | 3.3   |      | 5.2   | 7.0   |      | 0.0   |
| Queue Delay             | 0.0   |      | 0.0   | 0.1   |      | 0.0   |
| Total Delay             | 3.3   |      | 5.2   | 7.1   |      | 0.0   |
| LOS                     | A     |      | A     | A     |      | A     |
| Approach Delay          | 3.3   |      |       | 7.1   |      |       |
| Approach LOS            | A     |      |       | A     |      |       |
| Queue Length 50th (ft)  | 29    |      | 3     | 164   |      | 0     |
| Queue Length 95th (ft)  | 44    |      | m5    | 63    |      | 0     |
| Internal Link Dist (ft) | 362   |      |       | 356   | 125  |       |
| Turn Bay Length (ft)    |       |      | 100   |       |      |       |
| Base Capacity (vph)     | 3270  |      | 301   | 3474  |      | 489   |
| Starvation Cap Reductn  | 166   |      | 0     | 709   |      | 0     |
| Spillback Cap Reductn   | 0     |      | 0     | 0     |      | 0     |
| Storage Cap Reductn     | 0     |      | 0     | 0     |      | 0     |
| Reduced v/c Ratio       | 0.45  |      | 0.06  | 0.51  |      | 0.00  |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 70

37: N. Congress Ave & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.43

Intersection Signal Delay: 5.2 Intersection LOS: A

Intersection Capacity Utilization 58.4% ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 37: N. Congress Ave & W. 15th St



38: Brazos St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR   | SBL   | SBT   | SBR  |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|-------|-------|-------|------|
| Lane Configurations     | ↖ ↗   | ↖ ↗   | ↖ ↗  | ↖ ↗   | ↖ ↗   | ↖ ↗  | ↖ ↗   | ↖ ↗   | ↖ ↗   | ↖ ↗   | ↖ ↗   | ↖ ↗  |
| Traffic Volume (vph)    | 77    | 1088  | 47   | 26    | 1400  | 81   | 4     | 2     | 7     | 2     | 0     | 4    |
| Future Volume (vph)     | 77    | 1088  | 47   | 26    | 1400  | 81   | 4     | 2     | 7     | 2     | 0     | 4    |
| Confl. Peds. (#/hr)     | 1     |       | 9    | 9     |       | 1    | 9     |       | 4     | 4     |       | 9    |
| Confl. Bikes (#/hr)     |       |       |      |       |       | 1    |       |       |       |       |       | 17   |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97 |
| Adj. Flow (vph)         | 79    | 1122  | 48   | 27    | 1443  | 84   | 4     | 2     | 7     | 2     | 0     | 4    |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |       |       |       |      |
| Lane Group Flow (vph)   | 79    | 1170  | 0    | 27    | 1527  | 0    | 0     | 6     | 7     | 0     | 6     | 0    |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | Perm  | NA    | Perm  | Perm  | NA    |      |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |       | 4     |       |       | 8     |      |
| Permitted Phases        | 2     |       |      | 6     |       |      | 4     |       | 4     | 8     |       |      |
| Detector Phase          | 5     | 2     |      | 1     | 6     |      | 4     | 4     | 4     | 8     | 8     |      |
| Switch Phase            |       |       |      |       |       |      |       |       |       |       |       |      |
| Minimum Initial (s)     | 5.0   | 15.0  |      | 5.0   | 15.0  |      | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  |      |
| Minimum Split (s)       | 10.0  | 22.0  |      | 10.0  | 22.0  |      | 32.0  | 32.0  | 32.0  | 32.0  | 32.0  |      |
| Total Split (s)         | 15.0  | 78.0  |      | 10.0  | 73.0  |      | 32.0  | 32.0  | 32.0  | 32.0  | 32.0  |      |
| Total Split (%)         | 12.5% | 65.0% |      | 8.3%  | 60.8% |      | 26.7% | 26.7% | 26.7% | 26.7% | 26.7% |      |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |      |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      |       | 0.0   | 0.0   |       | 0.0   |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      |       | 5.0   | 5.0   |       | 5.0   |      |
| Lead/Lag                | Lead  | Lead  |      | Lag   | Lag   |      |       |       |       |       |       |      |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |       |       |       |       |       |      |
| Recall Mode             | None  | C-Max |      | None  | C-Max |      | None  | None  | None  | None  | None  |      |
| Act Effct Green (s)     | 103.0 | 105.0 |      | 99.6  | 100.6 |      |       | 10.0  | 10.0  |       | 10.0  |      |
| Actuated g/C Ratio      | 0.86  | 0.88  |      | 0.83  | 0.84  |      |       | 0.08  | 0.08  |       | 0.08  |      |
| v/c Ratio               | 0.26  | 0.27  |      | 0.07  | 0.36  |      |       | 0.05  | 0.03  |       | 0.03  |      |
| Control Delay           | 7.1   | 4.1   |      | 1.9   | 1.7   |      |       | 51.7  | 0.3   |       | 0.2   |      |
| Queue Delay             | 0.0   | 0.0   |      | 0.0   | 0.1   |      |       | 0.0   | 0.0   |       | 0.0   |      |
| Total Delay             | 7.1   | 4.2   |      | 1.9   | 1.7   |      |       | 51.7  | 0.3   |       | 0.2   |      |
| LOS                     | A     | A     |      | A     | A     |      |       | D     | A     |       | A     |      |
| Approach Delay          |       | 4.4   |      |       | 1.7   |      |       | 24.0  |       |       | 0.2   |      |
| Approach LOS            |       | A     |      |       | A     |      |       | C     |       |       | A     |      |
| Queue Length 50th (ft)  | 11    | 105   |      | 1     | 16    |      |       | 4     | 0     |       | 0     |      |
| Queue Length 95th (ft)  | 38    | 115   |      | 2     | 124   |      |       | 18    | 0     |       | 0     |      |
| Internal Link Dist (ft) |       | 356   |      |       | 297   |      |       | 199   |       |       | 273   |      |
| Turn Bay Length (ft)    | 100   |       |      | 40    |       |      |       |       | 50    |       |       |      |
| Base Capacity (vph)     | 348   | 4414  |      | 409   | 4225  |      |       | 346   | 434   |       | 413   |      |
| Starvation Cap Reductn  | 0     | 1121  |      | 0     | 845   |      |       | 0     | 0     |       | 0     |      |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 0     |      |       | 0     | 0     |       | 0     |      |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      |       | 0     | 0     |       | 0     |      |
| Reduced v/c Ratio       | 0.23  | 0.36  |      | 0.07  | 0.45  |      |       | 0.02  | 0.02  |       | 0.01  |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 65

38: Brazos St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 0.36  
Intersection Signal Delay: 3.0  
Intersection Capacity Utilization 57.6%  
Analysis Period (min) 15

Intersection LOS: A  
ICU Level of Service B

Splits and Phases: 38: Brazos St & W. 15th St



39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

|                         | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑↑   |      | ↓     | ↑↑↑   |      |      |      |      |       | ↑↑↑   | ↓     |
| Traffic Volume (vph)    | 0    | 830   | 343  | 157   | 1486  | 0    | 0    | 0    | 0    | 92    | 175   | 43    |
| Future Volume (vph)     | 0    | 830   | 343  | 157   | 1486  | 0    | 0    | 0    | 0    | 92    | 175   | 43    |
| Confl. Peds. (#/hr)     |      | 22    | 22   |       |       |      |      |      |      | 9     |       | 7     |
| Peak Hour Factor        | 0.99 | 0.99  | 0.99 | 0.99  | 0.99  | 0.99 | 0.99 | 0.99 | 0.99 | 0.99  | 0.99  | 0.99  |
| Adj. Flow (vph)         | 0    | 838   | 346  | 159   | 1501  | 0    | 0    | 0    | 0    | 93    | 177   | 43    |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 1184  | 0    | 159   | 1501  | 0    | 0    | 0    | 0    | 0     | 270   | 43    |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      | 3.0   | 10.0  |      |      |      |      | 7.0   | 7.0   | 7.0   |
| Minimum Split (s)       |      | 28.0  |      | 8.0   | 28.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (s)         |      | 68.0  |      | 20.0  | 88.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (%)         |      | 56.7% |      | 16.7% | 73.3% |      |      |      |      | 26.7% | 26.7% | 26.7% |
| Yellow Time (s)         |      | 4.0   |      | 4.0   | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      | 1.0   | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      | 0.0   | 0.0   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      | 5.0   | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      | Lead  |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      | Yes   |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      | None  | C-Max |      |      |      |      | None  | None  | None  |
| Act Effct Green (s)     |      | 85.2  |      | 98.0  | 98.0  |      |      |      |      | 12.0  | 12.0  | 12.0  |
| Actuated g/C Ratio      |      | 0.71  |      | 0.82  | 0.82  |      |      |      |      | 0.10  | 0.10  | 0.10  |
| v/c Ratio               |      | 0.34  |      | 0.41  | 0.36  |      |      |      |      | 0.54  | 0.20  | 0.20  |
| Control Delay           |      | 2.4   |      | 6.7   | 3.8   |      |      |      |      | 55.1  | 7.4   | 7.4   |
| Queue Delay             |      | 0.1   |      | 0.0   | 0.3   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             |      | 2.5   |      | 6.7   | 4.0   |      |      |      |      | 55.1  | 7.4   | 7.4   |
| LOS                     |      | A     |      | A     | A     |      |      |      |      | E     | A     | A     |
| Approach Delay          |      | 2.5   |      | 4.3   |       |      |      |      |      | 48.6  |       |       |
| Approach LOS            |      | A     |      | A     |       |      |      |      |      | D     |       |       |
| Queue Length 50th (ft)  |      | 0     |      | 24    | 94    |      |      |      |      | 73    | 0     | 0     |
| Queue Length 95th (ft)  |      | 0     |      | m30   | 101   |      |      |      |      | 101   | 20    | 20    |
| Internal Link Dist (ft) |      | 297   |      | 282   |       |      |      | 125  |      | 272   |       |       |
| Turn Bay Length (ft)    |      |       |      | 70    |       |      |      |      |      |       | 50    |       |
| Base Capacity (vph)     |      | 3444  |      | 476   | 4150  |      |      |      |      | 1120  | 398   |       |
| Starvation Cap Reductn  |      | 1007  |      | 0     | 1666  |      |      |      |      | 0     | 0     |       |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     |       |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     |       |
| Reduced v/c Ratio       |      | 0.49  |      | 0.33  | 0.60  |      |      |      |      | 0.24  | 0.11  |       |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green  
Natural Cycle: 70  
Control Type: Actuated-Coordinated

39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 8.0

Intersection LOS: A

Intersection Capacity Utilization 88.0%

ICU Level of Service E

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 39: San Jacinto Blvd & W. 15th St



40: Trinity St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↰     | ↱↱↱   |      |      | ↱↱↱   |      |       | ↱↱    | ↱     |      |      |      |
| Traffic Volume (vph)    | 218   | 752   | 0    | 0    | 1593  | 639  | 58    | 164   | 11    | 0    | 0    | 0    |
| Future Volume (vph)     | 218   | 752   | 0    | 0    | 1593  | 639  | 58    | 164   | 11    | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 1     |       |      |      |       | 1    | 3     |       | 6     |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       |      |       |       | 2     |      |      |      |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97 | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph)         | 225   | 775   | 0    | 0    | 1642  | 659  | 60    | 169   | 11    | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 225   | 775   | 0    | 0    | 2301  | 0    | 0     | 229   | 11    | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 1.0   | 10.0  |      |      | 1.0   |      | 10.0  | 10.0  | 10.0  |      |      |      |
| Minimum Split (s)       | 5.5   | 28.0  |      |      | 5.5   |      | 28.0  | 28.0  | 28.0  |      |      |      |
| Total Split (s)         | 20.0  | 92.0  |      |      | 72.0  |      | 28.0  | 28.0  | 28.0  |      |      |      |
| Total Split (%)         | 16.7% | 76.7% |      |      | 60.0% |      | 23.3% | 23.3% | 23.3% |      |      |      |
| Yellow Time (s)         | 3.5   | 4.0   |      |      | 3.5   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      |       | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 4.5   | 5.0   |      |      | 4.5   |      |       | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effct Green (s)     | 87.5  | 87.0  |      |      | 69.1  |      |       | 23.0  | 23.0  |      |      |      |
| Actuated g/C Ratio      | 0.73  | 0.72  |      |      | 0.58  |      |       | 0.19  | 0.19  |      |      |      |
| v/c Ratio               | 0.84  | 0.21  |      |      | 0.81  |      |       | 0.34  | 0.03  |      |      |      |
| Control Delay           | 62.8  | 3.7   |      |      | 8.4   |      |       | 43.7  | 0.2   |      |      |      |
| Queue Delay             | 0.0   | 0.1   |      |      | 0.1   |      |       | 0.0   | 0.0   |      |      |      |
| Total Delay             | 62.8  | 3.8   |      |      | 8.5   |      |       | 43.7  | 0.2   |      |      |      |
| LOS                     | E     | A     |      |      | A     |      |       | D     | A     |      |      |      |
| Approach Delay          |       | 17.1  |      |      | 8.5   |      |       | 41.7  |       |      |      |      |
| Approach LOS            |       | B     |      |      | A     |      |       | D     |       |      |      |      |
| Queue Length 50th (ft)  | 120   | 35    |      |      | 119   |      |       | 81    | 0     |      |      |      |
| Queue Length 95th (ft)  | #223  | 42    |      |      | m158  |      |       | 121   | 0     |      |      |      |
| Internal Link Dist (ft) |       | 282   |      |      | 657   |      |       | 149   |       |      | 621  |      |
| Turn Bay Length (ft)    | 100   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 289   | 3686  |      |      | 2850  |      |       | 668   | 344   |      |      |      |
| Starvation Cap Reductn  | 0     | 1674  |      |      | 54    |      |       | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      |       | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      |       | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.78  | 0.39  |      |      | 0.82  |      |       | 0.34  | 0.03  |      |      |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 90

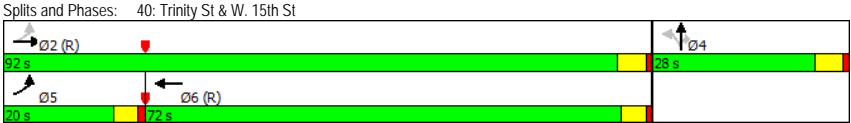
40: Trinity St & W. 15th St

TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site

Timing Plan: AM

|   |                        |
|---|------------------------|
| Control Type: Actuated-Coordinated                                |                        |
| Maximum v/c Ratio: 0.84   |                        |
| Intersection Signal Delay: 13.2                                   | Intersection LOS: B    |
| Intersection Capacity Utilization 88.0%                           | ICU Level of Service E |
| Analysis Period (min) 15  |                        |
| # 95th percentile volume exceeds capacity, queue may be longer.   |                        |
| Queue shown is maximum after two cycles.                          |                        |
| m Volume for 95th percentile queue is metered by upstream signal. |                        |



11: Colorado St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Intersection              |    |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 10 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | A  |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |      |      | ↕    |      |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 4    | 201  | 34   | 0    | 21   | 31   | 5    | 0    | 15   | 20   | 44   |
| Future Vol, veh/h   | 0    | 4    | 201  | 34   | 0    | 21   | 31   | 5    | 0    | 15   | 20   | 44   |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 5    | 228  | 39   | 0    | 24   | 35   | 6    | 0    | 17   | 23   | 50   |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB  | NB  |
|----------------------------|------|-----|-----|
| Opposing Approach          | WB   | EB  | SB  |
| Opposing Lanes             | 1    | 1   | 1   |
| Conflicting Approach Left  | SB   | NB  | EB  |
| Conflicting Lanes Left     | 1    | 1   | 1   |
| Conflicting Approach Right | NB   | SB  | WB  |
| Conflicting Lanes Right    | 1    | 1   | 1   |
| HCM Control Delay          | 10.5 | 8.8 | 8.5 |
| HCM LOS                    | B    | A   | A   |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 19%   | 2%    | 37%   | 2%    |
| Vol Thru, %            | 25%   | 84%   | 54%   | 91%   |
| Vol Right, %           | 56%   | 14%   | 9%    | 7%    |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 79    | 239   | 57    | 227   |
| LT Vol                 | 15    | 4     | 21    | 4     |
| Through Vol            | 20    | 201   | 31    | 207   |
| RT Vol                 | 44    | 34    | 5     | 16    |
| Lane Flow Rate         | 90    | 272   | 65    | 258   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.119 | 0.36  | 0.093 | 0.346 |
| Departure Headway (Hd) | 4.791 | 4.774 | 5.147 | 4.826 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 741   | 750   | 690   | 740   |
| Service Time           | 2.867 | 2.834 | 3.226 | 2.886 |
| HCM Lane V/C Ratio     | 0.121 | 0.363 | 0.094 | 0.349 |
| HCM Control Delay      | 8.5   | 10.5  | 8.8   | 10.4  |
| HCM Lane LOS           | A     | B     | A     | B     |
| HCM 95th-ile Q         | 0.4   | 1.6   | 0.3   | 1.5   |

11: Colorado St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 4    | 207  | 16   |
| Future Vol, veh/h   | 0    | 4    | 207  | 16   |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 5    | 235  | 18   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 10.4 |
| HCM LOS                    | B    |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Intersection              |     |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 8.6 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | A   |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |      |      | ↕    |      |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 0    | 251  | 0    | 0    | 0    | 54   | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h   | 0    | 0    | 251  | 0    | 0    | 0    | 54   | 0    | 0    | 0    | 0    | 0    |
| Peak Hour Factor    | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 289  | 0    | 0    | 0    | 62   | 0    | 0    | 0    | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB  | WB  | NB |
|----------------------------|-----|-----|----|
| Opposing Approach          | WB  | EB  | SB |
| Opposing Lanes             | 1   | 1   | 1  |
| Conflicting Approach Left  | SB  | NB  | EB |
| Conflicting Lanes Left     | 1   | 1   | 1  |
| Conflicting Approach Right | NB  | SB  | WB |
| Conflicting Lanes Right    | 1   | 1   | 1  |
| HCM Control Delay          | 8.9 | 7.5 | 0  |
| HCM LOS                    | A   | A   | -  |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 0%    | 0%    | 0%    | 0%    |
| Vol Thru, %            | 100%  | 100%  | 100%  | 0%    |
| Vol Right, %           | 0%    | 0%    | 0%    | 100%  |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 0     | 251   | 54    | 8     |
| LT Vol                 | 0     | 0     | 0     | 0     |
| Through Vol            | 0     | 251   | 54    | 0     |
| RT Vol                 | 0     | 0     | 0     | 8     |
| Lane Flow Rate         | 0     | 289   | 62    | 9     |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0     | 0.32  | 0.072 | 0.01  |
| Departure Headway (Hd) | 4.697 | 3.996 | 4.164 | 4.08  |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 0     | 900   | 853   | 882   |
| Service Time           | 2.697 | 2.014 | 2.222 | 2.08  |
| HCM Lane V/C Ratio     | 0     | 0.321 | 0.073 | 0.01  |
| HCM Control Delay      | 7.7   | 8.9   | 7.5   | 7.1   |
| HCM Lane LOS           | N     | A     | A     | A     |
| HCM 95th-tile Q        | 0     | 1.4   | 0.2   | 0     |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      |      | ↕    |
| Traffic Vol, veh/h  | 0    | 0    | 0    | 8    |
| Future Vol, veh/h   | 0    | 0    | 0    | 8    |
| Peak Hour Factor    | 0.87 | 0.87 | 0.87 | 0.87 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 0    | 9    |
| Number of Lanes     | 0    | 0    | 0    | 1    |

| Approach                   | SB  |
|----------------------------|-----|
| Opposing Approach          | NB  |
| Opposing Lanes             | 1   |
| Conflicting Approach Left  | WB  |
| Conflicting Lanes Left     | 1   |
| Conflicting Approach Right | EB  |
| Conflicting Lanes Right    | 1   |
| HCM Control Delay          | 7.1 |
| HCM LOS                    | A   |

14: Brazos St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 12.6 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |      |      | ↕    |      |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 117  | 79   | 7    | 0    | 17   | 115  | 106  | 0    | 20   | 0    | 0    |
| Future Vol, veh/h   | 0    | 117  | 79   | 7    | 0    | 17   | 115  | 106  | 0    | 20   | 0    | 0    |
| Peak Hour Factor    | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 148  | 100  | 9    | 0    | 22   | 146  | 134  | 0    | 25   | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB | NB  |
|----------------------------|------|----|-----|
| Opposing Approach          | WB   | EB | SB  |
| Opposing Lanes             | 1    | 1  | 1   |
| Conflicting Approach Left  | SB   | NB | EB  |
| Conflicting Lanes Left     | 1    | 1  | 1   |
| Conflicting Approach Right | NB   | SB | WB  |
| Conflicting Lanes Right    | 1    | 1  | 1   |
| HCM Control Delay          | 12.1 | 12 | 9.6 |
| HCM LOS                    | B    | B  | A   |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 100%  | 58%   | 7%    | 5%    |
| Vol Thru, %            | 0%    | 39%   | 48%   | 85%   |
| Vol Right, %           | 0%    | 3%    | 45%   | 9%    |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 20    | 203   | 238   | 262   |
| LT Vol                 | 20    | 117   | 17    | 14    |
| Through Vol            | 0     | 79    | 115   | 224   |
| RT Vol                 | 0     | 7     | 106   | 24    |
| Lane Flow Rate         | 25    | 257   | 301   | 332   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.044 | 0.393 | 0.428 | 0.498 |
| Departure Headway (Hd) | 6.245 | 5.503 | 5.114 | 5.403 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 571   | 653   | 702   | 667   |
| Service Time           | 4.305 | 3.544 | 3.154 | 3.442 |
| HCM Lane V/C Ratio     | 0.044 | 0.394 | 0.429 | 0.498 |
| HCM Control Delay      | 9.6   | 12.1  | 12    | 13.7  |
| HCM Lane LOS           | A     | B     | B     | B     |
| HCM 95th-ile Q         | 0.1   | 1.9   | 2.2   | 2.8   |

14: Brazos St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 14   | 224  | 24   |
| Future Vol, veh/h   | 0    | 14   | 224  | 24   |
| Peak Hour Factor    | 0.79 | 0.79 | 0.79 | 0.79 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 18   | 284  | 30   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 13.7 |
| HCM LOS                    | B    |

16: San Jacinto Blvd & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 14.1 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↶    |      |      |      | ↷    |      |      |      |      |      |
| Traffic Vol, veh/h  | 0    | 0    | 13   | 95   | 0    | 71   | 172  | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h   | 0    | 0    | 13   | 95   | 0    | 71   | 172  | 0    | 0    | 0    | 0    | 0    |
| Peak Hour Factor    | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 14   | 101  | 0    | 76   | 183  | 0    | 0    | 0    | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    |

| Approach                   |  | EB   | WB   |
|----------------------------|--|------|------|
| Opposing Approach          |  | WB   | EB   |
| Opposing Lanes             |  | 1    | 1    |
| Conflicting Approach Left  |  | SB   |      |
| Conflicting Lanes Left     |  | 3    | 0    |
| Conflicting Approach Right |  |      | SB   |
| Conflicting Lanes Right    |  | 0    | 3    |
| HCM Control Delay          |  | 10.4 | 15.3 |
| HCM LOS                    |  | B    | C    |

| Lane                   | EBLn1 | WBLn1 | SBLn1 | SBLn2 | SBLn3 |
|------------------------|-------|-------|-------|-------|-------|
| Vol Left, %            | 0%    | 29%   | 0%    | 0%    | 0%    |
| Vol Thru, %            | 12%   | 71%   | 100%  | 100%  | 0%    |
| Vol Right, %           | 88%   | 0%    | 0%    | 0%    | 100%  |
| Sign Control           | Stop  | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 108   | 243   | 318   | 318   | 68    |
| LT Vol                 | 0     | 71    | 0     | 0     | 0     |
| Through Vol            | 13    | 172   | 318   | 318   | 0     |
| RT Vol                 | 95    | 0     | 0     | 0     | 68    |
| Lane Flow Rate         | 115   | 259   | 338   | 338   | 72    |
| Geometry Grp           | 7     | 7     | 7     | 7     | 7     |
| Degree of Util (X)     | 0.196 | 0.476 | 0.541 | 0.541 | 0.066 |
| Departure Headway (Hd) | 6.14  | 6.631 | 5.761 | 5.761 | 3.302 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 584   | 543   | 628   | 628   | 1082  |
| Service Time           | 3.881 | 4.366 | 3.489 | 3.489 | 1.03  |
| HCM Lane V/C Ratio     | 0.197 | 0.477 | 0.538 | 0.538 | 0.067 |
| HCM Control Delay      | 10.4  | 15.3  | 15.1  | 15.1  | 6.3   |
| HCM Lane LOS           | B     | C     | C     | C     | A     |
| HCM 95th-tile Q        | 0.7   | 2.5   | 3.2   | 3.2   | 0.2   |

16: San Jacinto Blvd & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↶↷   | ↶↷   |
| Traffic Vol, veh/h  | 0    | 0    | 635  | 68   |
| Future Vol, veh/h   | 0    | 0    | 635  | 68   |
| Peak Hour Factor    | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 676  | 72   |
| Number of Lanes     | 0    | 0    | 2    | 1    |

| Approach                   |  | SB   |
|----------------------------|--|------|
| Opposing Approach          |  |      |
| Opposing Lanes             |  | 0    |
| Conflicting Approach Left  |  | WB   |
| Conflicting Lanes Left     |  | 1    |
| Conflicting Approach Right |  | EB   |
| Conflicting Lanes Right    |  | 1    |
| HCM Control Delay          |  | 14.2 |
| HCM LOS                    |  | B    |

20: Colorado St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 10.1 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | +    |      |      |      | +    |      |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 30   | 185  | 34   | 0    | 0    | 25   | 0    | 0    | 15   | 41   | 0    |
| Future Vol, veh/h   | 0    | 30   | 185  | 34   | 0    | 0    | 25   | 0    | 0    | 15   | 41   | 0    |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 34   | 210  | 39   | 0    | 0    | 28   | 0    | 0    | 17   | 47   | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB  | NB  |
|----------------------------|------|-----|-----|
| Opposing Approach          | WB   | EB  | SB  |
| Opposing Lanes             | 1    | 1   | 1   |
| Conflicting Approach Left  | SB   | NB  | EB  |
| Conflicting Lanes Left     | 1    | 1   | 1   |
| Conflicting Approach Right | NB   | SB  | WB  |
| Conflicting Lanes Right    | 1    | 1   | 1   |
| HCM Control Delay          | 10.5 | 8.4 | 8.6 |
| HCM LOS                    | B    | A   | A   |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 27%   | 12%   | 0%    | 0%    |
| Vol Thru, %            | 73%   | 74%   | 100%  | 88%   |
| Vol Right, %           | 0%    | 14%   | 0%    | 12%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 56    | 249   | 25    | 233   |
| LT Vol                 | 15    | 30    | 0     | 0     |
| Through Vol            | 41    | 185   | 25    | 206   |
| RT Vol                 | 0     | 34    | 0     | 27    |
| Lane Flow Rate         | 64    | 283   | 28    | 265   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.09  | 0.37  | 0.04  | 0.346 |
| Departure Headway (Hd) | 5.073 | 4.703 | 5.088 | 4.701 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 702   | 761   | 699   | 763   |
| Service Time           | 3.137 | 2.751 | 3.157 | 2.75  |
| HCM Lane V/C Ratio     | 0.091 | 0.372 | 0.04  | 0.347 |
| HCM Control Delay      | 8.6   | 10.5  | 8.4   | 10.2  |
| HCM Lane LOS           | A     | B     | A     | B     |
| HCM 95th-tile Q        | 0.3   | 1.7   | 0.1   | 1.5   |

20: Colorado St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 0    | 206  | 27   |
| Future Vol, veh/h   | 0    | 0    | 206  | 27   |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 234  | 31   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 10.2 |
| HCM LOS                    | B    |

24: E. 17th St & Brazos St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Intersection              |     |
|---------------------------|-----|
| Intersection Delay, s/veh | 8.4 |
| Intersection LOS          | A   |

| Movement            | EBU  | EBL  | EBT  | WBU  | WBT  | WBR  | SBU  | SBL  | SBR  |
|---------------------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↱    |      | ↱    |      |      | ↱↲   |      |
| Traffic Vol, veh/h  | 0    | 0    | 28   | 0    | 206  | 16   | 0    | 37   | 0    |
| Future Vol, veh/h   | 0    | 0    | 28   | 0    | 206  | 16   | 0    | 37   | 0    |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 32   | 0    | 234  | 18   | 0    | 42   | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 1    | 0    | 0    | 1    | 0    |

| Approach                   | EB  | WB  | SB |
|----------------------------|-----|-----|----|
| Opposing Approach          | WB  | EB  |    |
| Opposing Lanes             | 1   | 1   | 0  |
| Conflicting Approach Left  | SB  |     | WB |
| Conflicting Lanes Left     | 1   | 0   | 1  |
| Conflicting Approach Right |     | SB  | EB |
| Conflicting Lanes Right    | 0   | 1   | 1  |
| HCM Control Delay          | 7.4 | 8.6 | 8  |
| HCM LOS                    | A   | A   | A  |

| Lane                   | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, %            | 0%    | 0%    | 100%  |
| Vol Thru, %            | 100%  | 93%   | 0%    |
| Vol Right, %           | 0%    | 7%    | 0%    |
| Sign Control           | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 28    | 222   | 37    |
| LT Vol                 | 0     | 0     | 37    |
| Through Vol            | 28    | 206   | 0     |
| RT Vol                 | 0     | 16    | 0     |
| Lane Flow Rate         | 32    | 252   | 42    |
| Geometry Grp           | 1     | 1     | 1     |
| Degree of Util (X)     | 0.037 | 0.279 | 0.055 |
| Departure Headway (Hd) | 4.197 | 3.987 | 4.745 |
| Convergence, Y/N       | Yes   | Yes   | Yes   |
| Cap                    | 841   | 898   | 759   |
| Service Time           | 2.281 | 2.031 | 2.745 |
| HCM Lane V/C Ratio     | 0.038 | 0.281 | 0.055 |
| HCM Control Delay      | 7.4   | 8.6   | 8     |
| HCM Lane LOS           | A     | A     | A     |
| HCM 95th-ile Q         | 0.1   | 1.1   | 0.2   |

4: Colorado St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.2  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑↑   |      | ↑    | ↑↑   | ↑    |      |
| Traffic Vol, veh/h       | 1081 | 92   | 144  | 761  | 0    | 21   |
| Future Vol, veh/h        | 1081 | 92   | 144  | 761  | 0    | 21   |
| Conflicting Peds, #/hr   | 0    | 1    | 1    | 0    | 0    | 5    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | 40   | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 87   | 87   | 87   | 87   | 87   | 87   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 1243 | 106  | 166  | 875  | 0    | 24   |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |      |
|----------------------|--------|---|--------|---|--------|------|
| Conflicting Flow All | 0      | 0 | 1349   | 0 | 2064   | 680  |
| Stage 1              | -      | - | -      | - | 1296   | -    |
| Stage 2              | -      | - | -      | - | 768    | -    |
| Critical Hdwy        | -      | - | 4.14   | - | 6.84   | 6.94 |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.84   | -    |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.84   | -    |
| Follow-up Hdwy       | -      | - | 2.22   | - | 3.52   | 3.32 |
| Pot Cap-1 Maneuver   | -      | - | 506    | - | 47     | 393  |
| Stage 1              | -      | - | -      | - | 220    | -    |
| Stage 2              | -      | - | -      | - | 418    | -    |
| Platoon blocked, %   | -      | - | -      | - | -      | -    |
| Mov Cap-1 Maneuver   | -      | - | 504    | - | 31     | 391  |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 31     | -    |
| Stage 1              | -      | - | -      | - | 220    | -    |
| Stage 2              | -      | - | -      | - | 280    | -    |

| Approach             | EB | WB  | NB   |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0  | 2.5 | 14.8 |
| HCM LOS              |    |     | B    |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 391   | -   | -   | 504   | -   |
| HCM Lane V/C Ratio    | 0.062 | -   | -   | 0.328 | -   |
| HCM Control Delay (s) | 14.8  | -   | -   | 15.6  | -   |
| HCM Lane LOS          | B     | -   | -   | C     | -   |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | 1.4   | -   |

9: Guadalupe St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.3  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    | ↑    |      | ↑    |      |      |      |      | ↑↑   |      |      |
| Traffic Vol, veh/h       | 0    | 12   | 46   | 60   | 9    | 0    | 0    | 0    | 0    | 74   | 1074 | 18   |
| Future Vol, veh/h        | 0    | 12   | 46   | 60   | 9    | 0    | 0    | 0    | 0    | 74   | 1074 | 18   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 12   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 36   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 0    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 13   | 48   | 63   | 9    | 0    | 0    | 0    | 0    | 78   | 1131 | 19   |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |   |
|----------------------|--------|------|--------|------|--------|---|
| Conflicting Flow All | -      | 1332 | 623    | 739  | 1341   | - |
| Stage 1              | -      | 1332 | -      | 0    | 0      | - |
| Stage 2              | -      | 0    | -      | 739  | 1341   | - |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | - |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | - |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | - |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | - |
| Pot Cap-1 Maneuver   | 0      | 153  | 429    | 306  | 151    | 0 |
| Stage 1              | 0      | 222  | -      | -    | -      | 0 |
| Stage 2              | 0      | -    | -      | 375  | 219    | 0 |
| Platoon blocked, %   | -      | -    | -      | -    | -      | - |
| Mov Cap-1 Maneuver   | -      | 148  | 414    | 253  | 146    | - |
| Mov Cap-2 Maneuver   | -      | 148  | -      | 253  | 146    | - |
| Stage 1              | -      | 214  | -      | -    | -      | - |
| Stage 2              | -      | -    | -      | 312  | 211    | - |

| Approach             | EB   | WB   | SB |
|----------------------|------|------|----|
| HCM Control Delay, s | 18.3 | 27.6 |    |
| HCM LOS              | C    | D    |    |

| Minor Lane/Major Mvmt | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-------|-------|-----|-----|-----|
| Capacity (veh/h)      | 148   | 414   | 231   | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.085 | 0.117 | 0.314 | -   | -   | -   |
| HCM Control Delay (s) | 31.6  | 14.8  | 27.6  | -   | -   | -   |
| HCM Lane LOS          | D     | B     | D     | -   | -   | -   |
| HCM 95th %tile Q(veh) | 0.3   | 0.4   | 1.3   | -   | -   | -   |

10: Lavaca St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |       |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|-------|------|------|------|------|------|
| Int Delay, s/veh         | 4    |      |      |      |      |      |       |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL   | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      | ↕ ↕ ↕ |      |      |      |      |      |
| Traffic Vol, veh/h       | 4    | 69   | 0    | 0    | 34   | 18   | 86    | 530  | 171  | 0    | 0    | 0    |
| Future Vol, veh/h        | 4    | 69   | 0    | 0    | 34   | 18   | 86    | 530  | 171  | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 28   | 17    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free  | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -     | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 0     | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | -    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 94   | 94   | 94   | 94   | 94   | 94   | 94    | 94   | 94   | 94   | 94   | 94   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2     | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 4    | 73   | 0    | 0    | 36   | 19   | 91    | 564  | 182  | 0    | 0    | 0    |

| Major/Minor          | Minor2 |      | Minor1 |   | Major1 |      |
|----------------------|--------|------|--------|---|--------|------|
| Conflicting Flow All | 472    | 946  | -      | - | 855    | 401  |
| Stage 1              | 17     | 17   | -      | - | 838    | -    |
| Stage 2              | 455    | 929  | -      | - | 17     | -    |
| Critical Hdwy        | 6.44   | 6.54 | -      | - | 6.54   | 7.14 |
| Critical Hdwy Stg 1  | -      | -    | -      | - | 5.54   | -    |
| Critical Hdwy Stg 2  | 6.74   | 5.54 | -      | - | -      | -    |
| Follow-up Hdwy       | 3.82   | 4.02 | -      | - | 4.02   | 3.92 |
| Pot Cap-1 Maneuver   | 515    | 260  | 0      | 0 | 294    | 512  |
| Stage 1              | -      | -    | 0      | 0 | 380    | -    |
| Stage 2              | 507    | 344  | 0      | 0 | -      | -    |
| Platoon blocked, %   | -      | -    | -      | - | -      | -    |
| Mov Cap-1 Maneuver   | 411    | 235  | -      | - | 266    | 512  |
| Mov Cap-2 Maneuver   | 411    | 235  | -      | - | 266    | -    |
| Stage 1              | -      | -    | -      | - | 349    | -    |
| Stage 2              | 402    | 316  | -      | - | -      | -    |

| Approach             | EB   | WB   | NB  |
|----------------------|------|------|-----|
| HCM Control Delay, s | 26.9 | 18.6 | 0.9 |
| HCM LOS              | D    | C    |     |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1 | WBLn1 |
|-----------------------|-------|-----|-----|-------|-------|
| Capacity (veh/h)      | 1133  | -   | -   | 241   | 319   |
| HCM Lane V/C Ratio    | 0.081 | -   | -   | 0.322 | 0.173 |
| HCM Control Delay (s) | 8.5   | -   | -   | 26.9  | 18.6  |
| HCM Lane LOS          | A     | -   | -   | D     | C     |
| HCM 95th %tile Q(veh) | 0.3   | -   | -   | 1.3   | 0.6   |

MS

Synchro 9 Report  
Page 3

13: W. 18th St & Parking Dr. 2  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 3    |      |      |      |      |      |
| Movement                 | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
| Lane Configurations      |      | ↕    | ↕    |      | ↕    |      |
| Traffic Vol, veh/h       | 123  | 127  | 56   | 103  | 14   | 17   |
| Future Vol, veh/h        | 123  | 127  | 56   | 103  | 14   | 17   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | -    | 0    | 0    | -    | 0    | -    |
| Grade, %                 | -    | 0    | 0    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 134  | 138  | 61   | 112  | 15   | 18   |

| Major/Minor          | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 173    | 0      | 522    |
| Stage 1              | -      | -      | 117    |
| Stage 2              | -      | -      | 405    |
| Critical Hdwy        | 4.12   | -      | 6.42   |
| Critical Hdwy Stg 1  | -      | -      | 5.42   |
| Critical Hdwy Stg 2  | -      | -      | 5.42   |
| Follow-up Hdwy       | 2.218  | -      | 3.518  |
| Pot Cap-1 Maneuver   | 1404   | -      | 515    |
| Stage 1              | -      | -      | 908    |
| Stage 2              | -      | -      | 673    |
| Platoon blocked, %   | -      | -      | -      |
| Mov Cap-1 Maneuver   | 1404   | -      | 462    |
| Mov Cap-2 Maneuver   | -      | -      | 462    |
| Stage 1              | -      | -      | 908    |
| Stage 2              | -      | -      | 604    |

| Approach             | EB  | WB | SB   |
|----------------------|-----|----|------|
| HCM Control Delay, s | 3.9 | 0  | 10.9 |
| HCM LOS              |     |    | B    |

| Minor Lane/Major Mvmt | EBL   | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h)      | 1404  | -   | -   | -   | 639   |
| HCM Lane V/C Ratio    | 0.095 | -   | -   | -   | 0.053 |
| HCM Control Delay (s) | 7.8   | 0   | -   | -   | 10.9  |
| HCM Lane LOS          | A     | A   | -   | -   | B     |
| HCM 95th %tile Q(veh) | 0.3   | -   | -   | -   | 0.2   |

MS

Synchro 9 Report  
Page 4

15: Brazos St & Parking Dr. 1  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 3    |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | ↱    |      |      | ↱    | ↱    |      |
| Traffic Vol, veh/h       | 35   | 21   | 154  | 69   | 257  | 257  |
| Future Vol, veh/h        | 35   | 21   | 154  | 69   | 257  | 257  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 38   | 23   | 167  | 75   | 279  | 279  |

| Major/Minor          | Minor2 | Major1 | Major2 |   |     |
|----------------------|--------|--------|--------|---|-----|
| Conflicting Flow All | 829    | 419    | 559    | 0 | - 0 |
| Stage 1              | 419    | -      | -      | - | -   |
| Stage 2              | 410    | -      | -      | - | -   |
| Critical Hdwy        | 6.42   | 6.22   | 4.12   | - | -   |
| Critical Hdwy Stg 1  | 5.42   | -      | -      | - | -   |
| Critical Hdwy Stg 2  | 5.42   | -      | -      | - | -   |
| Follow-up Hdwy       | 3.518  | 3.318  | 2.218  | - | -   |
| Pot Cap-1 Maneuver   | 340    | 634    | 1012   | - | -   |
| Stage 1              | 664    | -      | -      | - | -   |
| Stage 2              | 670    | -      | -      | - | -   |
| Platoon blocked, %   |        |        |        | - | -   |
| Mov Cap-1 Maneuver   | 282    | 634    | 1012   | - | -   |
| Mov Cap-2 Maneuver   | 282    | -      | -      | - | -   |
| Stage 1              | 664    | -      | -      | - | -   |
| Stage 2              | 555    | -      | -      | - | -   |

| Approach             | EB   | NB  | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 17.2 | 6.4 | 0  |
| HCM LOS              | C    |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1012  | -   | 356   | -   | -   |
| HCM Lane V/C Ratio    | 0.165 | -   | 0.171 | -   | -   |
| HCM Control Delay (s) | 9.3   | 0   | 17.2  | -   | -   |
| HCM Lane LOS          | A     | A   | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.6   | -   | 0.6   | -   | -   |

MS

Synchro 9 Report  
Page 5

17: Trinity St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 5.5  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↱    |      |      | ↱    |      | ↱    | ↱    | ↱    |      |      |      |
| Traffic Vol, veh/h       | 27   | 0    | 0    | 0    | 0    | 0    | 341  | 219  | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 27   | 0    | 0    | 0    | 0    | 0    | 341  | 219  | 0    | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 5    | 0    | 0    | 0    | 6    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 115  | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | -    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 88   | 88   | 88   | 88   | 88   | 88   | 88   | 88   | 88   | 88   | 88   | 88   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 31   | 0    | 0    | 0    | 0    | 0    | 388  | 249  | 0    | 0    | 0    | 0    |

| Major/Minor          | Minor2 | Major2 | Major1 |       |           |
|----------------------|--------|--------|--------|-------|-----------|
| Conflicting Flow All | 882    | 1031   | -      | - - 0 | 7 0 -     |
| Stage 1              | 7      | 7      | -      | - - - | - - -     |
| Stage 2              | 875    | 1024   | -      | - - - | - - -     |
| Critical Hdwy        | 6.08   | 6.53   | -      | - - - | 4.13 - -  |
| Critical Hdwy Stg 1  | 5.43   | 5.53   | -      | - - - | - - -     |
| Critical Hdwy Stg 2  | 6.03   | 5.53   | -      | - - - | - - -     |
| Follow-up Hdwy       | 3.669  | 4.019  | -      | - - - | 2.219 - - |
| Pot Cap-1 Maneuver   | 335    | 232    | 0      | 0 - - | 1613 - 0  |
| Stage 1              | 974    | 890    | 0      | 0 - - | - - 0     |
| Stage 2              | 342    | 312    | 0      | 0 - - | - - 0     |
| Platoon blocked, %   |        |        |        | - - - | - - -     |
| Mov Cap-1 Maneuver   | 252    | 0      | -      | - - - | 1613 - -  |
| Mov Cap-2 Maneuver   | 252    | 0      | -      | - - - | - - -     |
| Stage 1              | 968    | 0      | -      | - - - | - - -     |
| Stage 2              | 258    | 0      | -      | - - - | - - -     |

| Approach             | EB   | WB | NB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 21.3 | 0  | 4.8 |
| HCM LOS              | C    |    |     |

| Minor Lane/Major Mvmt | NBL  | NBT | EBLn1 | WBT | WBR |
|-----------------------|------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1613 | -   | 252   | -   | -   |
| HCM Lane V/C Ratio    | 0.24 | -   | 0.122 | -   | -   |
| HCM Control Delay (s) | 7.9  | -   | 21.3  | -   | -   |
| HCM Lane LOS          | A    | -   | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.9  | -   | 0.4   | -   | -   |

MS

Synchro 9 Report  
Page 6

25: San Jacinto Blvd & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 6.7  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    | ↑    |      | ↑    |      |      |      |      | ↑↑   | ↑    | ↑    |
| Traffic Vol, veh/h       | 0    | 20   | 58   | 70   | 121  | 0    | 0    | 0    | 0    | 46   | 538  | 103  |
| Future Vol, veh/h        | 0    | 20   | 58   | 70   | 121  | 0    | 0    | 0    | 0    | 46   | 538  | 103  |
| Conflicting Peds, #/hr   | 0    | 0    | 22   | 0    | 0    | 0    | 0    | 0    | 0    | 4    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 40   | -    | -    | -    | -    | -    | -    | -    | -    | 50   |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 22   | 63   | 76   | 132  | 0    | 0    | 0    | 0    | 50   | 585  | 112  |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |   |
|----------------------|--------|------|--------|------|--------|---|
| Conflicting Flow All | -      | 689  | 314    | 429  | 689    | - |
| Stage 1              | -      | 685  | -      | 4    | 4      | - |
| Stage 2              | -      | 4    | -      | 425  | 685    | - |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | - |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | - |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | - |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | - |
| Pot Cap-1 Maneuver   | 0      | 367  | 682    | 510  | 367    | 0 |
| Stage 1              | 0      | 447  | -      | -    | -      | 0 |
| Stage 2              | 0      | -    | -      | 578  | 447    | 0 |
| Platoon blocked, %   | -      | -    | -      | -    | -      | - |
| Mov Cap-1 Maneuver   | -      | 347  | 682    | 422  | 347    | - |
| Mov Cap-2 Maneuver   | -      | 347  | -      | 422  | 347    | - |
| Stage 1              | -      | 424  | -      | -    | -      | - |
| Stage 2              | -      | -    | -      | 472  | 424    | - |

| Approach             | EB   | WB   | SB  |
|----------------------|------|------|-----|
| HCM Control Delay, s | 12.2 | 26.3 | 0.6 |
| HCM LOS              | B    | D    |     |

| Minor Lane/Major Mvmt | EBLn1 | EBLn2 | WBLn1 | SBL   | SBT | SBR |
|-----------------------|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h)      | 347   | 682   | 371   | 1616  | -   | -   |
| HCM Lane V/C Ratio    | 0.063 | 0.092 | 0.56  | 0.031 | -   | -   |
| HCM Control Delay (s) | 16.1  | 10.8  | 26.3  | 7.3   | 0.1 | -   |
| HCM Lane LOS          | C     | B     | D     | A     | A   | -   |
| HCM 95th %tile Q(veh) | 0.2   | 0.3   | 3.3   | 0.1   | -   | -   |

26: Trinity St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.6  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | ↓    |      | ↑↑↑  | ↑↑↑  |      |      |
| Traffic Vol, veh/h       | 35   | 0    | 103  | 527  | 0    | 0    |
| Future Vol, veh/h        | 35   | 0    | 103  | 527  | 0    | 0    |
| Conflicting Peds, #/hr   | 3    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | -    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 87   | 87   | 87   | 87   | 87   | 87   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 40   | 0    | 118  | 606  | 0    | 0    |

| Major/Minor          | Minor2 | Major1 |      |
|----------------------|--------|--------|------|
| Conflicting Flow All | 482    | -      | 0    |
| Stage 1              | 0      | -      | -    |
| Stage 2              | 482    | -      | -    |
| Critical Hdwy        | 5.74   | -      | 5.34 |
| Critical Hdwy Stg 1  | -      | -      | -    |
| Critical Hdwy Stg 2  | 6.04   | -      | -    |
| Follow-up Hdwy       | 3.82   | -      | 3.12 |
| Pot Cap-1 Maneuver   | 558    | 0      | -    |
| Stage 1              | -      | 0      | -    |
| Stage 2              | 536    | 0      | -    |
| Platoon blocked, %   | -      | -      | -    |
| Mov Cap-1 Maneuver   | 558    | -      | -    |
| Mov Cap-2 Maneuver   | 558    | -      | -    |
| Stage 1              | -      | -      | -    |
| Stage 2              | 536    | -      | -    |

| Approach             | EB | NB |
|----------------------|----|----|
| HCM Control Delay, s | 12 |    |
| HCM LOS              | B  |    |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 |
|-----------------------|-----|-----|-------|
| Capacity (veh/h)      | -   | -   | 558   |
| HCM Lane V/C Ratio    | -   | -   | 0.072 |
| HCM Control Delay (s) | -   | -   | 12    |
| HCM Lane LOS          | -   | -   | B     |
| HCM 95th %tile Q(veh) | -   | -   | 0.2   |

27: Guadalupe St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.8  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↱    |      |      | ↱    |      |      |      |      | ↱↲   | ↱    | ↲    |
| Traffic Vol, veh/h       | 0    | 12   | 46   | 40   | 8    | 0    | 0    | 0    | 0    | 23   | 1086 | 18   |
| Future Vol, veh/h        | 0    | 12   | 46   | 40   | 8    | 0    | 0    | 0    | 0    | 23   | 1086 | 18   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 20   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 24   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 13   | 50   | 43   | 9    | 0    | 0    | 0    | 0    | 25   | 1180 | 20   |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |   |          |
|----------------------|--------|------|--------|------|--------|---|----------|
| Conflicting Flow All | -      | 1254 | 634    | 667  | 1254   | - | 0 0 0    |
| Stage 1              | -      | 1254 | -      | 0    | 0      | - | - - -    |
| Stage 2              | -      | 0    | -      | 667  | 1254   | - | - - -    |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | - | 4.14 - - |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | - | - - -    |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | - | - - -    |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | - | 2.22 - - |
| Pot Cap-1 Maneuver   | 0      | 171  | 422    | 344  | 171    | 0 | - - -    |
| Stage 1              | 0      | 242  | -      | -    | -      | 0 | - - -    |
| Stage 2              | 0      | -    | -      | 414  | 242    | 0 | - - -    |
| Platoon blocked, %   | -      | -    | -      | -    | -      | - | - - -    |
| Mov Cap-1 Maneuver   | -      | 167  | 412    | 284  | 167    | - | - - -    |
| Mov Cap-2 Maneuver   | -      | 167  | -      | 284  | 167    | - | - - -    |
| Stage 1              | -      | 236  | -      | -    | -      | - | - - -    |
| Stage 2              | -      | -    | -      | 344  | 236    | - | - - -    |

| Approach             | EB   |  | WB   |  | SB |  |  |
|----------------------|------|--|------|--|----|--|--|
| HCM Control Delay, s | 19.2 |  | 22.8 |  |    |  |  |
| HCM LOS              | C    |  | C    |  |    |  |  |

| Minor Lane/Major Mvmt | EBLn1WBLn1 | SBL | SBT | SBR |
|-----------------------|------------|-----|-----|-----|
| Capacity (veh/h)      | 316 254    | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.2 0.205  | -   | -   | -   |
| HCM Control Delay (s) | 19.2 22.8  | -   | -   | -   |
| HCM Lane LOS          | C C        | -   | -   | -   |
| HCM 95th %tile Q(veh) | 0.7 0.8    | -   | -   | -   |

29: Colorado St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.4  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↱    |      |      | ↱    |      |      |      |      | ↱↲   | ↱    | ↲    |
| Traffic Vol, veh/h       | 3    | 25   | 33   | 9    | 7    | 5    | 15   | 280  | 8    | 2    | 46   | 16   |
| Future Vol, veh/h        | 3    | 25   | 33   | 9    | 7    | 5    | 15   | 280  | 8    | 2    | 46   | 16   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 15   | 3    | 0    | 0    | 0    | 0    | 3    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 4    | 32   | 42   | 11   | 9    | 6    | 19   | 354  | 10   | 3    | 58   | 20   |

| Major/Minor          | Minor2 |       | Minor1 |       | Major1 |       |       | Major2 |   |           |
|----------------------|--------|-------|--------|-------|--------|-------|-------|--------|---|-----------|
| Conflicting Flow All | 496    | 479   | 71     | 507   | 484    | 374   | 81    | 0      | 0 | 365 0 0   |
| Stage 1              | 76     | 76    | -      | 397   | 397    | -     | -     | -      | - | - - -     |
| Stage 2              | 420    | 403   | -      | 110   | 87     | -     | -     | -      | - | - - -     |
| Critical Hdwy        | 7.12   | 6.52  | 6.22   | 7.12  | 6.52   | 6.22  | 4.12  | -      | - | 4.12 - -  |
| Critical Hdwy Stg 1  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -     | -      | - | - - -     |
| Critical Hdwy Stg 2  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -     | -      | - | - - -     |
| Follow-up Hdwy       | 3.518  | 4.018 | 3.318  | 3.518 | 4.018  | 3.318 | 2.218 | -      | - | 2.218 - - |
| Pot Cap-1 Maneuver   | 484    | 486   | 991    | 476   | 483    | 672   | 1517  | -      | - | 1194 - -  |
| Stage 1              | 933    | 832   | -      | 629   | 603    | -     | -     | -      | - | - - -     |
| Stage 2              | 611    | 600   | -      | 895   | 823    | -     | -     | -      | - | - - -     |
| Platoon blocked, %   | -      | -     | -      | -     | -      | -     | -     | -      | - | - - -     |
| Mov Cap-1 Maneuver   | 458    | 475   | 988    | 426   | 472    | 662   | 1517  | -      | - | 1177 - -  |
| Mov Cap-2 Maneuver   | 458    | 475   | -      | 426   | 472    | -     | -     | -      | - | - - -     |
| Stage 1              | 915    | 827   | -      | 619   | 593    | -     | -     | -      | - | - - -     |
| Stage 2              | 578    | 590   | -      | 822   | 818    | -     | -     | -      | - | - - -     |

| Approach             | EB   |  | WB   |  | NB  |  |  | SB  |  |  |
|----------------------|------|--|------|--|-----|--|--|-----|--|--|
| HCM Control Delay, s | 11.2 |  | 12.9 |  | 0.4 |  |  | 0.3 |  |  |
| HCM LOS              | B    |  | B    |  |     |  |  |     |  |  |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1WBLn1        | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------------------|-----|-----|-----|
| Capacity (veh/h)      | 1517  | -   | -   | 659 483 1177      | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.013 | -   | -   | 0.117 0.055 0.002 | -   | -   | -   |
| HCM Control Delay (s) | 7.4   | 0   | -   | 11.2 12.9 8.1     | 0   | -   | -   |
| HCM Lane LOS          | A     | A   | -   | B B A A           | -   | -   | -   |
| HCM 95th %tile Q(veh) | 0     | -   | -   | 0.4 0.2 0         | -   | -   | -   |

30: N. Congress Ave  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 9    |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    |      |      | ↑    |      |      | ↑    |      |      | ↑    |      |
| Traffic Vol, veh/h       | 0    | 35   | 0    | 0    | 18   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 0    | 35   | 0    | 0    | 18   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 10   | 0    | 10   | 11   | 0    | 0    | 0    | 0    | 11   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 38   | 0    | 0    | 20   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |

| Major/Minor          | Minor2 |       |   | Minor1 |       |   | Major1 |   |   | Major2 |   |   |
|----------------------|--------|-------|---|--------|-------|---|--------|---|---|--------|---|---|
| Conflicting Flow All | -      | 1     | - | -      | 1     | - | -      | 0 | - | -      | - | 0 |
| Stage 1              | -      | 1     | - | -      | 0     | - | -      | - | - | -      | - | - |
| Stage 2              | -      | 0     | - | -      | 1     | - | -      | - | - | -      | - | - |
| Critical Hdwy        | -      | 6.52  | - | -      | 6.52  | - | -      | - | - | -      | - | - |
| Critical Hdwy Stg 1  | -      | 5.52  | - | -      | 5.52  | - | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | -      | 5.52  | - | -      | 5.52  | - | -      | - | - | -      | - | - |
| Follow-up Hdwy       | -      | 4.018 | - | -      | 4.018 | - | -      | - | - | -      | - | - |
| Pot Cap-1 Maneuver   | 0      | 895   | 0 | 0      | 895   | 0 | 0      | - | 0 | 0      | - | 0 |
| Stage 1              | 0      | 895   | 0 | 0      | -     | 0 | 0      | - | 0 | 0      | - | 0 |
| Stage 2              | 0      | -     | 0 | 0      | 895   | 0 | 0      | - | 0 | 0      | - | 0 |
| Platoon blocked, %   | -      | -     | - | -      | -     | - | -      | - | - | -      | - | - |
| Mov Cap-1 Maneuver   | -      | 895   | - | -      | 895   | - | -      | - | - | -      | - | - |
| Mov Cap-2 Maneuver   | -      | 895   | - | -      | 895   | - | -      | - | - | -      | - | - |
| Stage 1              | -      | 895   | - | -      | -     | - | -      | - | - | -      | - | - |
| Stage 2              | -      | -     | - | -      | 895   | - | -      | - | - | -      | - | - |

| Approach             | EB  |  | WB  |  | NB |  | SB |  |
|----------------------|-----|--|-----|--|----|--|----|--|
| HCM Control Delay, s | 9.2 |  | 9.1 |  | 0  |  | 0  |  |
| HCM LOS              | A   |  | A   |  |    |  |    |  |

| Minor Lane/Major Mvmt | NBT | EBLn1 | WBLn1 | SBT |
|-----------------------|-----|-------|-------|-----|
| Capacity (veh/h)      | -   | 895   | 895   | -   |
| HCM Lane V/C Ratio    | -   | 0.043 | 0.022 | -   |
| HCM Control Delay (s) | -   | 9.2   | 9.1   | -   |
| HCM Lane LOS          | -   | A     | A     | -   |
| HCM 95th %tile Q(veh) | -   | 0.1   | 0.1   | -   |

MS

Synchro 9 Report  
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31: Brazos St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.4  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑    |      |      | ↑    | ↑    |      |
| Traffic Vol, veh/h       | 34   | 0    | 3    | 12   | 14   | 0    |
| Future Vol, veh/h        | 34   | 0    | 3    | 12   | 14   | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 25   | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 83   | 83   | 83   | 83   | 83   | 83   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 41   | 0    | 4    | 14   | 17   | 0    |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 0      | 0 | 66     | 0 | 88     | 66    |
| Stage 1              | -      | - | -      | - | 66     | -     |
| Stage 2              | -      | - | -      | - | 22     | -     |
| Critical Hdwy        | -      | - | 4.12   | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | -      | - | 2.218  | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | -      | - | 1536   | - | 913    | 998   |
| Stage 1              | -      | - | -      | - | 957    | -     |
| Stage 2              | -      | - | -      | - | 1001   | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | -      | - | 1536   | - | 889    | 974   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 889    | -     |
| Stage 1              | -      | - | -      | - | 934    | -     |
| Stage 2              | -      | - | -      | - | 998    | -     |

| Approach             | EB |  | WB  |  | NB  |  |
|----------------------|----|--|-----|--|-----|--|
| HCM Control Delay, s | 0  |  | 1.5 |  | 9.1 |  |
| HCM LOS              |    |  |     |  | A   |  |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 889   | -   | -   | 1536  | -   |
| HCM Lane V/C Ratio    | 0.019 | -   | -   | 0.002 | -   |
| HCM Control Delay (s) | 9.1   | -   | -   | 7.3   | 0   |
| HCM Lane LOS          | A     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 0.1   | -   | -   | 0     | -   |

MS

Synchro 9 Report  
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32: San Jacinto Blvd & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: AM

| Intersection             |        |      |      |        |      |      |
|--------------------------|--------|------|------|--------|------|------|
| Int Delay, s/veh         | 1.4    |      |      |        |      |      |
| Movement                 | EBL    | EBR  | NBL  | NBT    | SBT  | SBR  |
| Lane Configurations      |        | ↑    |      |        | ↑↑↑  | ↑    |
| Traffic Vol, veh/h       | 0      | 44   | 0    | 0      | 333  | 33   |
| Future Vol, veh/h        | 0      | 44   | 0    | 0      | 333  | 33   |
| Conflicting Peds, #/hr   | 0      | 0    | 0    | 0      | 0    | 120  |
| Sign Control             | Stop   | Stop | Free | Free   | Free | Free |
| RT Channelized           | -      | None | -    | None   | -    | None |
| Storage Length           | -      | 0    | -    | -      | -    | 50   |
| Veh in Median Storage, # | 0      | -    | -    | -      | 0    | -    |
| Grade, %                 | 0      | -    | -    | 0      | 0    | -    |
| Peak Hour Factor         | 83     | 83   | 83   | 83     | 83   | 83   |
| Heavy Vehicles, %        | 2      | 2    | 2    | 2      | 2    | 2    |
| Mvmt Flow                | 0      | 53   | 0    | 0      | 401  | 40   |
| Major/Minor              |        |      |      |        |      |      |
|                          | Minor2 |      |      | Major2 |      |      |
| Conflicting Flow All     | -      | 321  | -    | -      | 0    | -    |
| Stage 1                  | -      | -    | -    | -      | -    | -    |
| Stage 2                  | -      | -    | -    | -      | -    | -    |
| Critical Hdwy            | -      | 7.14 | -    | -      | -    | -    |
| Critical Hdwy Stg 1      | -      | -    | -    | -      | -    | -    |
| Critical Hdwy Stg 2      | -      | -    | -    | -      | -    | -    |
| Follow-up Hdwy           | -      | 3.92 | -    | -      | -    | -    |
| Pot Cap-1 Maneuver       | 0      | 576  | -    | -      | -    | -    |
| Stage 1                  | 0      | -    | -    | -      | -    | -    |
| Stage 2                  | 0      | -    | -    | -      | -    | -    |
| Platoon blocked, %       | -      | -    | -    | -      | -    | -    |
| Mov Cap-1 Maneuver       | -      | 510  | -    | -      | -    | -    |
| Mov Cap-2 Maneuver       | -      | -    | -    | -      | -    | -    |
| Stage 1                  | -      | -    | -    | -      | -    | -    |
| Stage 2                  | -      | -    | -    | -      | -    | -    |
| Approach                 |        |      |      |        |      |      |
|                          | EB     |      |      | SB     |      |      |
| HCM Control Delay, s     | 12.9   | -    | -    | 0      | -    | -    |
| HCM LOS                  | B      | -    | -    | -      | -    | -    |
| Minor Lane/Major Mvmt    |        |      |      |        |      |      |
|                          | EBLn1  | SBT  | SBR  |        |      |      |
| Capacity (veh/h)         | 510    | -    | -    |        |      |      |
| HCM Lane V/C Ratio       | 0.104  | -    | -    |        |      |      |
| HCM Control Delay (s)    | 12.9   | -    | -    |        |      |      |
| HCM Lane LOS             | B      | -    | -    |        |      |      |
| HCM 95th %tile Q(veh)    | 0.3    | -    | -    |        |      |      |

1: Martin Luther King Jr. Blvd & Guadalupe St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

|                         | ←     | →     | ↖    | ↗    | ←     | ↖     | ↗    | →    | ↖    | ↗     | →     | ↖     | ↗ |
|-------------------------|-------|-------|------|------|-------|-------|------|------|------|-------|-------|-------|---|
| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR   | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |   |
| Lane Configurations     | ↖     | ↖     | ↖    |      | ↖     | ↖     |      |      |      | ↖     | ↖     | ↖     |   |
| Traffic Volume (vph)    | 149   | 362   | 129  | 0    | 1163  | 669   | 0    | 0    | 0    | 187   | 619   | 228   |   |
| Future Volume (vph)     | 149   | 362   | 129  | 0    | 1163  | 669   | 0    | 0    | 0    | 187   | 619   | 228   |   |
| Confl. Peds. (#/hr)     | 29    |       | 68   | 68   |       | 29    |      |      |      | 41    |       | 68    |   |
| Confl. Bikes (#/hr)     |       |       | 1    |      |       | 6     |      |      |      |       |       | 3     |   |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94 | 0.94 | 0.94  | 0.94  | 0.94 | 0.94 | 0.94 | 0.94  | 0.94  | 0.94  |   |
| Adj. Flow (vph)         | 159   | 385   | 137  | 0    | 1237  | 712   | 0    | 0    | 0    | 199   | 659   | 243   |   |
| Shared Lane Traffic (%) |       |       |      |      |       |       |      |      |      |       |       |       |   |
| Lane Group Flow (vph)   | 159   | 522   | 0    | 0    | 1237  | 712   | 0    | 0    | 0    | 199   | 659   | 243   |   |
| Turn Type               | Prot  | NA    |      |      | NA    | pm+ov |      |      |      | pm+pt | NA    | Perm  |   |
| Protected Phases        | 5     | 2     |      |      | 6     | 7     |      |      |      | 7     | 4     |       |   |
| Permitted Phases        |       |       |      |      | 6     |       |      |      |      | 4     |       | 4     |   |
| Detector Phase          | 5     | 2     |      |      | 6     | 7     |      |      |      | 7     | 4     | 4     |   |
| Switch Phase            |       |       |      |      |       |       |      |      |      |       |       |       |   |
| Minimum Initial (s)     | 2.0   | 15.0  |      |      | 15.0  | 10.0  |      |      |      | 10.0  | 5.0   | 5.0   |   |
| Minimum Split (s)       | 7.0   | 27.0  |      |      | 34.0  | 15.0  |      |      |      | 15.0  | 32.0  | 32.0  |   |
| Total Split (s)         | 25.0  | 92.0  |      |      | 67.0  | 43.0  |      |      |      | 43.0  | 43.0  | 43.0  |   |
| Total Split (%)         | 18.5% | 68.1% |      |      | 49.6% | 31.9% |      |      |      | 31.9% | 31.9% | 31.9% |   |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   | 4.0   |      |      |      | 4.0   | 4.0   | 4.0   |   |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   | 1.0   |      |      |      | 1.0   | 1.0   | 1.0   |   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   | 0.0   |      |      |      | 0.0   | 0.0   | 0.0   |   |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   | 5.0   |      |      |      | 5.0   | 5.0   | 5.0   |   |
| Lead/Lag                | Lag   |       |      |      | Lead  |       |      |      |      |       |       |       |   |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |       |      |      |      |       |       |       |   |
| Recall Mode             | None  | C-Max |      |      | C-Max | None  |      |      |      | None  | Max   | Max   |   |
| Act Effect Green (s)    | 20.0  | 87.0  |      |      | 62.0  | 100.0 |      |      |      | 38.0  | 38.0  | 38.0  |   |
| Actuated g/C Ratio      | 0.15  | 0.64  |      |      | 0.46  | 0.74  |      |      |      | 0.28  | 0.28  | 0.28  |   |
| v/c Ratio               | 0.61  | 0.25  |      |      | 0.76  | 0.60  |      |      |      | 0.40  | 0.66  | 0.48  |   |
| Control Delay           | 64.6  | 10.0  |      |      | 25.7  | 2.3   |      |      |      | 42.2  | 46.6  | 18.6  |   |
| Queue Delay             | 0.0   | 0.0   |      |      | 13.8  | 0.2   |      |      |      | 0.0   | 0.0   | 0.0   |   |
| Total Delay             | 64.6  | 10.0  |      |      | 39.5  | 2.5   |      |      |      | 42.2  | 46.6  | 18.6  |   |
| LOS                     | E     | A     |      |      | D     | A     |      |      |      | D     | D     | B     |   |
| Approach Delay          |       | 22.7  |      |      | 26.0  |       |      |      |      |       | 39.6  |       |   |
| Approach LOS            |       | C     |      |      | C     |       |      |      |      |       | D     |       |   |
| Queue Length 50th (ft)  | 132   | 90    |      |      | 423   | 20    |      |      |      | 142   | 268   | 63    |   |
| Queue Length 95th (ft)  | 209   | 117   |      |      | 498   | 43    |      |      |      | 216   | 337   | 147   |   |
| Internal Link Dist (ft) |       | 228   |      |      | 45    |       | 159  |      |      |       | 210   |       |   |
| Turn Bay Length (ft)    | 160   |       |      |      |       |       |      |      |      | 130   |       | 120   |   |
| Base Capacity (vph)     | 262   | 2122  |      |      | 1625  | 1177  |      |      |      | 498   | 996   | 503   |   |
| Starvation Cap Reductn  | 0     | 0     |      |      | 392   | 80    |      |      |      | 0     | 0     | 0     |   |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     | 0     |      |      |      | 0     | 0     | 0     |   |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     | 0     |      |      |      | 0     | 0     | 0     |   |
| Reduced v/c Ratio       | 0.61  | 0.25  |      |      | 1.00  | 0.65  |      |      |      | 0.40  | 0.66  | 0.48  |   |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green  
Natural Cycle: 80

MS

Synchro 9 Report  
Page 1

1: Martin Luther King Jr. Blvd & Guadalupe St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 29.4

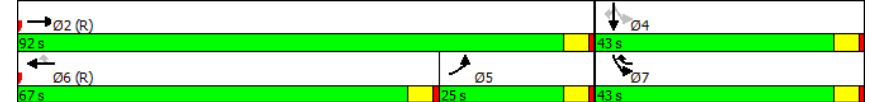
Intersection LOS: C

Intersection Capacity Utilization 75.4%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: Martin Luther King Jr. Blvd & Guadalupe St



MS

Synchro 9 Report  
Page 2

3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

|                         | →     | ↖    | ↗    | ←     | ↖     | ↗     |
|-------------------------|-------|------|------|-------|-------|-------|
| Lane Group              | EBT   | EBR  | WBL  | WBT   | NBL   | NBR   |
| Lane Configurations     | ↑↑    |      |      | ↑↑    | ↖↗    | ↖↗    |
| Traffic Volume (vph)    | 528   | 0    | 0    | 1297  | 857   | 238   |
| Future Volume (vph)     | 528   | 0    | 0    | 1297  | 857   | 238   |
| Confl. Peds. (#/hr)     |       |      |      |       |       | 79    |
| Peak Hour Factor        | 0.91  | 0.91 | 0.91 | 0.91  | 0.91  | 0.91  |
| Adj. Flow (vph)         | 580   | 0    | 0    | 1425  | 942   | 262   |
| Shared Lane Traffic (%) |       |      |      |       |       |       |
| Lane Group Flow (vph)   | 580   | 0    | 0    | 1425  | 942   | 262   |
| Turn Type               | NA    |      |      | NA    | Prot  | Perm  |
| Protected Phases        | 2     |      |      | 6     | 8     |       |
| Permitted Phases        |       |      |      |       |       | 3     |
| Detector Phase          | 2     |      |      | 6     | 8     | 3     |
| Switch Phase            |       |      |      |       |       |       |
| Minimum Initial (s)     | 10.0  |      |      | 10.0  | 5.0   | 5.0   |
| Minimum Split (s)       | 30.0  |      |      | 15.0  | 10.0  | 10.0  |
| Total Split (s)         | 86.0  |      |      | 86.0  | 49.0  | 49.0  |
| Total Split (%)         | 63.7% |      |      | 63.7% | 36.3% | 36.3% |
| Yellow Time (s)         | 4.0   |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |       |      |      |       |       |       |
| Lead-Lag Optimize?      |       |      |      |       |       |       |
| Recall Mode             | C-Max |      |      | C-Max | Max   | Max   |
| Act Effct Green (s)     | 81.0  |      |      | 81.0  | 44.0  | 44.0  |
| Actuated g/C Ratio      | 0.60  |      |      | 0.60  | 0.33  | 0.33  |
| v/c Ratio               | 0.27  |      |      | 0.67  | 0.84  | 0.42  |
| Control Delay           | 13.9  |      |      | 13.6  | 60.1  | 18.5  |
| Queue Delay             | 0.0   |      |      | 0.3   | 0.0   | 0.0   |
| Total Delay             | 13.9  |      |      | 13.9  | 60.1  | 18.5  |
| LOS                     | B     |      |      | B     | E     | B     |
| Approach Delay          | 13.9  |      |      | 13.9  | 51.1  |       |
| Approach LOS            | B     |      |      | B     | D     |       |
| Queue Length 50th (ft)  | 122   |      |      | 250   | 436   | 82    |
| Queue Length 95th (ft)  | 150   |      |      | 299   | 509   | 114   |
| Internal Link Dist (ft) | 272   |      |      | 277   | 337   |       |
| Turn Bay Length (ft)    |       |      |      |       |       |       |
| Base Capacity (vph)     | 2123  |      |      | 2123  | 1118  | 631   |
| Starvation Cap Reductn  | 0     |      |      | 146   | 0     | 0     |
| Spillback Cap Reductn   | 0     |      |      | 191   | 0     | 0     |
| Storage Cap Reductn     | 0     |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       | 0.27  |      |      | 0.74  | 0.84  | 0.42  |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green  
Natural Cycle: 55  
Control Type: Actuated-Coordinated

MS

Synchro 9 Report  
Page 3

3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 27.8

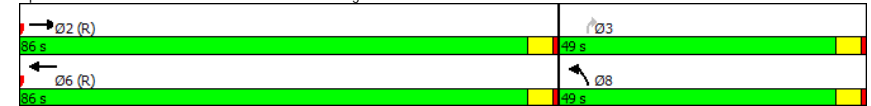
Intersection LOS: C

Intersection Capacity Utilization 87.2%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 3: Lavaca St & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 4

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

|                         | →     | ↖    | ↗     | ←      | ↖    | ↗    |
|-------------------------|-------|------|-------|--------|------|------|
| Lane Group              | EBT   | EBR  | WBL   | WBT    | NBL  | NBR  |
| Lane Configurations     | ↔↔    |      | ↖     | ↔↔     |      |      |
| Traffic Volume (vph)    | 738   | 0    | 12    | 1242   | 0    | 0    |
| Future Volume (vph)     | 738   | 0    | 12    | 1242   | 0    | 0    |
| Confl. Peds. (#/hr)     |       | 32   | 32    |        | 34   |      |
| Confl. Bikes (#/hr)     |       | 4    |       |        |      |      |
| Peak Hour Factor        | 0.94  | 0.94 | 0.94  | 0.94   | 0.94 | 0.94 |
| Adj. Flow (vph)         | 785   | 0    | 13    | 1321   | 0    | 0    |
| Shared Lane Traffic (%) |       |      |       |        |      |      |
| Lane Group Flow (vph)   | 785   | 0    | 13    | 1321   | 0    | 0    |
| Turn Type               | NA    |      | pm+pt | NA     |      |      |
| Protected Phases        | 2     |      | 1     | 6      |      |      |
| Permitted Phases        |       |      | 6     |        |      |      |
| Detector Phase          | 2     |      | 1     | 6      |      |      |
| Switch Phase            |       |      |       |        |      |      |
| Minimum Initial (s)     | 15.0  |      | 3.0   | 15.0   |      |      |
| Minimum Split (s)       | 34.0  |      | 8.0   | 20.0   |      |      |
| Total Split (s)         | 120.0 |      | 15.0  | 135.0  |      |      |
| Total Split (%)         | 88.9% |      | 11.1% | 100.0% |      |      |
| Yellow Time (s)         | 4.0   |      | 4.0   | 4.0    |      |      |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0    |      |      |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0    |      |      |
| Total Lost Time (s)     | 5.0   |      | 5.0   | 5.0    |      |      |
| Lead/Lag                | Lead  |      | Lag   |        |      |      |
| Lead-Lag Optimize?      | Yes   |      | Yes   |        |      |      |
| Recall Mode             | C-Max |      | None  | C-Max  |      |      |
| Act Effect Green (s)    | 127.0 |      | 133.0 | 135.0  |      |      |
| Actuated g/C Ratio      | 0.94  |      | 0.99  | 1.00   |      |      |
| v/c Ratio               | 0.24  |      | 0.02  | 0.37   |      |      |
| Control Delay           | 0.7   |      | 0.1   | 0.3    |      |      |
| Queue Delay             | 0.0   |      | 0.0   | 0.0    |      |      |
| Total Delay             | 0.7   |      | 0.1   | 0.3    |      |      |
| LOS                     | A     |      | A     | A      |      |      |
| Approach Delay          | 0.7   |      |       | 0.3    |      |      |
| Approach LOS            | A     |      |       | A      |      |      |
| Queue Length 50th (ft)  | 0     |      | 0     | 3      |      |      |
| Queue Length 95th (ft)  | 42    |      | m0    | 0      |      |      |
| Internal Link Dist (ft) | 366   |      |       | 377    | 331  |      |
| Turn Bay Length (ft)    |       |      | 115   |        |      |      |
| Base Capacity (vph)     | 3329  |      | 704   | 3539   |      |      |
| Starvation Cap Reductn  | 0     |      | 0     | 0      |      |      |
| Spillback Cap Reductn   | 0     |      | 0     | 0      |      |      |
| Storage Cap Reductn     | 0     |      | 0     | 0      |      |      |
| Reduced v/c Ratio       | 0.24  |      | 0.02  | 0.37   |      |      |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 45

MS

Synchro 9 Report  
Page 5

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.37

Intersection Signal Delay: 0.5

Intersection LOS: A

Intersection Capacity Utilization 38.5%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: N. Congress Ave & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 6

6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations     | ↰     | ↰↱    | ↱    | ↰     | ↰↱    | ↱     | ↰     | ↰     | ↰↱    | ↱     | ↰     | ↰↱    |
| Traffic Volume (vph)    | 87    | 731   | 31   | 44    | 870   | 131   | 124   | 23    | 300   | 96    | 25    | 244   |
| Future Volume (vph)     | 87    | 731   | 31   | 44    | 870   | 131   | 124   | 23    | 300   | 96    | 25    | 244   |
| Confl. Peds. (#/hr)     | 43    |       | 7    | 7     |       | 43    | 22    |       | 23    | 23    |       | 22    |
| Confl. Bikes (#/hr)     |       |       | 4    |       |       | 3     |       |       |       |       |       |       |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  |
| Adj. Flow (vph)         | 90    | 754   | 32   | 45    | 897   | 135   | 128   | 24    | 309   | 99    | 26    | 252   |
| Shared Lane Traffic (%) |       |       |      |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)   | 90    | 786   | 0    | 45    | 897   | 135   | 0     | 152   | 309   | 0     | 125   | 252   |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    | Perm  | Perm  | NA    | Perm  | Perm  | NA    | Perm  |
| Protected Phases        | 5     | 2     |      | 1     | 6     |       |       | 8     |       |       | 4     |       |
| Permitted Phases        | 2     |       |      | 6     |       | 6     | 8     |       | 8     | 4     |       | 4     |
| Detector Phase          | 5     | 2     |      | 1     | 6     | 6     | 8     | 8     | 8     | 4     | 4     | 4     |
| Switch Phase            |       |       |      |       |       |       |       |       |       |       |       |       |
| Minimum Initial (s)     | 3.0   | 10.0  |      | 3.0   | 10.0  | 10.0  | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       | 8.0   | 22.0  |      | 8.0   | 28.0  | 28.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  |
| Total Split (s)         | 15.0  | 89.0  |      | 15.0  | 89.0  | 89.0  | 31.0  | 31.0  | 31.0  | 31.0  | 31.0  | 31.0  |
| Total Split (%)         | 11.1% | 65.9% |      | 11.1% | 65.9% | 65.9% | 23.0% | 23.0% | 23.0% | 23.0% | 23.0% | 23.0% |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   | 5.0   |       | 5.0   | 5.0   |       | 5.0   | 5.0   |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   | Lag   |       |       |       |       |       |       |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   | Yes   |       |       |       |       |       |       |
| Recall Mode             | None  | C-Max |      | None  | C-Max | C-Max | Max   | Max   | Max   | Max   | Max   | Max   |
| Act Effect Green (s)    | 95.9  | 89.7  |      | 93.0  | 86.6  | 86.6  |       | 26.0  | 26.0  |       | 26.0  | 26.0  |
| Actuated g/C Ratio      | 0.71  | 0.66  |      | 0.69  | 0.64  | 0.64  |       | 0.19  | 0.19  |       | 0.19  | 0.19  |
| v/c Ratio               | 0.22  | 0.34  |      | 0.10  | 0.40  | 0.15  |       | 0.73  | 0.57  |       | 0.66  | 0.52  |
| Control Delay           | 5.1   | 7.2   |      | 2.0   | 5.4   | 2.0   |       | 72.3  | 9.5   |       | 68.1  | 11.3  |
| Queue Delay             | 0.0   | 0.3   |      | 0.0   | 0.3   | 0.0   |       | 0.0   | 0.2   |       | 0.0   | 0.0   |
| Total Delay             | 5.1   | 7.5   |      | 2.0   | 5.7   | 2.0   |       | 72.3  | 9.7   |       | 68.1  | 11.3  |
| LOS                     | A     | A     |      | A     | A     | A     |       | E     | A     |       | E     | B     |
| Approach Delay          |       | 7.2   |      |       | 5.0   |       |       | 30.3  |       |       | 30.1  |       |
| Approach LOS            |       | A     |      |       | A     |       |       | C     |       |       | C     |       |
| Queue Length 50th (ft)  | 15    | 102   |      | 2     | 113   | 10    |       | 127   | 0     |       | 102   | 11    |
| Queue Length 95th (ft)  | 24    | 108   |      | 5     | 154   | 28    |       | #231  | 84    |       | #187  | 90    |
| Internal Link Dist (ft) |       | 377   |      |       | 273   |       |       | 135   |       |       | 212   |       |
| Turn Bay Length (ft)    | 160   |       |      | 100   |       | 100   |       |       | 100   |       |       |       |
| Base Capacity (vph)     | 444   | 2334  |      | 519   | 2269  | 904   |       | 208   | 539   |       | 190   | 481   |
| Starvation Cap Reductn  | 0     | 808   |      | 0     | 666   | 0     |       | 0     | 0     |       | 0     | 0     |
| Spillback Cap Reductn   | 0     | 283   |      | 0     | 0     | 0     |       | 0     | 24    |       | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Reduced v/c Ratio       | 0.20  | 0.52  |      | 0.09  | 0.56  | 0.15  |       | 0.73  | 0.60  |       | 0.66  | 0.52  |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 70

MS

Synchro 9 Report  
Page 7

6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay: 13.3

Intersection LOS: B

Intersection Capacity Utilization 78.2%

ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: Brazos St & Martin Luther King Jr. Blvd




MS

Synchro 9 Report  
Page 8

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

|                         |  |       |      |       |       |      |      |      |      |       |       |       |
|-------------------------|---|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Group              | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
| Lane Configurations     |   | ↑↑    |      | ↓     | ↑↑    |      |      |      |      | ↓     | ↑↑    | ↑     |
| Traffic Volume (vph)    | 0   | 1066  | 29   | 335   | 1102  | 0    | 0    | 0    | 0    | 37    | 196   | 138   |
| Future Volume (vph)     | 0   | 1066  | 29   | 335   | 1102  | 0    | 0    | 0    | 0    | 37    | 196   | 138   |
| Confl. Peds. (#/hr)     |   |       | 36   | 36    |       |      |      |      |      | 71    |       | 17    |
| Confl. Bikes (#/hr)     |   |       | 7    |       |       |      |      |      |      |       |       | 14    |
| Peak Hour Factor        | 0.93  | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93 | 0.93 | 0.93 | 0.93  | 0.93  | 0.93  |
| Adj. Flow (vph)         | 0   | 1146  | 31   | 360   | 1185  | 0    | 0    | 0    | 0    | 40    | 211   | 148   |
| Shared Lane Traffic (%) |   |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0   | 1177  | 0    | 360   | 1185  | 0    | 0    | 0    | 0    | 40    | 211   | 148   |
| Turn Type               |   | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |   | 2     |      | 1     | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |   |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |   | 2     |      | 1     | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |   |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |   | 10.0  |      | 3.0   | 10.0  |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       |   | 32.0  |      | 8.0   | 30.0  |      |      |      |      | 30.0  | 30.0  | 30.0  |
| Total Split (s)         |   | 78.0  |      | 25.0  | 103.0 |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (%)         |   | 57.8% |      | 18.5% | 76.3% |      |      |      |      | 23.7% | 23.7% | 23.7% |
| Yellow Time (s)         |   | 4.0   |      | 4.0   | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |   | 1.0   |      | 1.0   | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |   | 0.0   |      | 0.0   | 0.0   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |   | 5.0   |      | 5.0   | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |   | Lag   |      | Lead  |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |   | Yes   |      | Yes   |       |      |      |      |      |       |       |       |
| Recall Mode             |   | C-Max |      | None  | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effect Green (s)    |   | 74.7  |      | 98.0  | 98.0  |      |      |      |      | 27.0  | 27.0  | 27.0  |
| Actuated g/C Ratio      |   | 0.55  |      | 0.73  | 0.73  |      |      |      |      | 0.20  | 0.20  | 0.20  |
| v/c Ratio               |   | 0.60  |      | 0.90  | 0.46  |      |      |      |      | 0.13  | 0.30  | 0.37  |
| Control Delay           |   | 15.7  |      | 60.2  | 4.3   |      |      |      |      | 45.8  | 47.3  | 13.6  |
| Queue Delay             |   | 0.5   |      | 1.8   | 0.3   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             |   | 16.2  |      | 62.0  | 4.5   |      |      |      |      | 45.8  | 47.3  | 13.6  |
| LOS                     |   | B     |      | E     | A     |      |      |      |      | D     | D     | B     |
| Approach Delay          |   | 16.2  |      |       | 17.9  |      |      |      |      |       | 34.6  |       |
| Approach LOS            |   | B     |      |       | B     |      |      |      |      |       | C     |       |
| Queue Length 50th (ft)  |   | 303   |      | 207   | 122   |      |      |      |      | 29    | 83    | 15    |
| Queue Length 95th (ft)  |   | 377   |      | m#337 | m127  |      |      |      |      | 64    | 122   | 76    |
| Internal Link Dist (ft) |   | 273   |      |       | 321   |      |      | 343  |      |       | 244   |       |
| Turn Bay Length (ft)    |   |       |      | 120   |       |      |      |      |      | 100   |       | 100   |
| Base Capacity (vph)     |   | 1949  |      | 418   | 2569  |      |      |      |      | 313   | 707   | 401   |
| Starvation Cap Reductn  |   | 351   |      | 13    | 626   |      |      |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   |   | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Storage Cap Reductn     |   | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       |   | 0.74  |      | 0.89  | 0.61  |      |      |      |      | 0.13  | 0.30  | 0.37  |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 80

MS

Synchro 9 Report  
Page 9

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 19.4

Intersection LOS: B

Intersection Capacity Utilization 82.4%

ICU Level of Service E

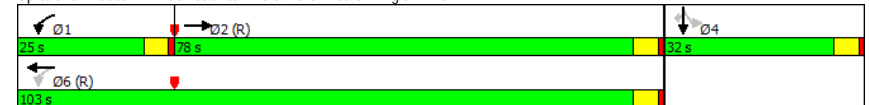
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: San Jacinto Blvd & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
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8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↩     | ↩↩    |      |      | ↩↩    |      | ↩     | ↩     | ↩     |      | ↓    | ↩    |
| Traffic Volume (vph)    | 83    | 1097  | 0    | 0    | 1176  | 51   | 214   | 314   | 482   | 0    | 0    | 0    |
| Future Volume (vph)     | 83    | 1097  | 0    | 0    | 1176  | 51   | 214   | 314   | 482   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     |       |       | 33   |      |       | 87   | 17    |       | 148   |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       | 4    |       |       | 12    |      |      |      |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97 | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph)         | 86    | 1131  | 0    | 0    | 1212  | 53   | 221   | 324   | 497   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       | 10%  |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 86    | 1131  | 0    | 0    | 1265  | 0    | 199   | 346   | 497   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 26.0  |      |      | 26.0  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (s)         | 15.0  | 104.0 |      |      | 89.0  |      | 31.0  | 31.0  | 31.0  |      |      |      |
| Total Split (%)         | 11.1% | 77.0% |      |      | 65.9% |      | 23.0% | 23.0% | 23.0% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 99.0  | 99.0  |      |      | 86.7  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Actuated g/C Ratio      | 0.73  | 0.73  |      |      | 0.64  |      | 0.19  | 0.19  | 0.19  |      |      |      |
| v/c Ratio               | 0.30  | 0.44  |      |      | 0.57  |      | 0.64  | 1.02  | 1.57  |      |      |      |
| Control Delay           | 4.8   | 1.4   |      |      | 7.0   |      | 67.7  | 113.8 | 302.5 |      |      |      |
| Queue Delay             | 0.0   | 0.0   |      |      | 0.6   |      | 0.9   | 26.6  | 0.0   |      |      |      |
| Total Delay             | 4.8   | 1.5   |      |      | 7.7   |      | 68.7  | 140.4 | 302.5 |      |      |      |
| LOS                     | A     | A     |      |      | A     |      | E     | F     | F     |      |      |      |
| Approach Delay          |       | 1.7   |      |      | 7.7   |      |       | 204.0 |       |      |      |      |
| Approach LOS            |       | A     |      |      | A     |      |       | F     |       |      |      |      |
| Queue Length 50th (ft)  | 3     | 22    |      |      | 107   |      | 174   | -341  | -530  |      |      |      |
| Queue Length 95th (ft)  | m12   | 24    |      |      | 123   |      | 269   | #553  | #754  |      |      |      |
| Internal Link Dist (ft) |       | 321   |      |      | 699   |      |       | 350   |       |      | 106  |      |
| Turn Bay Length (ft)    | 120   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 317   | 2595  |      |      | 2232  |      | 313   | 339   | 316   |      |      |      |
| Starvation Cap Reductn  | 0     | 222   |      |      | 537   |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      | 22    | 24    | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.27  | 0.48  |      |      | 0.75  |      | 0.68  | 1.10  | 1.57  |      |      |      |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green  
Natural Cycle: 65

MS

Synchro 9 Report  
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8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.57

Intersection Signal Delay: 63.7

Intersection LOS: E

Intersection Capacity Utilization 82.4%

ICU Level of Service E

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

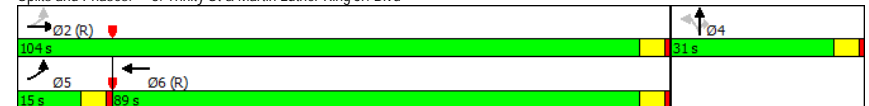
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Trinity St & Martin Luther King Jr. Blvd




















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Synchro 9 Report  
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18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

|  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group   | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations  |   |  |  |   |  |   |   |   |   |   |  |  |
| Traffic Volume (vph)                                       | 0   | 20  | 11  | 163   | 94  | 0   | 0   | 0   | 0   | 47  | 1136  | 22  |
| Future Volume (vph)  | 0   | 20  | 11  | 163   | 94  | 0   | 0   | 0   | 0   | 47  | 1136  | 22  |
| Confl. Peds. (#/hr)  |   |   | 67  |   |   |   |   |   |   | 43  |   |   |
| Confl. Bikes (#/hr)  |   |   |   |   |   |   |   |   | 2   |   |   |   |
| Peak Hour Factor   | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  |
| Parking (#/hr)   |   | 0   |   |   |   |   |   |   |   |   |   |   |
| Adj. Flow (vph)  | 0   | 21  | 11  | 170   | 98  | 0   | 0   | 0   | 0   | 49  | 1183  | 23  |
| Shared Lane Traffic (%)                                    |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)                                      | 0   | 21  | 11  | 0   | 268   | 0   | 0   | 0   | 0   | 0   | 1255  | 0   |
| Turn Type  | NA  | Perm  | Perm  | NA  |   |   |   |   |   | Perm  | NA  |   |
| Protected Phases   | 4 12  |   |   | 4 12  |   |   |   |   |   |   | 2 10  |   |
| Permitted Phases   |   |   | 4 12  | 4 12  |   |   |   |   |   | 2 10  |   |   |
| Detector Phase   |   | 4 12  | 4 12  | 4 12  | 4 12  |   |   |   |   | 2 10  | 2 10  |   |
| Switch Phase   |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (%)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Yellow Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| All-Red Time (s)   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lost Time Adjust (s)                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Lost Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead/Lag   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?   |   |   |   |   |   |   |   |   |   |   |   |   |
| Recall Mode  |   |   |   |   |   |   |   |   |   |   |   |   |
| Act Effct Green (s)  |   | 31.3  | 31.3  |   | 31.3  |   |   |   |   |   | 79.7  |   |
| Actuated g/C Ratio   |   | 0.23  | 0.23  |   | 0.23  |   |   |   |   |   | 0.59  |   |
| v/c Ratio  |   | 0.05  | 0.03  |   | 0.78  |   |   |   |   |   | 0.60  |   |
| Control Delay  |   | 21.9  | 0.1   |   | 35.1  |   |   |   |   |   | 12.1  |   |
| Queue Delay  |   | 0.0   | 0.0   |   | 0.0   |   |   |   |   |   | 0.0   |   |
| Total Delay  |   | 21.9  | 0.1   |   | 35.1  |   |   |   |   |   | 12.1  |   |
| LOS  |   | C   | A   |   | D   |   |   |   |   |   | B   |   |
| Approach Delay   |   | 14.4  |   |   | 35.1  |   |   |   |   |   | 12.1  |   |
| Approach LOS   |   | B   |   |   | D   |   |   |   |   |   | B   |   |
| Queue Length 50th (ft)                                     |   | 10  | 0   |   | 84  |   |   |   |   |   | 193   |   |
| Queue Length 95th (ft)                                     |   | 24  | 0   |   | 108   |   |   |   |   |   | 246   |   |
| Internal Link Dist (ft)                                    |   | 177   |   |   | 244   |   |   | 271   |   |   | 262   |   |
| Turn Bay Length (ft)                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Base Capacity (vph)  |   | 533   | 509   |   | 471   |   |   |   |   |   | 2076  |   |
| Starvation Cap Reductn                                     |   | 0   | 0   |   | 1   |   |   |   |   |   | 0   |   |
| Spillback Cap Reductn                                      |   | 0   | 0   |   | 0   |   |   |   |   |   | 0   |   |
| Storage Cap Reductn  |   | 0   | 0   |   | 0   |   |   |   |   |   | 0   |   |
| Reduced v/c Ratio  |   | 0.04  | 0.02  |   | 0.57  |   |   |   |   |   | 0.60  |   |
| <b>Intersection Summary</b>                                |   |   |   |   |   |   |   |   |   |   |   |   |
| Cycle Length: 135  |   |   |   |   |   |   |   |   |   |   |   |   |
| Actuated Cycle Length: 135                                 |   |   |   |   |   |   |   |   |   |   |   |   |
| Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green |   |   |   |   |   |   |   |   |   |   |   |   |

MS

Synchro 9 Report  
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18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Lane Group                  | Ø2    | Ø4   | Ø10  | Ø12  |
|-----------------------------|-------|------|------|------|
| Lane Configurations         |       |      |      |      |
| Traffic Volume (vph)        |       |      |      |      |
| Future Volume (vph)         |       |      |      |      |
| Confl. Peds. (#/hr)         |       |      |      |      |
| Confl. Bikes (#/hr)         |       |      |      |      |
| Peak Hour Factor            |       |      |      |      |
| Parking (#/hr)              |       |      |      |      |
| Adj. Flow (vph)             |       |      |      |      |
| Shared Lane Traffic (%)     |       |      |      |      |
| Lane Group Flow (vph)       |       |      |      |      |
| Turn Type                   |       |      |      |      |
| Protected Phases            | 2     | 4    | 10   | 12   |
| Permitted Phases            |       |      |      |      |
| Detector Phase              |       |      |      |      |
| Switch Phase                |       |      |      |      |
| Minimum Initial (s)         | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)           | 21.0  | 21.0 | 22.5 | 22.5 |
| Total Split (s)             | 56.0  | 29.0 | 24.0 | 26.0 |
| Total Split (%)             | 41%   | 21%  | 18%  | 19%  |
| Yellow Time (s)             | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)            | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)        |       |      |      |      |
| Total Lost Time (s)         |       |      |      |      |
| Lead/Lag                    |       |      |      |      |
| Lead-Lag Optimize?          |       |      |      |      |
| Recall Mode                 | C-Max | None | None | None |
| Act Effct Green (s)         |       |      |      |      |
| Actuated g/C Ratio          |       |      |      |      |
| v/c Ratio                   |       |      |      |      |
| Control Delay               |       |      |      |      |
| Queue Delay                 |       |      |      |      |
| Total Delay                 |       |      |      |      |
| LOS                         |       |      |      |      |
| Approach Delay              |       |      |      |      |
| Approach LOS                |       |      |      |      |
| Queue Length 50th (ft)      |       |      |      |      |
| Queue Length 95th (ft)      |       |      |      |      |
| Internal Link Dist (ft)     |       |      |      |      |
| Turn Bay Length (ft)        |       |      |      |      |
| Base Capacity (vph)         |       |      |      |      |
| Starvation Cap Reductn      |       |      |      |      |
| Spillback Cap Reductn       |       |      |      |      |
| Storage Cap Reductn         |       |      |      |      |
| Reduced v/c Ratio           |       |      |      |      |
| <b>Intersection Summary</b> |       |      |      |      |

MS

Synchro 9 Report  
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18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 16.1

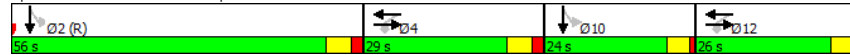
Intersection LOS: B

Intersection Capacity Utilization 74.9%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 18: Guadalupe St & E. 17th St



19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

|                         | ↖    | →    | ↘    | ↙    | ←    | ↖    | ↗    | ↘    | ↙    | ↖    | ↗    | ↘    | ↙ |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|---|
| Lane Group              | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |   |
| Lane Configurations     |      | ↖    |      |      | ↗    |      | ↖↗↘  | ↖↗↘  | ↖    |      |      |      |   |
| Traffic Volume (vph)    | 10   | 64   | 0    | 0    | 131  | 123  | 63   | 1021 | 68   | 0    | 0    | 0    |   |
| Future Volume (vph)     | 10   | 64   | 0    | 0    | 131  | 123  | 63   | 1021 | 68   | 0    | 0    | 0    |   |
| Confl. Peds. (#/hr)     | 33   |      |      |      |      |      |      |      | 46   |      |      |      |   |
| Peak Hour Factor        | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |   |
| Parking (#/hr)          |      | 0    |      |      |      |      |      |      |      |      |      |      |   |
| Adj. Flow (vph)         | 11   | 70   | 0    | 0    | 142  | 134  | 68   | 1110 | 74   | 0    | 0    | 0    |   |
| Shared Lane Traffic (%) |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Lane Group Flow (vph)   | 0    | 81   | 0    | 0    | 276  | 0    | 0    | 1178 | 74   | 0    | 0    | 0    |   |
| Turn Type               | Perm | NA   |      |      | NA   |      | Perm | NA   | Perm |      |      |      |   |
| Protected Phases        |      | 4 12 |      |      | 4 12 |      |      | 2 10 |      |      |      |      |   |
| Permitted Phases        | 4 12 |      |      |      |      |      | 2 10 |      | 2 10 |      |      |      |   |
| Detector Phase          | 4 12 | 4 12 |      |      | 4 12 |      | 2 10 | 2 10 | 2 10 |      |      |      |   |
| Switch Phase            |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Minimum Initial (s)     |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Minimum Split (s)       |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Total Split (s)         |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Total Split (%)         |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Yellow Time (s)         |      |      |      |      |      |      |      |      |      |      |      |      |   |
| All-Red Time (s)        |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Lost Time Adjust (s)    |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Total Lost Time (s)     |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Lead/Lag                |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Lead-Lag Optimize?      |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Recall Mode             |      |      |      |      |      |      |      |      |      |      |      |      |   |
| Act Effct Green (s)     | 31.2 |      |      |      | 31.2 |      |      | 79.8 | 79.8 |      |      |      |   |
| Actuated g/C Ratio      | 0.23 |      |      |      | 0.23 |      |      | 0.59 | 0.59 |      |      |      |   |
| v/c Ratio               | 0.22 |      |      |      | 0.64 |      |      | 0.39 | 0.09 |      |      |      |   |
| Control Delay           | 21.8 |      |      |      | 30.2 |      |      | 8.7  | 2.3  |      |      |      |   |
| Queue Delay             | 0.0  |      |      |      | 0.0  |      |      | 0.1  | 0.0  |      |      |      |   |
| Total Delay             | 21.8 |      |      |      | 30.2 |      |      | 8.8  | 2.3  |      |      |      |   |
| LOS                     | C    |      |      |      | C    |      |      | A    | A    |      |      |      |   |
| Approach Delay          | 21.8 |      |      |      | 30.2 |      |      | 8.4  |      |      |      |      |   |
| Approach LOS            | C    |      |      |      | C    |      |      | A    |      |      |      |      |   |
| Queue Length 50th (ft)  | 33   |      |      |      | 127  |      |      | 154  | 2    |      |      |      |   |
| Queue Length 95th (ft)  | m62  |      |      |      | 181  |      |      | 93   | 11   |      |      |      |   |
| Internal Link Dist (ft) | 244  |      |      |      | 319  |      |      | 272  |      |      | 254  |      |   |
| Turn Bay Length (ft)    |      |      |      |      |      |      |      |      | 100  |      |      |      |   |
| Base Capacity (vph)     | 512  |      |      |      | 592  |      |      | 3052 | 813  |      |      |      |   |
| Starvation Cap Reductn  | 0    |      |      |      | 0    |      |      | 465  | 0    |      |      |      |   |
| Spillback Cap Reductn   | 0    |      |      |      | 0    |      |      | 0    | 0    |      |      |      |   |
| Storage Cap Reductn     | 0    |      |      |      | 0    |      |      | 0    | 0    |      |      |      |   |
| Reduced v/c Ratio       | 0.16 |      |      |      | 0.47 |      |      | 0.46 | 0.09 |      |      |      |   |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green

Natural Cycle: 100

19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 26.0  | 28.0 | 22.5 | 22.5 |
| Total Split (s)         | 54.0  | 28.0 | 25.0 | 28.0 |
| Total Split (%)         | 40%   | 21%  | 19%  | 21%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effect Green (s)    |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 12.8

Intersection LOS: B

Intersection Capacity Utilization 45.4%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 19: Lavaca St & E. 17th St



















## 28: Lavaca St &amp; E. 16th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2020 Background + Site

Timing Plan: PM

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     |   |  |   |   |  |   |   |  |  |   |   |   |
| Traffic Volume (vph)    | 10  | 43  | 0   | 0   | 54  | 27  | 62  | 1102  | 51  | 0   | 0   | 0   |
| Future Volume (vph)     | 10  | 43  | 0   | 0   | 54  | 27  | 62  | 1102  | 51  | 0   | 0   | 0   |
| Confl. Peds. (#/hr)     |   |   |   |   |   | 163   |   | 85  |   |   |   |   |
| Confl. Bikes (#/hr)     |   |   |   |   |   | 2   |   |   |   |   |   |   |
| Peak Hour Factor        | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  |
| Parking (#/hr)          |   |   |   |   | 0   |   |   |   |   |   |   |   |
| Adj. Flow (vph)         | 11  | 45  | 0   | 0   | 57  | 28  | 65  | 1160  | 54  | 0   | 0   | 0   |
| Shared Lane Traffic (%) |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)   | 0   | 56  | 0   | 0   | 85  | 0   | 0   | 1225  | 54  | 0   | 0   | 0   |
| Turn Type               | Perm  | NA  |   |   | NA  |   | Perm  | NA  | Perm  |   |   |   |
| Protected Phases        |   | 4 12  |   |   | 4 12  |   |   | 2 10  |   |   |   |   |
| Permitted Phases        | 4 12  |   |   |   |   |   | 2 10  |   | 2 10  |   |   |   |
| Detector Phase          | 4 12  | 4 12  |   |   | 4 12  |   | 2 10  | 2 10  | 2 10  |   |   |   |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Split (s)       |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (s)         |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (%)         |   |   |   |   |   |   |   |   |   |   |   |   |
| Yellow Time (s)         |   |   |   |   |   |   |   |   |   |   |   |   |
| All-Red Time (s)        |   |   |   |   |   |   |   |   |   |   |   |   |
| Lost Time Adjust (s)    |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Lost Time (s)     |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead/Lag                |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?      |   |   |   |   |   |   |   |   |   |   |   |   |
| Recall Mode             |   |   |   |   |   |   |   |   |   |   |   |   |
| Act Effct Green (s)     | 20.7  |   |   |   | 20.7  |   |   | 90.3  | 90.3  |   |   |   |
| Actuated g/C Ratio      | 0.15  |   |   |   | 0.15  |   |   | 0.67  | 0.67  |   |   |   |
| v/c Ratio               | 0.21  |   |   |   | 0.35  |   |   | 0.37  | 0.05  |   |   |   |
| Control Delay           | 30.0  |   |   |   | 26.2  |   |   | 5.9   | 2.1   |   |   |   |
| Queue Delay             | 0.0   |   |   |   | 0.0   |   |   | 0.4   | 0.0   |   |   |   |
| Total Delay             | 30.0  |   |   |   | 26.2  |   |   | 6.4   | 2.1   |   |   |   |
| LOS                     | C   |   |   |   | C   |   |   | A   | A   |   |   |   |
| Approach Delay          | 30.0  |   |   |   | 26.2  |   |   | 6.2   |   |   |   |   |
| Approach LOS            | C   |   |   |   | C   |   |   | A   |   |   |   |   |
| Queue Length 50th (ft)  | 32  |   |   |   | 37  |   |   | 136   | 5   |   |   |   |
| Queue Length 95th (ft)  | m51   |   |   |   | 64  |   |   | 130   | m6  |   |   |   |
| Internal Link Dist (ft) | 233   |   |   |   | 60  |   |   | 281   |   | 272   |   |   |
| Turn Bay Length (ft)    |   |   |   |   |   |   |   |   | 100   |   |   |   |
| Base Capacity (vph)     | 570   |   |   |   | 490   |   |   | 3364  | 1085  |   |   |   |
| Starvation Cap Reductn  | 0   |   |   |   | 0   |   |   | 1476  | 0   |   |   |   |
| Spillback Cap Reductn   | 0   |   |   |   | 0   |   |   | 0   | 0   |   |   |   |
| Storage Cap Reductn     | 0   |   |   |   | 0   |   |   | 0   | 0   |   |   |   |
| Reduced v/c Ratio       | 0.10  |   |   |   | 0.17  |   |   | 0.65  | 0.05  |   |   |   |

## Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green

MS

Synchro 9 Report  
Page 19

## 28: Lavaca St &amp; E. 16th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2020 Background + Site

Timing Plan: PM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Confl. Bikes (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 28.0  | 32.0 | 21.0 | 20.0 |
| Total Split (s)         | 55.0  | 32.0 | 24.0 | 24.0 |
| Total Split (%)         | 41%   | 24%  | 18%  | 18%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effct Green (s)     |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |

## Intersection Summary

MS

Synchro 9 Report  
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28: Lavaca St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.37

Intersection Signal Delay: 8.3

Intersection LOS: A

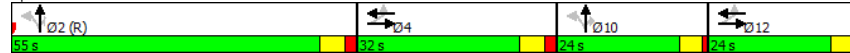
Intersection Capacity Utilization 54.2%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 28: Lavaca St & E. 16th St



34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

|                         | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑↑   |      | ↑     | ↑↑↑   |      |      |      |      |       | ↑↑↑   | ↑     |
| Traffic Volume (vph)    | 0    | 901   | 95   | 212   | 1707  | 0    | 0    | 0    | 0    | 149   | 889   | 412   |
| Future Volume (vph)     | 0    | 901   | 95   | 212   | 1707  | 0    | 0    | 0    | 0    | 149   | 889   | 412   |
| Confl. Peds. (#/hr)     |      |       | 18   | 18    |       |      |      |      |      | 20    |       | 27    |
| Confl. Bikes (#/hr)     |      |       |      |       |       |      |      |      |      |       |       | 27    |
| Peak Hour Factor        | 0.86 | 0.86  | 0.86 | 0.86  | 0.86  | 0.86 | 0.86 | 0.86 | 0.86 | 0.86  | 0.86  | 0.86  |
| Adj. Flow (vph)         | 0    | 1048  | 110  | 247   | 1985  | 0    | 0    | 0    | 0    | 173   | 1034  | 479   |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 1158  | 0    | 247   | 1985  | 0    | 0    | 0    | 0    | 0     | 1207  | 479   |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1 3   | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1 3   | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      |       | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       |      | 25.0  |      |       | 25.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (s)         |      | 58.0  |      |       | 88.0  |      |      |      |      | 47.0  | 47.0  | 47.0  |
| Total Split (%)         |      | 43.0% |      |       | 65.2% |      |      |      |      | 34.8% | 34.8% | 34.8% |
| Yellow Time (s)         |      | 4.0   |      |       | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      |       | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      |       | 0.0   |      |      |      |      |       | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      |       | 5.0   |      |      |      |      |       | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      |       |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      |       |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      |       | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effect Green (s)    |      | 53.0  |      | 83.0  | 83.0  |      |      |      |      |       | 42.0  | 42.0  |
| Actuated g/C Ratio      |      | 0.39  |      | 0.61  | 0.61  |      |      |      |      |       | 0.31  | 0.31  |
| v/c Ratio               |      | 0.59  |      | 0.64  | 0.63  |      |      |      |      |       | 0.77  | 0.91  |
| Control Delay           |      | 33.4  |      | 25.6  | 7.2   |      |      |      |      |       | 43.9  | 55.0  |
| Queue Delay             |      | 0.0   |      | 7.1   | 0.2   |      |      |      |      |       | 0.0   | 0.0   |
| Total Delay             |      | 33.4  |      | 32.7  | 7.4   |      |      |      |      |       | 43.9  | 55.0  |
| LOS                     |      | C     |      | C     | A     |      |      |      |      |       | D     | D     |
| Approach Delay          |      | 33.4  |      |       | 10.2  |      |      |      |      |       | 47.1  |       |
| Approach LOS            |      | C     |      |       | B     |      |      |      |      |       | D     |       |
| Queue Length 50th (ft)  |      | 287   |      | 80    | 134   |      |      |      |      |       | 307   | 273   |
| Queue Length 95th (ft)  |      | 316   |      | m138  | 137   |      |      |      |      |       | 356   | #488  |
| Internal Link Dist (ft) |      | 262   |      |       | 240   |      |      | 197  |      |       | 285   |       |
| Turn Bay Length (ft)    |      |       |      | 50    |       |      |      |      |      |       |       | 100   |
| Base Capacity (vph)     |      | 1968  |      | 383   | 3126  |      |      |      |      |       | 1564  | 525   |
| Starvation Cap Reductn  |      | 0     |      | 94    | 411   |      |      |      |      |       | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      |       | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      |       | 0     | 0     |
| Reduced v/c Ratio       |      | 0.59  |      | 0.85  | 0.73  |      |      |      |      |       | 0.77  | 0.91  |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 80

34: Guadalupe St & W. 15th St

TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site

Timing Plan: PM

| Lane Group              | Ø1   | Ø3   |
|-------------------------|------|------|
| Lane Configurations     |      |      |
| Traffic Volume (vph)    |      |      |
| Future Volume (vph)     |      |      |
| Confl. Peds. (#/hr)     |      |      |
| Confl. Bikes (#/hr)     |      |      |
| Peak Hour Factor        |      |      |
| Adj. Flow (vph)         |      |      |
| Shared Lane Traffic (%) |      |      |
| Lane Group Flow (vph)   |      |      |
| Turn Type               |      |      |
| Protected Phases        | 1    | 3    |
| Permitted Phases        |      |      |
| Detector Phase          |      |      |
| Switch Phase            |      |      |
| Minimum Initial (s)     | 5.0  | 8.0  |
| Minimum Split (s)       | 10.0 | 13.0 |
| Total Split (s)         | 15.0 | 15.0 |
| Total Split (%)         | 11%  | 11%  |
| Yellow Time (s)         | 4.0  | 4.0  |
| All-Red Time (s)        | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |
| Total Lost Time (s)     |      |      |
| Lead/Lag                | Lead |      |
| Lead-Lag Optimize?      | Yes  |      |
| Recall Mode             | Min  | None |
| Act Effect Green (s)    |      |      |
| Actuated g/C Ratio      |      |      |
| v/c Ratio               |      |      |
| Control Delay           |      |      |
| Queue Delay             |      |      |
| Total Delay             |      |      |
| LOS                     |      |      |
| Approach Delay          |      |      |
| Approach LOS            |      |      |
| Queue Length 50th (ft)  |      |      |
| Queue Length 95th (ft)  |      |      |
| Internal Link Dist (ft) |      |      |
| Turn Bay Length (ft)    |      |      |
| Base Capacity (vph)     |      |      |
| Starvation Cap Reductn  |      |      |
| Spillback Cap Reductn   |      |      |
| Storage Cap Reductn     |      |      |
| Reduced v/c Ratio       |      |      |
| Intersection Summary    |      |      |

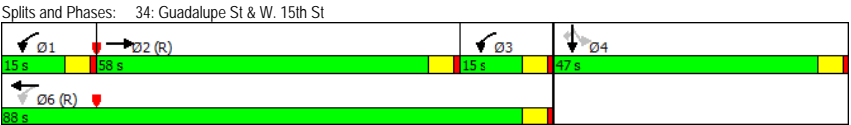
34: Guadalupe St & W. 15th St

TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site

Timing Plan: PM

|   |                        |
|---|------------------------|
| Control Type: Actuated-Coordinated                                |                        |
| Maximum v/c Ratio: 0.91   |                        |
| Intersection Signal Delay: 27.8                                   | Intersection LOS: C    |
| Intersection Capacity Utilization 77.2%                           | ICU Level of Service D |
| Analysis Period (min) 15  |                        |
| # 95th percentile volume exceeds capacity, queue may be longer.   |                        |
| Queue shown is maximum after two cycles.                          |                        |
| m Volume for 95th percentile queue is metered by upstream signal. |                        |



## 35: Lavaca St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2020 Background + Site

Timing Plan: PM

|                         | ↖     | →     | ↗    | ↖    | ←     | ↖    | ↖     | ↖     | ↖     | ↖    | ↖    | ↖    |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
| Lane Configurations     | ↖     | ↖↖↖   |      |      | ↖↖↖   |      |       | ↖↖↖   | ↖     |      |      |      |
| Traffic Volume (vph)    | 118   | 900   | 0    | 0    | 1606  | 66   | 385   | 872   | 157   | 0    | 0    | 0    |
| Future Volume (vph)     | 118   | 900   | 0    | 0    | 1606  | 66   | 385   | 872   | 157   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 47    |       |      |      |       | 47   | 30    |       | 18    |      |      |      |
| Confl. Bikes (#/hr)     |       |       | 2    |      |       |      |       |       | 27    |      |      |      |
| Peak Hour Factor        | 0.90  | 0.90  | 0.90 | 0.90 | 0.90  | 0.90 | 0.90  | 0.90  | 0.90  | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph)         | 131   | 1000  | 0    | 0    | 1784  | 73   | 428   | 969   | 174   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 131   | 1000  | 0    | 0    | 1857  | 0    | 0     | 1397  | 174   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 28.0  |      |      | 28.0  |      | 33.0  | 33.0  | 33.0  |      |      |      |
| Total Split (s)         | 20.0  | 86.0  |      |      | 66.0  |      | 49.0  | 49.0  | 49.0  |      |      |      |
| Total Split (%)         | 14.8% | 63.7% |      |      | 48.9% |      | 36.3% | 36.3% | 36.3% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 2.0   | 2.0   | 2.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 6.0   | 6.0   | 6.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 81.0  | 81.0  |      |      | 65.1  |      | 43.0  | 43.0  | 43.0  |      |      |      |
| Actuated g/C Ratio      | 0.60  | 0.60  |      |      | 0.48  |      | 0.32  | 0.32  | 0.32  |      |      |      |
| v/c Ratio               | 0.66  | 0.33  |      |      | 0.76  |      | 0.89  | 0.31  | 0.31  |      |      |      |
| Control Delay           | 69.2  | 3.2   |      |      | 12.8  |      | 51.8  | 13.1  | 13.1  |      |      |      |
| Queue Delay             | 0.0   | 0.1   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Delay             | 69.2  | 3.3   |      |      | 12.8  |      | 51.8  | 13.1  | 13.1  |      |      |      |
| LOS                     | E     | A     |      |      | B     |      | D     | D     | B     |      |      |      |
| Approach Delay          |       | 11.0  |      |      | 12.8  |      | 47.5  |       |       |      |      |      |
| Approach LOS            |       | B     |      |      | B     |      | D     |       |       |      |      |      |
| Queue Length 50th (ft)  | 81    | 43    |      |      | 117   |      | 426   | 33    | 33    |      |      |      |
| Queue Length 95th (ft)  | m147  | 50    |      |      | 116   |      | 491   | 92    | 92    |      |      |      |
| Internal Link Dist (ft) |       | 240   |      |      | 335   |      | 116   |       |       |      | 281  |      |
| Turn Bay Length (ft)    | 50    |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 248   | 3051  |      |      | 2432  |      | 1573  | 558   | 558   |      |      |      |
| Starvation Cap Reductn  | 0     | 873   |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.53  | 0.46  |      |      | 0.76  |      | 0.89  | 0.31  | 0.31  |      |      |      |

## Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 75

MS

Synchro 9 Report  
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## 35: Lavaca St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2020 Background + Site

Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 24.3

Intersection LOS: C

Intersection Capacity Utilization 77.2%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 35: Lavaca St &amp; W. 15th St



MS

Synchro 9 Report  
Page 26

36: Colorado St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

|                         | ←     | →     | ↖    | ↗     | ←     | ↖    | ↗     | ↖     | ↗    | ↖     | ↗     | ↖      | ↗ |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|--------|---|
| Lane Group              | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR    |   |
| Lane Configurations     | ↖ ↗   | ↖ ↗   |      | ↖ ↗   | ↖ ↗   |      | ↖ ↗   | ↖ ↗   |      | ↖ ↗   | ↖ ↗   | ↖ ↗    |   |
| Traffic Volume (vph)    | 27    | 1060  | 21   | 22    | 1374  | 14   | 8     | 26    | 108  | 127   | 6     | 267    |   |
| Future Volume (vph)     | 27    | 1060  | 21   | 22    | 1374  | 14   | 8     | 26    | 108  | 127   | 6     | 267    |   |
| Confl. Peds. (#/hr)     | 32    |       | 34   | 34    |       | 32   | 96    |       | 6    | 6     |       | 96     |   |
| Confl. Bikes (#/hr)     |       |       | 1    |       |       | 2    |       |       | 2    |       |       | 1      |   |
| Peak Hour Factor        | 0.87  | 0.87  | 0.87 | 0.87  | 0.87  | 0.87 | 0.87  | 0.87  | 0.87 | 0.87  | 0.87  | 0.87   |   |
| Adj. Flow (vph)         | 31    | 1218  | 24   | 25    | 1579  | 16   | 9     | 30    | 124  | 146   | 7     | 307    |   |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |      |       |       |        |   |
| Lane Group Flow (vph)   | 31    | 1242  | 0    | 25    | 1595  | 0    | 0     | 163   | 0    | 0     | 153   | 307    |   |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | Perm  | NA    |      | Perm  | NA    | custom |   |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |       | 4     |      |       | 8     |        |   |
| Permitted Phases        | 2     |       |      | 6     |       |      | 4     |       |      | 8     |       | 6      |   |
| Detector Phase          | 5     | 2     |      | 1     | 6     |      | 4     | 4     |      | 8     | 8     | 6      |   |
| Switch Phase            |       |       |      |       |       |      |       |       |      |       |       |        |   |
| Minimum Initial (s)     | 5.0   | 15.0  |      | 5.0   | 15.0  |      | 5.0   | 5.0   |      | 5.0   | 5.0   | 15.0   |   |
| Minimum Split (s)       | 10.0  | 20.0  |      | 10.0  | 22.0  |      | 36.0  | 36.0  |      | 10.0  | 10.0  | 22.0   |   |
| Total Split (s)         | 10.0  | 79.0  |      | 10.0  | 79.0  |      | 46.0  | 46.0  |      | 46.0  | 46.0  | 79.0   |   |
| Total Split (%)         | 7.4%  | 58.5% |      | 7.4%  | 58.5% |      | 34.1% | 34.1% |      | 34.1% | 34.1% | 58.5%  |   |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0    |   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0    |   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      |       | 0.0   |      |       | 0.0   | 0.0    |   |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      |       | 5.0   |      |       | 5.0   | 5.0    |   |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   |      |       |       |      |       | Lag   |        |   |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |       |       |      |       | Yes   |        |   |
| Recall Mode             | None  | C-Max |      | None  | C-Max |      | Max   | Max   |      | Max   | Max   | C-Max  |   |
| Act Effect Green (s)    | 81.0  | 78.0  |      | 81.0  | 78.0  |      |       | 41.0  |      |       | 41.0  | 78.0   |   |
| Actuated g/C Ratio      | 0.60  | 0.58  |      | 0.60  | 0.58  |      |       | 0.30  |      |       | 0.30  | 0.58   |   |
| v/c Ratio               | 0.18  | 0.42  |      | 0.10  | 0.54  |      |       | 0.29  |      |       | 0.49  | 0.37   |   |
| Control Delay           | 6.2   | 6.3   |      | 5.1   | 8.7   |      |       | 13.5  |      |       | 45.1  | 2.9    |   |
| Queue Delay             | 0.0   | 0.2   |      | 0.0   | 0.1   |      |       | 0.0   |      |       | 0.0   | 0.0    |   |
| Total Delay             | 6.2   | 6.4   |      | 5.1   | 8.8   |      |       | 13.5  |      |       | 45.1  | 2.9    |   |
| LOS                     | A     | A     |      | A     | A     |      |       | B     |      |       | D     | A      |   |
| Approach Delay          |       | 6.4   |      |       | 8.7   |      |       | 13.5  |      |       | 17.0  |        |   |
| Approach LOS            |       | A     |      |       | A     |      |       | B     |      |       | B     |        |   |
| Queue Length 50th (ft)  | 0     | 100   |      | 3     | 349   |      |       | 32    |      |       | 110   | 0      |   |
| Queue Length 95th (ft)  | 0     | 116   |      | 6     | 156   |      |       | 83    |      |       | 175   | 37     |   |
| Internal Link Dist (ft) |       | 335   |      |       | 362   |      |       | 155   |      |       | 114   |        |   |
| Turn Bay Length (ft)    | 90    |       |      | 90    |       |      |       |       |      |       |       | 100    |   |
| Base Capacity (vph)     | 172   | 2927  |      | 242   | 2928  |      |       | 567   |      |       | 310   | 828    |   |
| Starvation Cap Reductn  | 0     | 687   |      | 0     | 352   |      |       | 0     |      |       | 0     | 0      |   |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 60    |      |       | 0     |      |       | 0     | 14     |   |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      |       | 0     |      |       | 0     | 0      |   |
| Reduced v/c Ratio       | 0.18  | 0.55  |      | 0.10  | 0.62  |      |       | 0.29  |      |       | 0.49  | 0.38   |   |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 75

MS

Synchro 9 Report  
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36: Colorado St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 9.2

Intersection LOS: A

Intersection Capacity Utilization 87.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 36: Colorado St & W. 15th St



MS

Synchro 9 Report  
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37: N. Congress Ave & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

|                         | →     | ↖    | ↗     | ←     | ↖    | ↗     |
|-------------------------|-------|------|-------|-------|------|-------|
| Lane Group              | EBT   | EBR  | WBL   | WBT   | NBL  | NBR   |
| Lane Configurations     | ↑↑↑   |      | ↖     | ↑↑↑   |      | ↗     |
| Traffic Volume (vph)    | 1353  | 0    | 0     | 1175  | 0    | 1     |
| Future Volume (vph)     | 1353  | 0    | 0     | 1175  | 0    | 1     |
| Confl. Peds. (#/hr)     |       | 48   | 48    |       | 40   | 14    |
| Confl. Bikes (#/hr)     |       |      |       |       |      | 4     |
| Peak Hour Factor        | 0.86  | 0.86 | 0.86  | 0.86  | 0.86 | 0.86  |
| Adj. Flow (vph)         | 1573  | 0    | 0     | 1366  | 0    | 1     |
| Shared Lane Traffic (%) |       |      |       |       |      |       |
| Lane Group Flow (vph)   | 1573  | 0    | 0     | 1366  | 0    | 1     |
| Turn Type               | NA    |      | pm+pt | NA    |      | Perm  |
| Protected Phases        | 2     |      | 1     | 6     |      |       |
| Permitted Phases        |       |      | 6     |       |      | 4     |
| Detector Phase          | 2     |      | 1     | 6     |      | 4     |
| Switch Phase            |       |      |       |       |      |       |
| Minimum Initial (s)     | 5.0   |      | 5.0   | 5.0   |      | 5.0   |
| Minimum Split (s)       | 25.0  |      | 10.0  | 25.0  |      | 33.0  |
| Total Split (s)         | 92.0  |      | 10.0  | 102.0 |      | 33.0  |
| Total Split (%)         | 68.1% |      | 7.4%  | 75.6% |      | 24.4% |
| Yellow Time (s)         | 4.0   |      | 4.0   | 4.0   |      | 4.0   |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0   |      | 1.0   |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0   |      | 0.0   |
| Total Lost Time (s)     | 5.0   |      | 5.0   | 5.0   |      | 5.0   |
| Lead/Lag                | Lag   |      | Lead  |       |      |       |
| Lead-Lag Optimize?      | Yes   |      | Yes   |       |      |       |
| Recall Mode             | C-Max |      | None  | C-Max |      | Max   |
| Act Effect Green (s)    | 97.0  |      |       | 97.0  |      | 28.0  |
| Actuated g/C Ratio      | 0.72  |      |       | 0.72  |      | 0.21  |
| v/c Ratio               | 0.43  |      |       | 0.37  |      | 0.00  |
| Control Delay           | 4.5   |      |       | 10.4  |      | 0.0   |
| Queue Delay             | 0.0   |      |       | 0.1   |      | 0.0   |
| Total Delay             | 4.5   |      |       | 10.5  |      | 0.0   |
| LOS                     | A     |      |       | B     |      | A     |
| Approach Delay          | 4.5   |      |       | 10.5  |      |       |
| Approach LOS            | A     |      |       | B     |      |       |
| Queue Length 50th (ft)  | 78    |      |       | 331   |      | 0     |
| Queue Length 95th (ft)  | 90    |      |       | 77    |      | 0     |
| Internal Link Dist (ft) | 362   |      |       | 356   | 125  |       |
| Turn Bay Length (ft)    |       |      |       |       |      |       |
| Base Capacity (vph)     | 3653  |      |       | 3653  |      | 394   |
| Starvation Cap Reductn  | 408   |      |       | 1059  |      | 0     |
| Spillback Cap Reductn   | 0     |      |       | 289   |      | 0     |
| Storage Cap Reductn     | 0     |      |       | 0     |      | 0     |
| Reduced v/c Ratio       | 0.48  |      |       | 0.53  |      | 0.00  |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 70

MS

Synchro 9 Report  
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37: N. Congress Ave & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.43

Intersection Signal Delay: 7.3

Intersection LOS: A

Intersection Capacity Utilization 57.8%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 37: N. Congress Ave & W. 15th St



MS

























Synchro 9 Report  
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## 38: Brazos St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2020 Background + Site

Timing Plan: PM

|                         |  |    |  |  |    |  |  |  |  |  |    |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     |  |    |   |  |    |   |   |  |  |   |   |   |
| Traffic Volume (vph)    | 5   | 1341  | 37  | 9   | 1034  | 5   | 130   | 3   | 114   | 63  | 3   | 85  |
| Future Volume (vph)     | 5   | 1341  | 37  | 9   | 1034  | 5   | 130   | 3   | 114   | 63  | 3   | 85  |
| Confl. Peds. (#/hr)     | 8   |   | 9   | 9   |   | 8   | 5   |   | 19  | 19  |   | 5   |
| Confl. Bikes (#/hr)     |   |   |   |   |   | 1   |   |   |   |   |   | 1   |
| Peak Hour Factor        | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  |
| Adj. Flow (vph)         | 5   | 1442  | 40  | 10  | 1112  | 5   | 140   | 3   | 123   | 68  | 3   | 91  |
| Shared Lane Traffic (%) |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)   | 5   | 1482  | 0   | 10  | 1117  | 0   | 0   | 143   | 123   | 0   | 162   | 0   |
| Turn Type               | pm+pt   | NA  |   | pm+pt   | NA  |   | Perm  | NA  | Perm  | Perm  | NA  |   |
| Protected Phases        | 5   | 2   |   | 1   | 6   |   |   | 4   |   |   | 8   |   |
| Permitted Phases        | 2   |   |   | 6   |   |   | 4   |   | 4   | 8   |   |   |
| Detector Phase          | 5   | 2   |   | 1   | 6   |   | 4   | 4   | 4   | 8   | 8   |   |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     | 5.0   | 15.0  |   | 5.0   | 15.0  |   | 10.0  | 10.0  | 10.0  | 10.0  |   | 10.0  |
| Minimum Split (s)       | 10.0  | 22.0  |   | 10.0  | 22.0  |   | 32.0  | 32.0  | 32.0  | 32.0  |   | 32.0  |
| Total Split (s)         | 12.0  | 77.0  |   | 12.0  | 77.0  |   | 46.0  | 46.0  | 46.0  | 46.0  |   | 46.0  |
| Total Split (%)         | 8.9%  | 57.0%   |   | 8.9%  | 57.0%   |   | 34.1%   | 34.1%   | 34.1%   | 34.1%   |   | 34.1%   |
| Yellow Time (s)         | 4.0   | 4.0   |   | 4.0   | 4.0   |   | 4.0   | 4.0   | 4.0   | 4.0   |   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |   | 1.0   | 1.0   |   | 1.0   | 1.0   | 1.0   | 1.0   |   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |   | 0.0   | 0.0   |   |   | 0.0   | 0.0   |   | 0.0   |   |
| Total Lost Time (s)     | 5.0   | 5.0   |   | 5.0   | 5.0   |   |   | 5.0   | 5.0   |   | 5.0   |   |
| Lead/Lag                | Lead  | Lead  |   | Lag   | Lag   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?      | Yes   | Yes   |   | Yes   | Yes   |   |   |   |   |   |   |   |
| Recall Mode             | None  | C-Max   |   | None  | C-Max   |   | None  | None  | None  | None  | None  |   |
| Act Effect Green (s)    | 99.4  | 99.4  |   | 99.6  | 99.6  |   |   | 23.2  | 23.2  |   |   | 23.2  |
| Actuated g/C Ratio      | 0.74  | 0.74  |   | 0.74  | 0.74  |   |   | 0.17  | 0.17  |   |   | 0.17  |
| v/c Ratio               | 0.01  | 0.40  |   | 0.04  | 0.30  |   |   | 0.84  | 0.36  |   |   | 0.72  |
| Control Delay           | 5.4   | 3.8   |   | 12.7  | 11.4  |   |   | 89.7  | 15.2  |   |   | 53.3  |
| Queue Delay             | 0.0   | 0.0   |   | 0.0   | 0.1   |   |   | 0.0   | 0.0   |   |   | 0.0   |
| Total Delay             | 5.4   | 3.8   |   | 12.7  | 11.5  |   |   | 89.7  | 15.2  |   |   | 53.3  |
| LOS                     | A   | A   |   | B   | B   |   |   | F   | B   |   |   | D   |
| Approach Delay          |   | 3.8   |   |   | 11.5  |   |   | 55.3  |   |   |   | 53.3  |
| Approach LOS            |   | A   |   |   | B   |   |   | E   |   |   |   | D   |
| Queue Length 50th (ft)  | 0   | 42  |   | 3   | 144   |   |   | 123   | 18  |   |   | 95  |
| Queue Length 95th (ft)  | m2  | 93  |   | m11   | 289   |   |   | 190   | 69  |   |   | 165   |
| Internal Link Dist (ft) |   | 356   |   |   | 297   |   |   | 199   |   |   |   | 273   |
| Turn Bay Length (ft)    | 100   |   |   | 40  |   |   |   |   | 50  |   |   |   |
| Base Capacity (vph)     | 363   | 3726  |   | 289   | 3748  |   |   | 302   | 530   |   |   | 361   |
| Starvation Cap Reductn  | 0   | 445   |   | 0   | 1355  |   |   | 0   | 0   |   |   | 0   |
| Spillback Cap Reductn   | 0   | 138   |   | 0   | 0   |   |   | 0   | 2   |   |   | 1   |
| Storage Cap Reductn     | 0   | 0   |   | 0   | 0   |   |   | 0   | 0   |   |   | 0   |
| Reduced v/c Ratio       | 0.01  | 0.45  |   | 0.03  | 0.47  |   |   | 0.47  | 0.23  |   |   | 0.45  |

## Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 65

MS

Synchro 9 Report  
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## 38: Brazos St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2020 Background + Site

Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 13.8

Intersection LOS: B

Intersection Capacity Utilization 65.8%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 38: Brazos St &amp; W. 15th St



MS

Synchro 9 Report  
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39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

|                         | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL    | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|--------|-------|-------|
| Lane Configurations     |      | ↑↑↑   |      | ↓     | ↑↑↑   |      |      |      |      |        | ↓↑↑   | ↑     |
| Traffic Volume (vph)    | 0    | 1635  | 112  | 65    | 842   | 0    | 0    | 0    | 0    | 511    | 624   | 304   |
| Future Volume (vph)     | 0    | 1635  | 112  | 65    | 842   | 0    | 0    | 0    | 0    | 511    | 624   | 304   |
| Confl. Peds. (#/hr)     |      |       | 11   | 11    |       |      |      |      |      | 31     |       | 5     |
| Confl. Bikes (#/hr)     |      |       |      |       |       |      |      |      |      |        |       | 2     |
| Peak Hour Factor        | 0.93 | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93 | 0.93 | 0.93 | 0.93   | 0.93  | 0.93  |
| Adj. Flow (vph)         | 0    | 1758  | 120  | 70    | 905   | 0    | 0    | 0    | 0    | 549    | 671   | 327   |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |        |       |       |
| Lane Group Flow (vph)   | 0    | 1878  | 0    | 70    | 905   | 0    | 0    | 0    | 0    | 0      | 1220  | 327   |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm   | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |        | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4      |       | 4     |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4      | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |        |       |       |
| Minimum Initial (s)     |      | 10.0  |      | 3.0   | 10.0  |      |      |      |      | 7.0    | 7.0   | 7.0   |
| Minimum Split (s)       |      | 28.0  |      | 8.0   | 28.0  |      |      |      |      | 32.0   | 32.0  | 32.0  |
| Total Split (s)         |      | 80.0  |      | 15.0  | 95.0  |      |      |      |      | 40.0   | 40.0  | 40.0  |
| Total Split (%)         |      | 59.3% |      | 11.1% | 70.4% |      |      |      |      | 29.6%  | 29.6% | 29.6% |
| Yellow Time (s)         |      | 4.0   |      | 4.0   | 4.0   |      |      |      |      | 4.0    | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      | 1.0   | 1.0   |      |      |      |      | 1.0    | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      | 0.0   | 0.0   |      |      |      |      | 0.0    | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      | 5.0   | 5.0   |      |      |      |      | 5.0    | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      | Lead  |       |      |      |      |      |        |       |       |
| Lead-Lag Optimize?      |      | Yes   |      | Yes   |       |      |      |      |      |        |       |       |
| Recall Mode             |      | C-Max |      | None  | C-Max |      |      |      |      | None   | None  | None  |
| Act Effect Green (s)    |      | 79.7  |      | 90.0  | 90.0  |      |      |      |      | 35.0   | 35.0  | 35.0  |
| Actuated g/C Ratio      |      | 0.59  |      | 0.67  | 0.67  |      |      |      |      | 0.26   | 0.26  | 0.26  |
| v/c Ratio               |      | 0.63  |      | 0.41  | 0.27  |      |      |      |      | 1.22dl | 0.71  | 0.71  |
| Control Delay           |      | 8.9   |      | 27.2  | 8.4   |      |      |      |      | 67.9   | 43.7  | 43.7  |
| Queue Delay             |      | 0.2   |      | 0.0   | 0.2   |      |      |      |      | 0.0    | 0.1   | 0.1   |
| Total Delay             |      | 9.1   |      | 27.2  | 8.6   |      |      |      |      | 67.9   | 43.7  | 43.7  |
| LOS                     |      | A     |      | C     | A     |      |      |      |      | E      | D     | D     |
| Approach Delay          |      | 9.1   |      |       | 9.9   |      |      |      |      | 62.8   |       |       |
| Approach LOS            |      | A     |      |       | A     |      |      |      |      | E      |       |       |
| Queue Length 50th (ft)  |      | 145   |      | 31    | 100   |      |      |      |      | 389    | 201   | 201   |
| Queue Length 95th (ft)  |      | 286   |      | m64   | 116   |      |      |      |      | #489   | 316   | 316   |
| Internal Link Dist (ft) |      | 297   |      |       | 282   |      |      | 125  |      | 272    |       |       |
| Turn Bay Length (ft)    |      |       |      | 70    |       |      |      |      |      |        |       | 50    |
| Base Capacity (vph)     |      | 2970  |      | 200   | 3390  |      |      |      |      | 1262   | 460   | 460   |
| Starvation Cap Reductn  |      | 319   |      | 0     | 1388  |      |      |      |      | 0      | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 159   |      |      |      |      | 0      | 2     | 2     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      | 0      | 0     | 0     |
| Reduced v/c Ratio       |      | 0.71  |      | 0.35  | 0.45  |      |      |      |      | 0.97   | 0.71  | 0.71  |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 70

MS

Synchro 9 Report  
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39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.97

Intersection Signal Delay: 28.1

Intersection LOS: C

Intersection Capacity Utilization 72.7%

ICU Level of Service C

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 39: San Jacinto Blvd & W. 15th St



MS


















Synchro 9 Report  
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## 40: Trinity St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2020 Background + Site

Timing Plan: PM

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     |  |  |   |   |  |   |   |  |  |   |   |   |
| Traffic Volume (vph)    | 88  | 1837  | 0   | 0   | 736   | 145   | 176   | 303   | 278   | 0   | 0   | 0   |
| Future Volume (vph)     | 88  | 1837  | 0   | 0   | 736   | 145   | 176   | 303   | 278   | 0   | 0   | 0   |
| Confl. Peds. (#/hr)     | 2   |   |   |   |   |   | 2   | 7   | 8   |   |   |   |
| Confl. Bikes (#/hr)     |   |   |   |   |   |   |   |   | 8   |   |   |   |
| Peak Hour Factor        | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  |
| Adj. Flow (vph)         | 92  | 1914  | 0   | 0   | 767   | 151   | 183   | 316   | 290   | 0   | 0   | 0   |
| Shared Lane Traffic (%) |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)   | 92  | 1914  | 0   | 0   | 918   | 0   | 0   | 499   | 290   | 0   | 0   | 0   |
| Turn Type               | pm+pt   | NA  |   |   | NA  |   | Perm  | NA  | Perm  |   |   |   |
| Protected Phases        | 5   | 2   |   |   | 6   |   |   | 4   |   |   |   |   |
| Permitted Phases        | 2   |   |   |   |   |   | 4   |   | 4   |   |   |   |
| Detector Phase          | 5   | 2   |   |   | 6   |   | 4   | 4   | 4   |   |   |   |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     | 3.0   | 10.0  |   |   | 10.0  |   | 5.0   | 5.0   | 5.0   |   |   |   |
| Minimum Split (s)       | 8.0   | 28.0  |   |   | 28.0  |   | 35.0  | 35.0  | 35.0  |   |   |   |
| Total Split (s)         | 10.0  | 100.0   |   |   | 90.0  |   | 35.0  | 35.0  | 35.0  |   |   |   |
| Total Split (%)         | 7.4%  | 74.1%   |   |   | 66.7%   |   | 25.9%   | 25.9%   | 25.9%   |   |   |   |
| Yellow Time (s)         | 4.0   | 4.0   |   |   | 4.0   |   | 4.0   | 4.0   | 4.0   |   |   |   |
| All-Red Time (s)        | 1.0   | 1.0   |   |   | 1.0   |   | 1.0   | 1.0   | 1.0   |   |   |   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |   |   | 0.0   |   | 0.0   | 0.0   | 0.0   |   |   |   |
| Total Lost Time (s)     | 5.0   | 5.0   |   |   | 5.0   |   | 5.0   | 5.0   | 5.0   |   |   |   |
| Lead/Lag                | Lead  |   |   |   | Lag   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?      | Yes   |   |   |   | Yes   |   |   |   |   |   |   |   |
| Recall Mode             | None  | C-Max   |   |   | C-Max   |   | Max   | Max   | Max   |   |   |   |
| Act Effect Green (s)    | 95.0  | 95.0  |   |   | 85.0  |   | 30.0  | 30.0  | 30.0  |   |   |   |
| Actuated g/C Ratio      | 0.70  | 0.70  |   |   | 0.63  |   | 0.22  | 0.22  | 0.22  |   |   |   |
| v/c Ratio               | 0.24  | 0.53  |   |   | 0.29  |   | 0.65  | 0.75  | 0.75  |   |   |   |
| Control Delay           | 6.3   | 7.2   |   |   | 6.5   |   | 52.3  | 52.6  | 52.6  |   |   |   |
| Queue Delay             | 0.0   | 0.2   |   |   | 0.0   |   | 0.0   | 0.1   | 0.1   |   |   |   |
| Total Delay             | 6.3   | 7.4   |   |   | 6.5   |   | 52.3  | 52.6  | 52.6  |   |   |   |
| LOS                     | A   | A   |   |   | A   |   | D   | D   | D   |   |   |   |
| Approach Delay          |   | 7.4   |   |   | 6.5   |   | 52.4  |   |   |   |   |   |
| Approach LOS            |   | A   |   |   | A   |   | D   |   |   |   |   |   |
| Queue Length 50th (ft)  | 20  | 157   |   |   | 81  |   | 211   | 195   | 195   |   |   |   |
| Queue Length 95th (ft)  | m30   | m167  |   |   | m78   |   | 273   | #322  | #322  |   |   |   |
| Internal Link Dist (ft) |   | 282   |   |   | 641   |   | 149   |   |   | 621   |   |   |
| Turn Bay Length (ft)    | 100   |   |   |   |   |   |   |   |   |   |   |   |
| Base Capacity (vph)     | 389   | 3578  |   |   | 3136  |   | 769   | 385   | 385   |   |   |   |
| Starvation Cap Reductn  | 0   | 711   |   |   | 0   |   | 0   | 0   | 0   |   |   |   |
| Spillback Cap Reductn   | 0   | 120   |   |   | 0   |   | 0   | 1   | 1   |   |   |   |
| Storage Cap Reductn     | 0   | 0   |   |   | 0   |   | 0   | 0   | 0   |   |   |   |
| Reduced v/c Ratio       | 0.24  | 0.67  |   |   | 0.29  |   | 0.65  | 0.76  | 0.76  |   |   |   |

## Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 75

MS

Synchro 9 Report  
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## 40: Trinity St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2020 Background + Site

Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 16.7

Intersection LOS: B

Intersection Capacity Utilization 72.7%

ICU Level of Service C

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 40: Trinity St &amp; W. 15th St



MS

Synchro 9 Report  
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11: Colorado St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 13.3 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |      |      | ↕    |      |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 6    | 103  | 14   | 0    | 62   | 201  | 9    | 0    | 15   | 89   | 151  |
| Future Vol, veh/h   | 0    | 6    | 103  | 14   | 0    | 62   | 201  | 9    | 0    | 15   | 89   | 151  |
| Peak Hour Factor    | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 8    | 132  | 18   | 0    | 79   | 258  | 12   | 0    | 19   | 114  | 194  |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB | WB   | NB   |
|----------------------------|----|------|------|
| Opposing Approach          | WB | EB   | SB   |
| Opposing Lanes             | 1  | 1    | 1    |
| Conflicting Approach Left  | SB | NB   | EB   |
| Conflicting Lanes Left     | 1  | 1    | 1    |
| Conflicting Approach Right | NB | SB   | WB   |
| Conflicting Lanes Right    | 1  | 1    | 1    |
| HCM Control Delay          | 11 | 15.3 | 13.4 |
| HCM LOS                    | B  | C    | B    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 6%    | 5%    | 23%   | 14%   |
| Vol Thru, %            | 35%   | 84%   | 74%   | 55%   |
| Vol Right, %           | 59%   | 11%   | 3%    | 31%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 255   | 123   | 272   | 132   |
| LT Vol                 | 15    | 6     | 62    | 18    |
| Through Vol            | 89    | 103   | 201   | 73    |
| RT Vol                 | 151   | 14    | 9     | 41    |
| Lane Flow Rate         | 327   | 158   | 349   | 169   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.486 | 0.258 | 0.545 | 0.273 |
| Departure Headway (Hd) | 5.353 | 5.895 | 5.627 | 5.808 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 670   | 606   | 638   | 614   |
| Service Time           | 3.422 | 3.975 | 3.69  | 3.89  |
| HCM Lane V/C Ratio     | 0.488 | 0.261 | 0.547 | 0.275 |
| HCM Control Delay      | 13.4  | 11    | 15.3  | 11.1  |
| HCM Lane LOS           | B     | B     | C     | B     |
| HCM 95th-tile Q        | 2.7   | 1     | 3.3   | 1.1   |

11: Colorado St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 18   | 73   | 41   |
| Future Vol, veh/h   | 0    | 18   | 73   | 41   |
| Peak Hour Factor    | 0.78 | 0.78 | 0.78 | 0.78 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 23   | 94   | 53   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 11.1 |
| HCM LOS                    | B    |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 10.3 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↰    |      |      |      | ↰    |      |      |      | ↰    |      |
| Traffic Vol, veh/h  | 0    | 0    | 274  | 0    | 0    | 0    | 331  | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h   | 0    | 0    | 274  | 0    | 0    | 0    | 331  | 0    | 0    | 0    | 0    | 0    |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 319  | 0    | 0    | 0    | 385  | 0    | 0    | 0    | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB | WB   | NB |
|----------------------------|----|------|----|
| Opposing Approach          | WB | EB   | SB |
| Opposing Lanes             | 1  | 1    | 1  |
| Conflicting Approach Left  | SB | NB   | EB |
| Conflicting Lanes Left     | 1  | 1    | 1  |
| Conflicting Approach Right | NB | SB   | WB |
| Conflicting Lanes Right    | 1  | 1    | 1  |
| HCM Control Delay          | 10 | 10.7 | 0  |
| HCM LOS                    | A  | B    | -  |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 0%    | 0%    | 0%    | 0%    |
| Vol Thru, %            | 100%  | 100%  | 100%  | 0%    |
| Vol Right, %           | 0%    | 0%    | 0%    | 100%  |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 0     | 274   | 331   | 12    |
| LT Vol                 | 0     | 0     | 0     | 0     |
| Through Vol            | 0     | 274   | 331   | 0     |
| RT Vol                 | 0     | 0     | 0     | 12    |
| Lane Flow Rate         | 0     | 319   | 385   | 14    |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0     | 0.384 | 0.448 | 0.019 |
| Departure Headway (Hd) | 5.456 | 4.344 | 4.195 | 4.821 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 0     | 832   | 843   | 745   |
| Service Time           | 3.472 | 2.348 | 2.294 | 2.834 |
| HCM Lane V/C Ratio     | 0     | 0.383 | 0.457 | 0.019 |
| HCM Control Delay      | 8.5   | 10    | 10.7  | 7.9   |
| HCM Lane LOS           | N     | A     | B     | A     |
| HCM 95th-tile Q        | 0     | 1.8   | 2.3   | 0.1   |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      |      | ↰    |
| Traffic Vol, veh/h  | 0    | 0    | 0    | 12   |
| Future Vol, veh/h   | 0    | 0    | 0    | 12   |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 0    | 14   |
| Number of Lanes     | 0    | 0    | 0    | 1    |

| Approach                   | SB  |
|----------------------------|-----|
| Opposing Approach          | NB  |
| Opposing Lanes             | 1   |
| Conflicting Approach Left  | WB  |
| Conflicting Lanes Left     | 1   |
| Conflicting Approach Right | EB  |
| Conflicting Lanes Right    | 1   |
| HCM Control Delay          | 7.9 |
| HCM LOS                    | A   |

14: Brazos St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 20.8 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | C    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |      |      | ↕    |      |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 39   | 270  | 25   | 0    | 10   | 64   | 25   | 0    | 183  | 160  | 0    |
| Future Vol, veh/h   | 0    | 39   | 270  | 25   | 0    | 10   | 64   | 25   | 0    | 183  | 160  | 0    |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 45   | 314  | 29   | 0    | 12   | 74   | 29   | 0    | 213  | 186  | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB   | NB |
|----------------------------|------|------|----|
| Opposing Approach          | WB   | EB   | SB |
| Opposing Lanes             | 1    | 1    | 1  |
| Conflicting Approach Left  | SB   | NB   | EB |
| Conflicting Lanes Left     | 1    | 1    | 1  |
| Conflicting Approach Right | NB   | SB   | WB |
| Conflicting Lanes Right    | 1    | 1    | 1  |
| HCM Control Delay          | 23.1 | 12.4 | 24 |
| HCM LOS                    | C    | B    | C  |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 53%   | 12%   | 10%   | 36%   |
| Vol Thru, %            | 47%   | 81%   | 65%   | 21%   |
| Vol Right, %           | 0%    | 7%    | 25%   | 43%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 343   | 334   | 99    | 268   |
| LT Vol                 | 183   | 39    | 10    | 97    |
| Through Vol            | 160   | 270   | 64    | 56    |
| RT Vol                 | 0     | 25    | 25    | 115   |
| Lane Flow Rate         | 399   | 388   | 115   | 312   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.713 | 0.696 | 0.228 | 0.551 |
| Departure Headway (Hd) | 6.44  | 6.454 | 7.134 | 6.362 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 558   | 559   | 500   | 564   |
| Service Time           | 4.51  | 4.52  | 5.231 | 4.436 |
| HCM Lane V/C Ratio     | 0.715 | 0.694 | 0.23  | 0.553 |
| HCM Control Delay      | 24    | 23.1  | 12.4  | 17    |
| HCM Lane LOS           | C     | C     | B     | C     |
| HCM 95th-tile Q        | 5.8   | 5.5   | 0.9   | 3.3   |

14: Brazos St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 97   | 56   | 115  |
| Future Vol, veh/h   | 0    | 97   | 56   | 115  |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 113  | 65   | 134  |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB |
|----------------------------|----|
| Opposing Approach          | NB |
| Opposing Lanes             | 1  |
| Conflicting Approach Left  | WB |
| Conflicting Lanes Left     | 1  |
| Conflicting Approach Right | EB |
| Conflicting Lanes Right    | 1  |
| HCM Control Delay          | 17 |
| HCM LOS                    | C  |

16: San Jacinto Blvd & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 15.4 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | C    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↰    |      |      |      | ↱    |      |      |      |      |      |
| Traffic Vol, veh/h  | 0    | 0    | 96   | 300  | 0    | 35   | 53   | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h   | 0    | 0    | 96   | 300  | 0    | 35   | 53   | 0    | 0    | 0    | 0    | 0    |
| Peak Hour Factor    | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 101  | 316  | 0    | 37   | 56   | 0    | 0    | 0    | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    |

| Approach                   | EB   | WB   |
|----------------------------|------|------|
| Opposing Approach          | WB   | EB   |
| Opposing Lanes             | 1    | 1    |
| Conflicting Approach Left  | SB   |      |
| Conflicting Lanes Left     | 3    | 0    |
| Conflicting Approach Right |      | SB   |
| Conflicting Lanes Right    | 0    | 3    |
| HCM Control Delay          | 18.8 | 11.2 |
| HCM LOS                    | C    | B    |

| Lane                   | EBLn1 | WBLn1 | SBLn1 | SBLn2 | SBLn3 |
|------------------------|-------|-------|-------|-------|-------|
| Vol Left, %            | 0%    | 40%   | 0%    | 0%    | 0%    |
| Vol Thru, %            | 24%   | 60%   | 100%  | 100%  | 0%    |
| Vol Right, %           | 76%   | 0%    | 0%    | 0%    | 100%  |
| Sign Control           | Stop  | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 396   | 88    | 264   | 264   | 22    |
| LT Vol                 | 0     | 35    | 0     | 0     | 0     |
| Through Vol            | 96    | 53    | 264   | 264   | 0     |
| RT Vol                 | 300   | 0     | 0     | 0     | 22    |
| Lane Flow Rate         | 417   | 93    | 277   | 277   | 23    |
| Geometry Grp           | 7     | 7     | 7     | 7     | 7     |
| Degree of Util (X)     | 0.659 | 0.178 | 0.467 | 0.467 | 0.023 |
| Departure Headway (Hd) | 5.691 | 6.899 | 6.06  | 6.06  | 3.595 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 634   | 520   | 594   | 594   | 992   |
| Service Time           | 3.43  | 4.652 | 3.797 | 3.797 | 1.331 |
| HCM Lane V/C Ratio     | 0.658 | 0.179 | 0.466 | 0.466 | 0.023 |
| HCM Control Delay      | 18.8  | 11.2  | 14    | 14    | 6.4   |
| HCM Lane LOS           | C     | B     | B     | B     | A     |
| HCM 95th-tile Q        | 4.9   | 0.6   | 2.5   | 2.5   | 0.1   |

16: San Jacinto Blvd & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↰↱   | ↱    |
| Traffic Vol, veh/h  | 0    | 0    | 527  | 22   |
| Future Vol, veh/h   | 0    | 0    | 527  | 22   |
| Peak Hour Factor    | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 555  | 23   |
| Number of Lanes     | 0    | 0    | 2    | 1    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          |      |
| Opposing Lanes             | 0    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 13.7 |
| HCM LOS                    | B    |

20: Colorado St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Intersection              |     |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 9.9 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | A   |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |      |      | ↕    |      |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 77   | 36   | 15   | 0    | 0    | 174  | 0    | 0    | 15   | 129  | 0    |
| Future Vol, veh/h   | 0    | 77   | 36   | 15   | 0    | 0    | 174  | 0    | 0    | 15   | 129  | 0    |
| Peak Hour Factor    | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 94   | 44   | 18   | 0    | 0    | 212  | 0    | 0    | 18   | 157  | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB  | WB   | NB |
|----------------------------|-----|------|----|
| Opposing Approach          | WB  | EB   | SB |
| Opposing Lanes             | 1   | 1    | 1  |
| Conflicting Approach Left  | SB  | NB   | EB |
| Conflicting Lanes Left     | 1   | 1    | 1  |
| Conflicting Approach Right | NB  | SB   | WB |
| Conflicting Lanes Right    | 1   | 1    | 1  |
| HCM Control Delay          | 9.8 | 10.3 | 10 |
| HCM LOS                    | A   | B    | A  |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 10%   | 60%   | 0%    | 0%    |
| Vol Thru, %            | 90%   | 28%   | 100%  | 47%   |
| Vol Right, %           | 0%    | 12%   | 0%    | 53%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 144   | 128   | 174   | 159   |
| LT Vol                 | 15    | 77    | 0     | 0     |
| Through Vol            | 129   | 36    | 174   | 74    |
| RT Vol                 | 0     | 15    | 0     | 85    |
| Lane Flow Rate         | 176   | 156   | 212   | 194   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.25  | 0.224 | 0.297 | 0.257 |
| Departure Headway (Hd) | 5.127 | 5.168 | 5.042 | 4.776 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 692   | 685   | 704   | 743   |
| Service Time           | 3.22  | 3.266 | 3.134 | 2.866 |
| HCM Lane V/C Ratio     | 0.254 | 0.228 | 0.301 | 0.261 |
| HCM Control Delay      | 10    | 9.8   | 10.3  | 9.5   |
| HCM Lane LOS           | A     | A     | B     | A     |
| HCM 95th-tile Q        | 1     | 0.9   | 1.2   | 1     |

20: Colorado St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 0    | 74   | 85   |
| Future Vol, veh/h   | 0    | 0    | 74   | 85   |
| Peak Hour Factor    | 0.82 | 0.82 | 0.82 | 0.82 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 90   | 104  |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB  |
|----------------------------|-----|
| Opposing Approach          | NB  |
| Opposing Lanes             | 1   |
| Conflicting Approach Left  | WB  |
| Conflicting Lanes Left     | 1   |
| Conflicting Approach Right | EB  |
| Conflicting Lanes Right    | 1   |
| HCM Control Delay          | 9.5 |
| HCM LOS                    | A   |

24: E. 17th St & Brazos St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Intersection              |     |
|---------------------------|-----|
| Intersection Delay, s/veh | 8.7 |
| Intersection LOS          | A   |

| Movement            | EBU  | EBL  | EBT  | WBU  | WBT  | WBR  | SBU  | SBL  | SBR  |
|---------------------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↰    |      | ↰    |      |      | ↰    |      |
| Traffic Vol, veh/h  | 0    | 0    | 193  | 0    | 40   | 50   | 0    | 94   | 0    |
| Future Vol, veh/h   | 0    | 0    | 193  | 0    | 40   | 50   | 0    | 94   | 0    |
| Peak Hour Factor    | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 238  | 0    | 49   | 62   | 0    | 116  | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 1    | 0    | 0    | 1    | 0    |

| Approach                   | EB  | WB  | SB  |
|----------------------------|-----|-----|-----|
| Opposing Approach          | WB  | EB  |     |
| Opposing Lanes             | 1   | 1   | 0   |
| Conflicting Approach Left  | SB  |     | WB  |
| Conflicting Lanes Left     | 1   | 0   | 1   |
| Conflicting Approach Right |     | SB  | EB  |
| Conflicting Lanes Right    | 0   | 1   | 1   |
| HCM Control Delay          | 9.1 | 7.8 | 8.8 |
| HCM LOS                    | A   | A   | A   |

| Lane                   | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, %            | 0%    | 0%    | 100%  |
| Vol Thru, %            | 100%  | 44%   | 0%    |
| Vol Right, %           | 0%    | 56%   | 0%    |
| Sign Control           | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 193   | 90    | 94    |
| LT Vol                 | 0     | 0     | 94    |
| Through Vol            | 193   | 40    | 0     |
| RT Vol                 | 0     | 50    | 0     |
| Lane Flow Rate         | 238   | 111   | 116   |
| Geometry Grp           | 1     | 1     | 1     |
| Degree of Util (X)     | 0.288 | 0.128 | 0.158 |
| Departure Headway (Hd) | 4.344 | 4.15  | 4.899 |
| Convergence, Y/N       | Yes   | Yes   | Yes   |
| Cap                    | 829   | 864   | 733   |
| Service Time           | 2.361 | 2.17  | 2.923 |
| HCM Lane V/C Ratio     | 0.287 | 0.128 | 0.158 |
| HCM Control Delay      | 9.1   | 7.8   | 8.8   |
| HCM Lane LOS           | A     | A     | A     |
| HCM 95th-tile Q        | 1.2   | 0.4   | 0.6   |

4: Colorado St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.9  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑↑   |      | ↑    | ↑↑   | ↑    |      |
| Traffic Vol, veh/h       | 646  | 33   | 32   | 1315 | 2    | 116  |
| Future Vol, veh/h        | 646  | 33   | 32   | 1315 | 2    | 116  |
| Conflicting Peds, #/hr   | 0    | 8    | 8    | 0    | 0    | 11   |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | 40   | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 94   | 94   | 94   | 94   | 94   | 94   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 687  | 35   | 34   | 1399 | 2    | 123  |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |      |
|----------------------|--------|---|--------|---|--------|------|
| Conflicting Flow All | 0      | 0 | 730    | 0 | 1481   | 380  |
| Stage 1              | -      | - | -      | - | 713    | -    |
| Stage 2              | -      | - | -      | - | 768    | -    |
| Critical Hdwy        | -      | - | 4.14   | - | 6.84   | 6.94 |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.84   | -    |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.84   | -    |
| Follow-up Hdwy       | -      | - | 2.22   | - | 3.52   | 3.32 |
| Pot Cap-1 Maneuver   | -      | - | 870    | - | 116    | 618  |
| Stage 1              | -      | - | -      | - | 447    | -    |
| Stage 2              | -      | - | -      | - | 418    | -    |
| Platoon blocked, %   | -      | - | -      | - | -      | -    |
| Mov Cap-1 Maneuver   | -      | - | 861    | - | 111    | 607  |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 111    | -    |
| Stage 1              | -      | - | -      | - | 444    | -    |
| Stage 2              | -      | - | -      | - | 401    | -    |

| Approach             | EB | WB  | NB   |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0  | 0.2 | 13.2 |
| HCM LOS              |    |     | B    |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL  | WBT |
|-----------------------|-------|-----|-----|------|-----|
| Capacity (veh/h)      | 564   | -   | -   | 861  | -   |
| HCM Lane V/C Ratio    | 0.223 | -   | -   | 0.04 | -   |
| HCM Control Delay (s) | 13.2  | -   | -   | 9.4  | -   |
| HCM Lane LOS          | B     | -   | -   | A    | -   |
| HCM 95th %tile Q(veh) | 0.8   | -   | -   | 0.1  | -   |

9: Guadalupe St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 32.2 |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    | ↑    |      | ↑    |      |      |      |      | ↑↑   |      |      |
| Traffic Vol, veh/h       | 0    | 20   | 11   | 200  | 94   | 0    | 0    | 0    | 0    | 36   | 983  | 22   |
| Future Vol, veh/h        | 0    | 20   | 11   | 200  | 94   | 0    | 0    | 0    | 0    | 36   | 983  | 22   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 54   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 41   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 0    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 21   | 11   | 206  | 97   | 0    | 0    | 0    | 0    | 37   | 1013 | 23   |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |   |
|----------------------|--------|------|--------|------|--------|---|
| Conflicting Flow All | -      | 1140 | 613    | 645  | 1151   | - |
| Stage 1              | -      | 1140 | -      | 0    | 0      | - |
| Stage 2              | -      | 0    | -      | 645  | 1151   | - |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | - |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | - |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | - |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | - |
| Pot Cap-1 Maneuver   | 0      | 200  | 435    | 357  | 197    | 0 |
| Stage 1              | 0      | 274  | -      | -    | -      | 0 |
| Stage 2              | 0      | -    | -      | 427  | 271    | 0 |
| Platoon blocked, %   | -      | -    | -      | -    | -      | - |
| Mov Cap-1 Maneuver   | -      | 192  | 418    | 319  | 189    | - |
| Mov Cap-2 Maneuver   | -      | 192  | -      | 319  | 189    | - |
| Stage 1              | -      | 263  | -      | -    | -      | - |
| Stage 2              | -      | -    | -      | 383  | 260    | - |

| Approach             | EB   | WB    | SB |
|----------------------|------|-------|----|
| HCM Control Delay, s | 21.7 | 147.4 |    |
| HCM LOS              | C    | F     |    |

| Minor Lane/Major Mvmt | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-------|-------|-----|-----|-----|
| Capacity (veh/h)      | 192   | 418   | 261   | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.107 | 0.027 | 1.161 | -   | -   | -   |
| HCM Control Delay (s) | 26    | 13.9  | 147.4 | -   | -   | -   |
| HCM Lane LOS          | D     | B     | F     | -   | -   | -   |
| HCM 95th %tile Q(veh) | 0.4   | 0.1   | 13.6  | -   | -   | -   |

10: Lavaca St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |       |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|-------|------|------|------|------|------|
| Int Delay, s/veh         | 38.8 |      |      |      |      |      |       |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL   | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      | ↕ ↕ ↕ |      |      |      |      |      |
| Traffic Vol, veh/h       | 10   | 53   | 0    | 0    | 170  | 74   | 63    | 997  | 76   | 0    | 0    | 0    |
| Future Vol, veh/h        | 10   | 53   | 0    | 0    | 170  | 74   | 63    | 997  | 76   | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 21   | 25    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free  | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -     | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 0     | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | -    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 95   | 95   | 95   | 95   | 95   | 95   | 95    | 95   | 95   | 95   | 95   | 95   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2     | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 11   | 56   | 0    | 0    | 179  | 78   | 66    | 1049 | 80   | 0    | 0    | 0    |

| Major/Minor          | Minor2 |      | Minor1 |   | Major1 |      |
|----------------------|--------|------|--------|---|--------|------|
| Conflicting Flow All | 688    | 1287 | -      | - | 1247   | 586  |
| Stage 1              | 25     | 25   | -      | - | 1222   | -    |
| Stage 2              | 663    | 1262 | -      | - | 25     | -    |
| Critical Hdwy        | 6.44   | 6.54 | -      | - | 6.54   | 7.14 |
| Critical Hdwy Stg 1  | -      | -    | -      | - | 5.54   | -    |
| Critical Hdwy Stg 2  | 6.74   | 5.54 | -      | - | -      | -    |
| Follow-up Hdwy       | 3.82   | 4.02 | -      | - | 4.02   | 3.92 |
| Pot Cap-1 Maneuver   | 388    | 163  | 0      | 0 | ~ 172  | 389  |
| Stage 1              | -      | -    | 0      | 0 | 250    | -    |
| Stage 2              | 379    | 239  | 0      | 0 | -      | -    |
| Platoon blocked, %   | -      | -    | -      | - | -      | -    |
| Mov Cap-1 Maneuver   | -      | 150  | -      | - | ~ 158  | 389  |
| Mov Cap-2 Maneuver   | -      | 150  | -      | - | ~ 158  | -    |
| Stage 1              | -      | -    | -      | - | 235    | -    |
| Stage 2              | 68     | 225  | -      | - | -      | -    |

| Approach             | EB | WB    | NB  |
|----------------------|----|-------|-----|
| HCM Control Delay, s |    | 227.3 | 0.5 |
| HCM LOS              | -  | F     |     |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1 | WBLn1 |
|-----------------------|-------|-----|-----|-------|-------|
| Capacity (veh/h)      | 1124  | -   | -   | -     | 193   |
| HCM Lane V/C Ratio    | 0.059 | -   | -   | -     | 1.331 |
| HCM Control Delay (s) | 8.4   | -   | -   | -     | 227.3 |
| HCM Lane LOS          | A     | -   | -   | -     | F     |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | -     | 14.6  |

| Notes                      |                        |                            |                                |  |
|----------------------------|------------------------|----------------------------|--------------------------------|--|
| -: Volume exceeds capacity | \$: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |  |

13: W. 18th St & Parking Dr. 2  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 4.7  |      |      |      |      |      |
| Movement                 | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
| Lane Configurations      |      | ↕    |      | ↕    | ↕    |      |
| Traffic Vol, veh/h       | 24   | 278  | 342  | 20   | 97   | 116  |
| Future Vol, veh/h        | 24   | 278  | 342  | 20   | 97   | 116  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | -    | 0    | 0    | -    | 0    | -    |
| Grade, %                 | -    | 0    | 0    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 26   | 302  | 372  | 22   | 105  | 126  |

| Major/Minor          | Major1 |   | Major2 |   | Minor2 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 393    | 0 | -      | 0 | 737    | 383   |
| Stage 1              | -      | - | -      | - | 383    | -     |
| Stage 2              | -      | - | -      | - | 354    | -     |
| Critical Hdwy        | 4.12   | - | -      | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | 2.218  | - | -      | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | 1166   | - | -      | - | 386    | 664   |
| Stage 1              | -      | - | -      | - | 689    | -     |
| Stage 2              | -      | - | -      | - | 710    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | 1166   | - | -      | - | 376    | 664   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 376    | -     |
| Stage 1              | -      | - | -      | - | 689    | -     |
| Stage 2              | -      | - | -      | - | 691    | -     |

| Approach             | EB  | WB | SB   |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.6 | 0  | 18.7 |
| HCM LOS              |     |    | C    |

| Minor Lane/Major Mvmt | EBL   | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h)      | 1166  | -   | -   | -   | 492   |
| HCM Lane V/C Ratio    | 0.022 | -   | -   | -   | 0.471 |
| HCM Control Delay (s) | 8.2   | 0   | -   | -   | 18.7  |
| HCM Lane LOS          | A     | A   | -   | -   | C     |
| HCM 95th %tile Q(veh) | 0.1   | -   | -   | -   | 2.5   |

15: Brazos St & Parking Dr. 1  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 10.1 |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | ↰    |      |      | ↱    | ↰    |      |
| Traffic Vol, veh/h       | 242  | 145  | 30   | 195  | 51   | 50   |
| Future Vol, veh/h        | 242  | 145  | 30   | 195  | 51   | 50   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 263  | 158  | 33   | 212  | 55   | 54   |

| Major/Minor          | Minor2 | Major1 |       | Major2 |     |
|----------------------|--------|--------|-------|--------|-----|
| Conflicting Flow All | 360    | 83     | 110   | 0      | - 0 |
| Stage 1              | 83     | -      | -     | -      | -   |
| Stage 2              | 277    | -      | -     | -      | -   |
| Critical Hdwy        | 7.12   | 6.22   | 4.12  | -      | -   |
| Critical Hdwy Stg 1  | 6.12   | -      | -     | -      | -   |
| Critical Hdwy Stg 2  | 6.12   | -      | -     | -      | -   |
| Follow-up Hdwy       | 3.518  | 3.318  | 2.218 | -      | -   |
| Pot Cap-1 Maneuver   | 596    | 976    | 1480  | -      | -   |
| Stage 1              | 925    | -      | -     | -      | -   |
| Stage 2              | 729    | -      | -     | -      | -   |
| Platoon blocked, %   |        |        |       | -      | -   |
| Mov Cap-1 Maneuver   | 585    | 976    | 1480  | -      | -   |
| Mov Cap-2 Maneuver   | 585    | -      | -     | -      | -   |
| Stage 1              | 902    | -      | -     | -      | -   |
| Stage 2              | 711    | -      | -     | -      | -   |

| Approach             | EB   | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 18.1 | 1  | 0  |
| HCM LOS              | C    |    |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1480  | -   | 688   | -   | -   |
| HCM Lane V/C Ratio    | 0.022 | -   | 0.611 | -   | -   |
| HCM Control Delay (s) | 7.5   | 0   | 18.1  | -   | -   |
| HCM Lane LOS          | A     | A   | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.1   | -   | 4.2   | -   | -   |

17: Trinity St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 6.8  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↱    |      |      | ↰    |      | ↰    | ↱    | ↱    |      |      |      |
| Traffic Vol, veh/h       | 177  | 0    | 0    | 0    | 0    | 0    | 170  | 585  | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 177  | 0    | 0    | 0    | 0    | 0    | 170  | 585  | 0    | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 18   | 0    | 0    | 0    | 21   | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 115  | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | -    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 208  | 0    | 0    | 0    | 0    | 0    | 200  | 688  | 0    | 0    | 0    | 0    |

| Major/Minor          | Minor2 | Major2 |   | Major1 |           |
|----------------------|--------|--------|---|--------|-----------|
| Conflicting Flow All | 697    | 1110   | - | - 0    | 22 0 -    |
| Stage 1              | 22     | 22     | - | - -    | - - -     |
| Stage 2              | 675    | 1088   | - | - -    | - - -     |
| Critical Hdwy        | 6.08   | 6.53   | - | - -    | 4.13 - -  |
| Critical Hdwy Stg 1  | 5.43   | 5.53   | - | - -    | - - -     |
| Critical Hdwy Stg 2  | 6.03   | 5.53   | - | - -    | - - -     |
| Follow-up Hdwy       | 3.669  | 4.019  | - | - -    | 2.219 - - |
| Pot Cap-1 Maneuver   | 422    | 209    | 0 | 0 -    | 1593 - 0  |
| Stage 1              | 960    | 877    | 0 | 0 -    | - - 0     |
| Stage 2              | 438    | 291    | 0 | 0 -    | - - 0     |
| Platoon blocked, %   |        |        | - | - -    | - - -     |
| Mov Cap-1 Maneuver   | 354    | 0      | - | - -    | 1593 - -  |
| Mov Cap-2 Maneuver   | 354    | 0      | - | - -    | - - -     |
| Stage 1              | 941    | 0      | - | - -    | - - -     |
| Stage 2              | 375    | 0      | - | - -    | - - -     |

| Approach             | EB   | WB | NB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 28.7 | 0  | 1.7 |
| HCM LOS              | D    |    |     |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | WBT | WBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1593  | -   | 354   | -   | -   |
| HCM Lane V/C Ratio    | 0.126 | -   | 0.588 | -   | -   |
| HCM Control Delay (s) | 7.6   | -   | 28.7  | -   | -   |
| HCM Lane LOS          | A     | -   | D     | -   | -   |
| HCM 95th %tile Q(veh) | 0.4   | -   | 3.6   | -   | -   |

25: San Jacinto Blvd & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 31.2 |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    | ↑    |      | ↑    |      |      |      |      | ↑↑   | ↑    | ↑    |
| Traffic Vol, veh/h       | 0    | 146  | 158  | 35   | 43   | 0    | 0    | 0    | 0    | 104  | 996  | 20   |
| Future Vol, veh/h        | 0    | 146  | 158  | 35   | 43   | 0    | 0    | 0    | 0    | 104  | 996  | 20   |
| Conflicting Peds, #/hr   | 0    | 0    | 19   | 0    | 0    | 0    | 0    | 0    | 0    | 94   | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 40   | -    | -    | -    | -    | -    | -    | -    | -    | 50   |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 154  | 166  | 37   | 45   | 0    | 0    | 0    | 0    | 109  | 1048 | 21   |

| Major/Minor          | Minor2 |       |      | Minor1 |      |   | Major2 |   |   |
|----------------------|--------|-------|------|--------|------|---|--------|---|---|
| Conflicting Flow All | -      | 1361  | 543  | 933    | 1361 | - | 94     | 0 | 0 |
| Stage 1              | -      | 1267  | -    | 94     | 94   | - | -      | - | - |
| Stage 2              | -      | 94    | -    | 839    | 1267 | - | -      | - | - |
| Critical Hdwy        | -      | 6.54  | 6.94 | 7.54   | 6.54 | - | 4.14   | - | - |
| Critical Hdwy Stg 1  | -      | 5.54  | -    | -      | -    | - | -      | - | - |
| Critical Hdwy Stg 2  | -      | -     | -    | 6.54   | 5.54 | - | -      | - | - |
| Follow-up Hdwy       | -      | 4.02  | 3.32 | 3.52   | 4.02 | - | 2.22   | - | - |
| Pot Cap-1 Maneuver   | 0      | ~ 147 | 484  | 221    | 147  | 0 | 1498   | - | - |
| Stage 1              | 0      | 238   | -    | -      | -    | 0 | -      | - | - |
| Stage 2              | 0      | -     | -    | 326    | 238  | 0 | -      | - | - |
| Platoon blocked, %   | -      | -     | -    | -      | -    | - | -      | - | - |
| Mov Cap-1 Maneuver   | -      | ~ 110 | 484  | -      | 110  | - | 1498   | - | - |
| Mov Cap-2 Maneuver   | -      | ~ 110 | -    | -      | 110  | - | -      | - | - |
| Stage 1              | -      | 195   | -    | -      | -    | - | -      | - | - |
| Stage 2              | -      | -     | -    | 37     | 195  | - | -      | - | - |

| Approach             | EB    | WB | SB |
|----------------------|-------|----|----|
| HCM Control Delay, s | 150.7 |    | 1  |
| HCM LOS              | F     | -  |    |

| Minor Lane/Major Mvmt | EBLn1 | EBLn2 | WBLn1 | SBL   | SBT | SBR |
|-----------------------|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h)      | 110   | 484   | -     | 1498  | -   | -   |
| HCM Lane V/C Ratio    | 1.397 | 0.344 | -     | 0.073 | -   | -   |
| HCM Control Delay (s) | 296.1 | 16.3  | -     | 7.6   | 0.3 | -   |
| HCM Lane LOS          | F     | C     | -     | A     | A   | -   |
| HCM 95th %tile Q(veh) | 10.8  | 1.5   | -     | 0.2   | -   | -   |

| Notes                      |                        |                            |                                |
|----------------------------|------------------------|----------------------------|--------------------------------|
| -: Volume exceeds capacity | \$: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

26: Trinity St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 4    |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | ↓    |      | ↑↑   | ↑↑   |      |      |
| Traffic Vol, veh/h       | 226  | 0    | 20   | 530  | 0    | 0    |
| Future Vol, veh/h        | 226  | 0    | 20   | 530  | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | -    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 83   | 83   | 83   | 83   | 83   | 83   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 272  | 0    | 24   | 639  | 0    | 0    |

| Major/Minor          | Minor2 | Major1 |      |   |
|----------------------|--------|--------|------|---|
| Conflicting Flow All | 304    | -      | 0    | 0 |
| Stage 1              | 0      | -      | -    | - |
| Stage 2              | 304    | -      | -    | - |
| Critical Hdwy        | 5.74   | -      | 5.34 | - |
| Critical Hdwy Stg 1  | -      | -      | -    | - |
| Critical Hdwy Stg 2  | 6.04   | -      | -    | - |
| Follow-up Hdwy       | 3.82   | -      | 3.12 | - |
| Pot Cap-1 Maneuver   | 679    | 0      | -    | - |
| Stage 1              | -      | 0      | -    | - |
| Stage 2              | 662    | 0      | -    | - |
| Platoon blocked, %   | -      | -      | -    | - |
| Mov Cap-1 Maneuver   | 679    | -      | -    | - |
| Mov Cap-2 Maneuver   | 679    | -      | -    | - |
| Stage 1              | -      | -      | -    | - |
| Stage 2              | 662    | -      | -    | - |

| Approach             | EB   | NB |
|----------------------|------|----|
| HCM Control Delay, s | 13.8 |    |
| HCM LOS              | B    |    |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 |
|-----------------------|-----|-----|-------|
| Capacity (veh/h)      | -   | -   | 679   |
| HCM Lane V/C Ratio    | -   | -   | 0.401 |
| HCM Control Delay (s) | -   | -   | 13.8  |
| HCM Lane LOS          | -   | -   | B     |
| HCM 95th %tile Q(veh) | -   | -   | 1.9   |

27: Guadalupe St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 34.8 |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      |      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 0    | 20   | 11   | 85   | 94   | 0    | 0    | 0    | 0    | 26   | 1246 | 23   |
| Future Vol, veh/h        | 0    | 20   | 11   | 85   | 94   | 0    | 0    | 0    | 0    | 26   | 1246 | 23   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 24   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 42   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 23   | 13   | 98   | 108  | 0    | 0    | 0    | 0    | 30   | 1432 | 26   |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |   |
|----------------------|--------|------|--------|------|--------|---|
| Conflicting Flow All | -      | 1534 | 782    | 811  | 1534   | - |
| Stage 1              | -      | 1534 | -      | 0    | 0      | - |
| Stage 2              | -      | 0    | -      | 811  | 1534   | - |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | - |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | - |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | - |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | - |
| Pot Cap-1 Maneuver   | 0      | 115  | 337    | 271  | 115    | 0 |
| Stage 1              | 0      | 177  | -      | -    | -      | 0 |
| Stage 2              | 0      | -    | -      | 339  | 177    | 0 |
| Platoon blocked, %   | -      | -    | -      | -    | -      | - |
| Mov Cap-1 Maneuver   | -      | 110  | 324    | 219  | 110    | - |
| Mov Cap-2 Maneuver   | -      | 110  | -      | 219  | 110    | - |
| Stage 1              | -      | 170  | -      | -    | -      | - |
| Stage 2              | -      | -    | -      | 282  | 170    | - |

| Approach             | EB | WB    | SB |
|----------------------|----|-------|----|
| HCM Control Delay, s | 38 | 285.8 |    |
| HCM LOS              | E  | F     |    |

| Minor Lane/Major Mvmt | EBLn1WBLn1 | SBL   | SBT | SBR |
|-----------------------|------------|-------|-----|-----|
| Capacity (veh/h)      | 144        | 144   | -   | -   |
| HCM Lane V/C Ratio    | 0.247      | 1.429 | -   | -   |
| HCM Control Delay (s) | 38         | 285.8 | -   | -   |
| HCM Lane LOS          | E          | F     | -   | -   |
| HCM 95th %tile Q(veh) | 0.9        | 13.5  | -   | -   |

MS

Synchro 9 Report  
Page 9

29: Colorado St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 5.2  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      |      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 6    | 69   | 14   | 18   | 35   | 8    | 15   | 66   | 41   | 9    | 360  | 41   |
| Future Vol, veh/h        | 6    | 69   | 14   | 18   | 35   | 8    | 15   | 66   | 41   | 9    | 360  | 41   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 15   | 85   | 0    | 0    | 0    | 0    | 85   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 8    | 88   | 18   | 23   | 45   | 10   | 19   | 85   | 53   | 12   | 462  | 53   |

| Major/Minor          | Minor2 |       | Minor1 |       | Major1 |       | Major2 |   |
|----------------------|--------|-------|--------|-------|--------|-------|--------|---|
| Conflicting Flow All | 788    | 772   | 573    | 713   | 771    | 126   | 599    | 0 |
| Stage 1              | 596    | 596   | -      | 149   | 149    | -     | -      | - |
| Stage 2              | 192    | 176   | -      | 564   | 622    | -     | -      | - |
| Critical Hdwy        | 7.12   | 6.52  | 6.22   | 7.12  | 6.52   | 6.22  | 4.12   | - |
| Critical Hdwy Stg 1  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -      | - |
| Critical Hdwy Stg 2  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -      | - |
| Follow-up Hdwy       | 3.518  | 4.018 | 3.318  | 3.518 | 4.018  | 3.318 | 2.218  | - |
| Pot Cap-1 Maneuver   | 309    | 330   | 519    | 347   | 331    | 924   | 978    | - |
| Stage 1              | 490    | 492   | -      | 854   | 774    | -     | -      | - |
| Stage 2              | 810    | 753   | -      | 510   | 479    | -     | -      | - |
| Platoon blocked, %   | -      | -     | -      | -     | -      | -     | -      | - |
| Mov Cap-1 Maneuver   | 238    | 293   | 477    | 250   | 294    | 911   | 978    | - |
| Mov Cap-2 Maneuver   | 238    | 293   | -      | 250   | 294    | -     | -      | - |
| Stage 1              | 441    | 447   | -      | 836   | 758    | -     | -      | - |
| Stage 2              | 727    | 737   | -      | 389   | 435    | -     | -      | - |

| Approach             | EB   | WB   | NB  | SB  |
|----------------------|------|------|-----|-----|
| HCM Control Delay, s | 23.5 | 20.8 | 1.1 | 0.2 |
| HCM LOS              | C    | C    |     |     |

| Minor Lane/Major Mvmt | NBL  | NBT | NBR | EBLn1WBLn1 | SBL   | SBT   | SBR |
|-----------------------|------|-----|-----|------------|-------|-------|-----|
| Capacity (veh/h)      | 978  | -   | -   | 307        | 305   | 1426  | -   |
| HCM Lane V/C Ratio    | 0.02 | -   | -   | 0.372      | 0.256 | 0.008 | -   |
| HCM Control Delay (s) | 8.8  | 0   | -   | 23.5       | 20.8  | 7.5   | 0   |
| HCM Lane LOS          | A    | A   | -   | C          | C     | A     | A   |
| HCM 95th %tile Q(veh) | 0.1  | -   | -   | 1.7        | 1     | 0     | -   |

MS

Synchro 9 Report  
Page 10

30: N. Congress Ave  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 9.8  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    |      |      | ↑    |      |      | ↑    |      |      | ↑    |      |
| Traffic Vol, veh/h       | 0    | 122  | 0    | 0    | 123  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 0    | 122  | 0    | 0    | 123  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 57   | 0    | 25   | 21   | 0    | 0    | 0    | 0    | 21   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 151  | 0    | 0    | 152  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |

| Major/Minor          | Minor2 |       |   | Minor1 |       |   | Major1 |   |   | Major2 |   |   |
|----------------------|--------|-------|---|--------|-------|---|--------|---|---|--------|---|---|
| Conflicting Flow All | -      | 1     | - | -      | 1     | - | -      | 0 | - | -      | - | 0 |
| Stage 1              | -      | 1     | - | -      | 0     | - | -      | - | - | -      | - | - |
| Stage 2              | -      | 0     | - | -      | 1     | - | -      | - | - | -      | - | - |
| Critical Hdwy        | -      | 6.52  | - | -      | 6.52  | - | -      | - | - | -      | - | - |
| Critical Hdwy Stg 1  | -      | 5.52  | - | -      | 5.52  | - | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | -      | 5.52  | - | -      | 5.52  | - | -      | - | - | -      | - | - |
| Follow-up Hdwy       | -      | 4.018 | - | -      | 4.018 | - | -      | - | - | -      | - | - |
| Pot Cap-1 Maneuver   | 0      | 895   | 0 | 0      | 895   | 0 | 0      | - | 0 | 0      | - | 0 |
| Stage 1              | 0      | 895   | 0 | 0      | -     | 0 | 0      | - | 0 | 0      | - | 0 |
| Stage 2              | 0      | -     | 0 | 0      | 895   | 0 | 0      | - | 0 | 0      | - | 0 |
| Platoon blocked, %   | -      | -     | - | -      | -     | - | -      | - | - | -      | - | - |
| Mov Cap-1 Maneuver   | -      | 895   | - | -      | 895   | - | -      | - | - | -      | - | - |
| Mov Cap-2 Maneuver   | -      | 895   | - | -      | 895   | - | -      | - | - | -      | - | - |
| Stage 1              | -      | 895   | - | -      | -     | - | -      | - | - | -      | - | - |
| Stage 2              | -      | -     | - | -      | 895   | - | -      | - | - | -      | - | - |

| Approach             | EB  |  |  | WB  |  |  | NB |  |  | SB |  |  |
|----------------------|-----|--|--|-----|--|--|----|--|--|----|--|--|
| HCM Control Delay, s | 9.8 |  |  | 9.8 |  |  | 0  |  |  | 0  |  |  |
| HCM LOS              | A   |  |  | A   |  |  |    |  |  |    |  |  |

| Minor Lane/Major Mvmt | NBT | EBLn1 | WBLn1 | SBT |
|-----------------------|-----|-------|-------|-----|
| Capacity (veh/h)      | -   | 895   | 895   | -   |
| HCM Lane V/C Ratio    | -   | 0.168 | 0.17  | -   |
| HCM Control Delay (s) | -   | 9.8   | 9.8   | -   |
| HCM Lane LOS          | -   | A     | A     | -   |
| HCM 95th %tile Q(veh) | -   | 0.6   | 0.6   | -   |

31: Brazos St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.8  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑    |      |      | ↑    | ↑    |      |
| Traffic Vol, veh/h       | 79   | 0    | 15   | 44   | 36   | 0    |
| Future Vol, veh/h        | 79   | 0    | 15   | 44   | 36   | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 1    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 58   | 58   | 58   | 58   | 58   | 58   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 136  | 0    | 26   | 76   | 62   | 0    |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 0      | 0 | 137    | 0 | 265    | 137   |
| Stage 1              | -      | - | -      | - | 137    | -     |
| Stage 2              | -      | - | -      | - | 128    | -     |
| Critical Hdwy        | -      | - | 4.12   | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | -      | - | 2.218  | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | -      | - | 1447   | - | 724    | 911   |
| Stage 1              | -      | - | -      | - | 890    | -     |
| Stage 2              | -      | - | -      | - | 898    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | -      | - | 1447   | - | 710    | 910   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 710    | -     |
| Stage 1              | -      | - | -      | - | 889    | -     |
| Stage 2              | -      | - | -      | - | 881    | -     |

| Approach             | EB |  | WB  |  | NB   |  |
|----------------------|----|--|-----|--|------|--|
| HCM Control Delay, s | 0  |  | 1.9 |  | 10.6 |  |
| HCM LOS              |    |  |     |  | B    |  |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 710   | -   | -   | 1447  | -   |
| HCM Lane V/C Ratio    | 0.087 | -   | -   | 0.018 | -   |
| HCM Control Delay (s) | 10.6  | -   | -   | 7.5   | 0   |
| HCM Lane LOS          | B     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 0.3   | -   | -   | 0.1   | -   |

32: San Jacinto Blvd & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2020 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.9  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      |      | ↑    |      |      | ↑↑↑  | ↑    |
| Traffic Vol, veh/h       | 0    | 60   | 0    | 0    | 1256 | 30   |
| Future Vol, veh/h        | 0    | 60   | 0    | 0    | 1256 | 30   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 15   |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | 0    | -    | -    | -    | 50   |
| Veh in Median Storage, # | 0    | -    | -    | -    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 89   | 89   | 89   | 89   | 89   | 89   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 67   | 0    | 0    | 1411 | 34   |

| Major/Minor          | Minor2 | Major2 |
|----------------------|--------|--------|
| Conflicting Flow All | - 721  | - 0    |
| Stage 1              | - -    | - -    |
| Stage 2              | - -    | - -    |
| Critical Hdwy        | - 7.14 | - -    |
| Critical Hdwy Stg 1  | - -    | - -    |
| Critical Hdwy Stg 2  | - -    | - -    |
| Follow-up Hdwy       | - 3.92 | - -    |
| Pot Cap-1 Maneuver   | 0 317  | - -    |
| Stage 1              | 0 -    | - -    |
| Stage 2              | 0 -    | - -    |
| Platoon blocked, %   | - -    | - -    |
| Mov Cap-1 Maneuver   | - 312  | - -    |
| Mov Cap-2 Maneuver   | - -    | - -    |
| Stage 1              | - -    | - -    |
| Stage 2              | - -    | - -    |

| Approach             | EB   | SB |
|----------------------|------|----|
| HCM Control Delay, s | 19.7 | 0  |
| HCM LOS              | C    |    |

| Minor Lane/Major Mvmt | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-----|
| Capacity (veh/h)      | 312   | -   | -   |
| HCM Lane V/C Ratio    | 0.216 | -   | -   |
| HCM Control Delay (s) | 19.7  | -   | -   |
| HCM Lane LOS          | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.8   | -   | -   |

1: Martin Luther King Jr. Blvd & Guadalupe St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR   | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|------|------|-------|-------|------|------|------|-------|-------|-------|
| Lane Configurations     | ↰     | ↰↱    |      |      | ↱↰    | ↰     |      |      |      | ↰     | ↰↱    | ↰     |
| Traffic Volume (vph)    | 67    | 763   | 316  | 0    | 537   | 324   | 0    | 0    | 0    | 289   | 694   | 132   |
| Future Volume (vph)     | 67    | 763   | 316  | 0    | 537   | 324   | 0    | 0    | 0    | 289   | 694   | 132   |
| Confl. Peds. (#/hr)     | 28    |       | 19   | 19   |       | 28    |      |      |      | 29    |       | 19    |
| Confl. Bikes (#/hr)     |       |       | 1    |      |       | 1     |      |      |      |       |       | 13    |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94 | 0.94 | 0.94  | 0.94  | 0.94 | 0.94 | 0.94 | 0.94  | 0.94  | 0.94  |
| Adj. Flow (vph)         | 71    | 812   | 336  | 0    | 571   | 345   | 0    | 0    | 0    | 307   | 738   | 140   |
| Shared Lane Traffic (%) |       |       |      |      |       |       |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 71    | 1148  | 0    | 0    | 571   | 345   | 0    | 0    | 0    | 307   | 738   | 140   |
| Turn Type               | Prot  | NA    |      |      | NA    | pm+ov |      |      |      | pm+pt | NA    | Perm  |
| Protected Phases        | 5     | 2     |      |      | 6     | 7     |      |      |      | 7     | 4     |       |
| Permitted Phases        |       |       |      |      | 6     |       |      |      |      | 4     |       | 4     |
| Detector Phase          | 5     | 2     |      |      | 6     | 7     |      |      |      | 7     | 4     | 4     |
| Switch Phase            |       |       |      |      |       |       |      |      |      |       |       |       |
| Minimum Initial (s)     | 2.0   | 15.0  |      |      | 15.0  | 10.0  |      |      |      | 10.0  | 5.0   | 5.0   |
| Minimum Split (s)       | 7.0   | 27.0  |      |      | 34.0  | 15.0  |      |      |      | 15.0  | 32.0  | 32.0  |
| Total Split (s)         | 18.0  | 75.0  |      |      | 57.0  | 45.0  |      |      |      | 45.0  | 45.0  | 45.0  |
| Total Split (%)         | 15.0% | 62.5% |      |      | 47.5% | 37.5% |      |      |      | 37.5% | 37.5% | 37.5% |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   | 4.0   |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   | 1.0   |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   | 0.0   |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   | 5.0   |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                | Lag   |       |      |      | Lead  |       |      |      |      |       |       |       |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |       |      |      |      |       |       |       |
| Recall Mode             | None  | C-Max |      |      | C-Max | None  |      |      |      | None  | Max   | Max   |
| Act Effect Green (s)    | 11.6  | 70.0  |      |      | 55.6  | 95.6  |      |      |      | 40.0  | 40.0  | 40.0  |
| Actuated g/C Ratio      | 0.10  | 0.58  |      |      | 0.46  | 0.80  |      |      |      | 0.33  | 0.33  | 0.33  |
| v/c Ratio               | 0.42  | 0.58  |      |      | 0.35  | 0.27  |      |      |      | 0.52  | 0.63  | 0.25  |
| Control Delay           | 57.9  | 16.5  |      |      | 22.9  | 1.4   |      |      |      | 36.1  | 36.5  | 11.9  |
| Queue Delay             | 0.0   | 0.0   |      |      | 0.0   | 0.0   |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             | 57.9  | 16.5  |      |      | 22.9  | 1.4   |      |      |      | 36.1  | 36.5  | 11.9  |
| LOS                     | E     | B     |      |      | C     | A     |      |      |      | D     | D     | B     |
| Approach Delay          |       | 18.9  |      |      | 14.8  |       |      |      |      |       | 33.5  |       |
| Approach LOS            |       | B     |      |      | B     |       |      |      |      |       | C     |       |
| Queue Length 50th (ft)  | 52    | 267   |      |      | 153   | 0     |      |      |      | 191   | 252   | 24    |
| Queue Length 95th (ft)  | 100   | 331   |      |      | 214   | 36    |      |      |      | 282   | 318   | 73    |
| Internal Link Dist (ft) |       | 228   |      |      | 45    |       | 159  |      |      |       | 210   |       |
| Turn Bay Length (ft)    | 160   |       |      |      |       |       |      |      |      | 130   |       | 120   |
| Base Capacity (vph)     | 191   | 1968  |      |      | 1639  | 1274  |      |      |      | 590   | 1179  | 566   |
| Starvation Cap Reductn  | 0     | 0     |      |      | 0     | 137   |      |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     | 0     |      |      |      | 0     | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     | 0     |      |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       | 0.37  | 0.58  |      |      | 0.35  | 0.30  |      |      |      | 0.52  | 0.63  | 0.25  |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 75

MS

Synchro 9 Report  
Page 1

1: Martin Luther King Jr. Blvd & Guadalupe St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 23.0

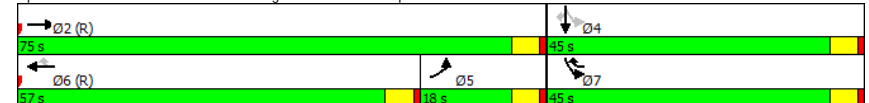
Intersection LOS: C

Intersection Capacity Utilization 62.9%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 1: Martin Luther King Jr. Blvd & Guadalupe St



MS

Synchro 9 Report  
Page 2

3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

|   | →     | ↖    | ↗    | ←     | ↖     | ↗     |
|---|-------|------|------|-------|-------|-------|
| Lane Group  | EBT   | EBR  | WBL  | WBT   | NBL   | NBR   |
| Lane Configurations   | ↑↑    |      |      | ↑↑    | ↑↑    | ↑     |
| Traffic Volume (vph)  | 1052  | 0    | 0    | 720   | 349   | 223   |
| Future Volume (vph)   | 1052  | 0    | 0    | 720   | 349   | 223   |
| Confl. Peds. (#/hr)   |       |      |      |       |       | 11    |
| Peak Hour Factor  | 0.86  | 0.86 | 0.86 | 0.86  | 0.86  | 0.86  |
| Adj. Flow (vph)   | 1223  | 0    | 0    | 837   | 406   | 259   |
| Shared Lane Traffic (%)   |       |      |      |       |       |       |
| Lane Group Flow (vph)   | 1223  | 0    | 0    | 837   | 406   | 259   |
| Turn Type   | NA    |      |      | NA    | Prot  | Perm  |
| Protected Phases  | 2     |      |      | 6     | 8     |       |
| Permitted Phases  |       |      |      |       |       | 3     |
| Detector Phase  | 2     |      |      | 6     | 8     | 3     |
| Switch Phase  |       |      |      |       |       |       |
| Minimum Initial (s)   | 10.0  |      |      | 10.0  | 5.0   | 5.0   |
| Minimum Split (s)   | 30.0  |      |      | 15.0  | 10.0  | 29.0  |
| Total Split (s)   | 87.0  |      |      | 87.0  | 33.0  | 33.0  |
| Total Split (%)   | 72.5% |      |      | 72.5% | 27.5% | 27.5% |
| Yellow Time (s)   | 4.0   |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)  | 1.0   |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)  | 0.0   |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)   | 5.0   |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag  |       |      |      |       |       |       |
| Lead-Lag Optimize?  |       |      |      |       |       |       |
| Recall Mode   | C-Max |      |      | C-Max | Max   | Max   |
| Act Effect Green (s)  | 82.0  |      |      | 82.0  | 28.0  | 28.0  |
| Actuated g/C Ratio  | 0.68  |      |      | 0.68  | 0.23  | 0.23  |
| v/c Ratio   | 0.51  |      |      | 0.35  | 0.51  | 0.59  |
| Control Delay   | 9.5   |      |      | 5.0   | 57.6  | 46.3  |
| Queue Delay   | 0.3   |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay   | 9.8   |      |      | 5.0   | 57.6  | 46.3  |
| LOS   | A     |      |      | A     | E     | D     |
| Approach Delay  | 9.8   |      |      | 5.0   | 53.2  |       |
| Approach LOS  | A     |      |      | A     | D     |       |
| Queue Length 50th (ft)  | 157   |      |      | 53    | 169   | 130   |
| Queue Length 95th (ft)  | 169   |      |      | 57    | 188   | 138   |
| Internal Link Dist (ft)   | 272   |      |      | 277   | 337   |       |
| Turn Bay Length (ft)  |       |      |      |       |       |       |
| Base Capacity (vph)   | 2418  |      |      | 2418  | 801   | 437   |
| Starvation Cap Reductn  | 521   |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   | 0     |      |      | 0     | 0     | 0     |
| Storage Cap Reductn   | 0     |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio   | 0.64  |      |      | 0.35  | 0.51  | 0.59  |
| <b>Intersection Summary</b>   |       |      |      |       |       |       |
| Cycle Length: 120   |       |      |      |       |       |       |
| Actuated Cycle Length: 120  |       |      |      |       |       |       |
| Offset: 2 (2%), Referenced to phase 2:EBT and 6:WBT, Start of Green |       |      |      |       |       |       |
| Natural Cycle: 60   |       |      |      |       |       |       |
| Control Type: Actuated-Coordinated                                  |       |      |      |       |       |       |

MS

Synchro 9 Report  
Page 3

3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

Maximum v/c Ratio: 0.59

Intersection Signal Delay: 18.9

Intersection LOS: B

Intersection Capacity Utilization 57.4%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 3: Lavaca St & Martin Luther King Jr. Blvd

|          |      |
|----------|------|
| → Ø2 (R) | ↖ Ø3 |
| 87 s     | 33 s |
| ← Ø6 (R) | ↗ Ø8 |
| 87 s     | 33 s |

MS

Synchro 9 Report  
Page 4

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

|                         | →     | ↖    | ↗     | ←      | ↖    | ↗    |
|-------------------------|-------|------|-------|--------|------|------|
| Lane Group              | EBT   | EBR  | WBL   | WBT    | NBL  | NBR  |
| Lane Configurations     | ↖↗    |      | ↖     | ↖↗     |      |      |
| Traffic Volume (vph)    | 1109  | 0    | 8     | 975    | 0    | 0    |
| Future Volume (vph)     | 1109  | 0    | 8     | 975    | 0    | 0    |
| Confl. Peds. (#/hr)     |       | 6    | 6     |        | 1    |      |
| Confl. Bikes (#/hr)     |       | 1    |       |        |      |      |
| Peak Hour Factor        | 0.89  | 0.89 | 0.89  | 0.89   | 0.89 | 0.89 |
| Adj. Flow (vph)         | 1246  | 0    | 9     | 1096   | 0    | 0    |
| Shared Lane Traffic (%) |       |      |       |        |      |      |
| Lane Group Flow (vph)   | 1246  | 0    | 9     | 1096   | 0    | 0    |
| Turn Type               | NA    |      | pm+pt | NA     |      |      |
| Protected Phases        | 2     |      | 1     | 6      |      |      |
| Permitted Phases        |       |      | 6     |        |      |      |
| Detector Phase          | 2     |      | 1     | 6      |      |      |
| Switch Phase            |       |      |       |        |      |      |
| Minimum Initial (s)     | 15.0  |      | 1.0   | 5.0    |      |      |
| Minimum Split (s)       | 34.0  |      | 5.5   | 29.0   |      |      |
| Total Split (s)         | 107.0 |      | 13.0  | 120.0  |      |      |
| Total Split (%)         | 89.2% |      | 10.8% | 100.0% |      |      |
| Yellow Time (s)         | 4.0   |      | 3.5   | 4.0    |      |      |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0    |      |      |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0    |      |      |
| Total Lost Time (s)     | 5.0   |      | 4.5   | 5.0    |      |      |
| Lead/Lag                | Lead  |      | Lag   |        |      |      |
| Lead-Lag Optimize?      | Yes   |      | Yes   |        |      |      |
| Recall Mode             | C-Max |      | None  | C-Max  |      |      |
| Act Effect Green (s)    | 116.4 |      | 119.1 | 120.0  |      |      |
| Actuated g/C Ratio      | 0.97  |      | 0.99  | 1.00   |      |      |
| v/c Ratio               | 0.36  |      | 0.02  | 0.31   |      |      |
| Control Delay           | 0.4   |      | 0.0   | 0.2    |      |      |
| Queue Delay             | 0.0   |      | 0.0   | 0.0    |      |      |
| Total Delay             | 0.4   |      | 0.0   | 0.2    |      |      |
| LOS                     | A     |      | A     | A      |      |      |
| Approach Delay          | 0.4   |      |       | 0.2    |      |      |
| Approach LOS            | A     |      |       | A      |      |      |
| Queue Length 50th (ft)  | 0     |      | 0     | 0      |      |      |
| Queue Length 95th (ft)  | 37    |      | m0    | 0      |      |      |
| Internal Link Dist (ft) | 366   |      |       | 377    | 331  |      |
| Turn Bay Length (ft)    |       |      | 115   |        |      |      |
| Base Capacity (vph)     | 3433  |      | 491   | 3539   |      |      |
| Starvation Cap Reductn  | 0     |      | 0     | 0      |      |      |
| Spillback Cap Reductn   | 0     |      | 0     | 0      |      |      |
| Storage Cap Reductn     | 0     |      | 0     | 0      |      |      |
| Reduced v/c Ratio       | 0.36  |      | 0.02  | 0.31   |      |      |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 40

MS

Synchro 9 Report  
Page 5

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.36

Intersection Signal Delay: 0.3

Intersection LOS: A

Intersection Capacity Utilization 34.8%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: N. Congress Ave & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 6

6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations     | ↰     | ↰↱    |      | ↰     | ↰↱    | ↰     |       | ↰     | ↰     | ↰     | ↰     | ↰     |
| Traffic Volume (vph)    | 140   | 748   | 228  | 290   | 967   | 138   | 19    | 0     | 35    | 42    | 1     | 11    |
| Future Volume (vph)     | 140   | 748   | 228  | 290   | 967   | 138   | 19    | 0     | 35    | 42    | 1     | 11    |
| Confl. Peds. (#/hr)     | 18    |       | 8    | 8     |       | 18    | 23    |       | 7     | 7     |       | 23    |
| Confl. Bikes (#/hr)     |       |       | 3    |       |       | 3     |       |       |       |       |       | 1     |
| Peak Hour Factor        | 0.84  | 0.84  | 0.84 | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  |
| Adj. Flow (vph)         | 167   | 890   | 271  | 345   | 1151  | 164   | 23    | 0     | 42    | 50    | 1     | 13    |
| Shared Lane Traffic (%) |       |       |      |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)   | 167   | 1161  | 0    | 345   | 1151  | 164   | 0     | 23    | 42    | 0     | 51    | 13    |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    | Perm  | Perm  | NA    | Perm  | Perm  | NA    | Perm  |
| Protected Phases        | 5     | 2     |      | 1     | 6     |       |       | 8     |       |       | 4     |       |
| Permitted Phases        | 2     |       |      | 6     |       | 6     | 8     |       | 8     | 4     |       | 4     |
| Detector Phase          | 5     | 2     |      | 1     | 6     | 6     | 8     | 8     | 8     | 4     | 4     | 4     |
| Switch Phase            |       |       |      |       |       |       |       |       |       |       |       |       |
| Minimum Initial (s)     | 1.0   | 10.0  |      | 1.0   | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  |
| Minimum Split (s)       | 5.5   | 22.0  |      | 5.5   | 28.0  | 28.0  | 22.0  | 22.0  | 22.0  | 28.0  | 28.0  | 28.0  |
| Total Split (s)         | 20.0  | 70.0  |      | 20.0  | 70.0  | 70.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  |
| Total Split (%)         | 16.7% | 58.3% |      | 16.7% | 58.3% | 58.3% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% |
| Yellow Time (s)         | 3.5   | 4.0   |      | 3.5   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Total Lost Time (s)     | 4.5   | 5.0   |      | 4.5   | 5.0   | 5.0   |       | 5.0   | 5.0   |       | 5.0   | 5.0   |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   | Lag   |       |       |       |       |       |       |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   | Yes   |       |       |       |       |       |       |
| Recall Mode             | None  | C-Max |      | None  | C-Max | C-Max | Max   | Max   | Max   | Max   | Max   | Max   |
| Act Effect Green (s)    | 75.2  | 65.6  |      | 85.4  | 71.4  | 71.4  |       | 25.0  | 25.0  |       | 25.0  | 25.0  |
| Actuated g/C Ratio      | 0.63  | 0.55  |      | 0.71  | 0.60  | 0.60  |       | 0.21  | 0.21  |       | 0.21  | 0.21  |
| v/c Ratio               | 0.50  | 0.62  |      | 0.90  | 0.55  | 0.18  |       | 0.08  | 0.11  |       | 0.18  | 0.04  |
| Control Delay           | 13.3  | 12.9  |      | 51.1  | 11.9  | 4.0   |       | 39.4  | 6.2   |       | 41.1  | 0.2   |
| Queue Delay             | 0.0   | 0.4   |      | 0.0   | 0.4   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Total Delay             | 13.3  | 13.3  |      | 51.1  | 12.2  | 4.0   |       | 39.4  | 6.2   |       | 41.1  | 0.2   |
| LOS                     | B     | B     |      | D     | B     | A     |       | D     | A     |       | D     | A     |
| Approach Delay          |       | 13.3  |      |       | 19.5  |       |       | 17.9  |       |       | 32.8  |       |
| Approach LOS            |       | B     |      |       | B     |       |       | B     |       |       | C     |       |
| Queue Length 50th (ft)  | 25    | 177   |      | 139   | 202   | 12    |       | 15    | 0     |       | 33    | 0     |
| Queue Length 95th (ft)  | 68    | 162   |      | #244  | 210   | 20    |       | 35    | 16    |       | 65    | 0     |
| Internal Link Dist (ft) |       | 377   |      |       | 273   |       |       | 135   |       |       | 212   |       |
| Turn Bay Length (ft)    | 160   |       |      | 100   |       | 100   |       |       | 100   |       |       |       |
| Base Capacity (vph)     | 427   | 1868  |      | 389   | 2104  | 913   |       | 271   | 367   |       | 284   | 360   |
| Starvation Cap Reductn  | 0     | 272   |      | 0     | 413   | 0     |       | 0     | 0     |       | 0     | 0     |
| Spillback Cap Reductn   | 0     | 5     |      | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Reduced v/c Ratio       | 0.39  | 0.73  |      | 0.89  | 0.68  | 0.18  |       | 0.08  | 0.11  |       | 0.18  | 0.04  |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 80

MS

Synchro 9 Report  
Page 7

6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 17.1

Intersection LOS: B

Intersection Capacity Utilization 75.5%

ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: Brazos St & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 8

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

|                         | ↖    | →     | ↘    | ↙     | ←     | ↖    | ↗    | ↘    | ↙    | ↖     | ↗     | ↘     | ↙ |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|---|
| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |   |
| Lane Configurations     |      | ↕     |      | ↕     | ↕     |      |      |      |      | ↕     | ↕     | ↕     |   |
| Traffic Volume (vph)    | 0    | 731   | 189  | 510   | 1413  | 0    | 0    | 0    | 0    | 36    | 51    | 55    |   |
| Future Volume (vph)     | 0    | 731   | 189  | 510   | 1413  | 0    | 0    | 0    | 0    | 36    | 51    | 55    |   |
| Confl. Peds. (#/hr)     |      |       | 53   | 53    |       |      |      |      |      | 7     |       | 48    |   |
| Confl. Bikes (#/hr)     |      |       | 2    |       |       |      |      |      |      |       |       | 29    |   |
| Peak Hour Factor        | 0.93 | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93 | 0.93 | 0.93 | 0.93  | 0.93  | 0.93  |   |
| Adj. Flow (vph)         | 0    | 786   | 203  | 548   | 1519  | 0    | 0    | 0    | 0    | 39    | 55    | 59    |   |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |   |
| Lane Group Flow (vph)   | 0    | 989   | 0    | 548   | 1519  | 0    | 0    | 0    | 0    | 39    | 55    | 59    |   |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |   |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |       | 4     |       |   |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |   |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4     | 4     | 4     |   |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |   |
| Minimum Initial (s)     |      | 5.0   |      |       | 10.0  |      |      |      |      | 10.0  | 10.0  | 10.0  |   |
| Minimum Split (s)       |      | 30.0  |      |       | 30.0  |      |      |      |      | 28.0  | 28.0  | 28.0  |   |
| Total Split (s)         |      | 62.0  |      |       | 92.0  |      |      |      |      | 28.0  | 28.0  | 28.0  |   |
| Total Split (%)         |      | 51.7% |      |       | 76.7% |      |      |      |      | 23.3% | 23.3% | 23.3% |   |
| Yellow Time (s)         |      | 4.0   |      |       | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |   |
| All-Red Time (s)        |      | 1.0   |      |       | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |   |
| Lost Time Adjust (s)    |      | 0.0   |      |       | 0.0   |      |      |      |      | 0.0   | 0.0   | 0.0   |   |
| Total Lost Time (s)     |      | 5.0   |      |       | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |   |
| Lead/Lag                |      | Lag   |      |       |       |      |      |      |      |       |       |       |   |
| Lead-Lag Optimize?      |      | Yes   |      |       |       |      |      |      |      |       |       |       |   |
| Recall Mode             |      | C-Max |      |       | C-Max |      |      |      |      | Max   | Max   | Max   |   |
| Act Effect Green (s)    |      | 57.0  |      |       | 87.5  | 87.0 |      |      |      | 23.0  | 23.0  | 23.0  |   |
| Actuated g/C Ratio      |      | 0.48  |      |       | 0.73  | 0.72 |      |      |      | 0.19  | 0.19  | 0.19  |   |
| v/c Ratio               |      | 0.61  |      |       | 1.11  | 0.59 |      |      |      | 0.12  | 0.08  | 0.17  |   |
| Control Delay           |      | 16.8  |      |       | 86.2  | 5.9  |      |      |      | 41.3  | 40.3  | 2.1   |   |
| Queue Delay             |      | 0.4   |      |       | 1.4   | 0.5  |      |      |      | 0.0   | 0.0   | 0.0   |   |
| Total Delay             |      | 17.2  |      |       | 87.6  | 6.4  |      |      |      | 41.3  | 40.3  | 2.1   |   |
| LOS                     |      | B     |      |       | F     | A    |      |      |      | D     | D     | A     |   |
| Approach Delay          |      | 17.2  |      |       |       | 28.0 |      |      |      |       | 25.8  |       |   |
| Approach LOS            |      | B     |      |       |       | C    |      |      |      |       | C     |       |   |
| Queue Length 50th (ft)  |      | 122   |      |       | ~363  | 126  |      |      |      | 25    | 18    | 0     |   |
| Queue Length 95th (ft)  |      | 146   |      |       | m#418 | m128 |      |      |      | 57    | 37    | 6     |   |
| Internal Link Dist (ft) |      | 273   |      |       |       | 321  |      |      | 343  |       | 244   |       |   |
| Turn Bay Length (ft)    |      |       |      |       | 120   |      |      |      |      | 100   |       | 100   |   |
| Base Capacity (vph)     |      | 1618  |      |       | 495   | 2565 |      |      |      | 335   | 678   | 353   |   |
| Starvation Cap Reductn  |      | 222   |      |       | 73    | 550  |      |      |      | 0     | 0     | 0     |   |
| Spillback Cap Reductn   |      | 0     |      |       | 0     | 20   |      |      |      | 0     | 0     | 0     |   |
| Storage Cap Reductn     |      | 0     |      |       | 0     | 0    |      |      |      | 0     | 0     | 0     |   |
| Reduced v/c Ratio       |      | 0.71  |      |       | 1.30  | 0.75 |      |      |      | 0.12  | 0.08  | 0.17  |   |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 90

MS

Synchro 9 Report  
Page 9

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Lane Group              | Ø1   | Ø9   |
|-------------------------|------|------|
| Lane Configurations     |      |      |
| Traffic Volume (vph)    |      |      |
| Future Volume (vph)     |      |      |
| Confl. Peds. (#/hr)     |      |      |
| Confl. Bikes (#/hr)     |      |      |
| Peak Hour Factor        |      |      |
| Adj. Flow (vph)         |      |      |
| Shared Lane Traffic (%) |      |      |
| Lane Group Flow (vph)   |      |      |
| Turn Type               |      |      |
| Protected Phases        | 1    | 9    |
| Permitted Phases        |      |      |
| Detector Phase          |      |      |
| Switch Phase            |      |      |
| Minimum Initial (s)     | 1.0  | 5.0  |
| Minimum Split (s)       | 5.5  | 9.5  |
| Total Split (s)         | 15.0 | 15.0 |
| Total Split (%)         | 13%  | 13%  |
| Yellow Time (s)         | 3.5  | 3.5  |
| All-Red Time (s)        | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |
| Total Lost Time (s)     |      |      |
| Lead/Lag                | Lead |      |
| Lead-Lag Optimize?      | Yes  |      |
| Recall Mode             | None | None |
| Act Effect Green (s)    |      |      |
| Actuated g/C Ratio      |      |      |
| v/c Ratio               |      |      |
| Control Delay           |      |      |
| Queue Delay             |      |      |
| Total Delay             |      |      |
| LOS                     |      |      |
| Approach Delay          |      |      |
| Approach LOS            |      |      |
| Queue Length 50th (ft)  |      |      |
| Queue Length 95th (ft)  |      |      |
| Internal Link Dist (ft) |      |      |
| Turn Bay Length (ft)    |      |      |
| Base Capacity (vph)     |      |      |
| Starvation Cap Reductn  |      |      |
| Spillback Cap Reductn   |      |      |
| Storage Cap Reductn     |      |      |
| Reduced v/c Ratio       |      |      |

Intersection Summary

MS

Synchro 9 Report  
Page 10

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.11

Intersection Signal Delay: 24.5

Intersection LOS: C

Intersection Capacity Utilization 89.5%

ICU Level of Service E

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

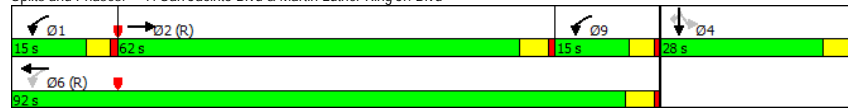
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: San Jacinto Blvd & Martin Luther King Jr. Blvd



8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↩     | ↩↩    |      |      | ↩↩    |      | ↩     | ↩     | ↩     |      |      |      |
| Traffic Volume (vph)    | 152   | 533   | 0    | 0    | 1805  | 58   | 67    | 84    | 108   | 0    | 0    | 0    |
| Future Volume (vph)     | 152   | 533   | 0    | 0    | 1805  | 58   | 67    | 84    | 108   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     |       |       | 35   |      |       | 58   | 34    |       | 28    |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       | 4    |       |       | 4     |      |      |      |
| Peak Hour Factor        | 0.89  | 0.89  | 0.89 | 0.89 | 0.89  | 0.89 | 0.89  | 0.89  | 0.89  | 0.89 | 0.89 | 0.89 |
| Adj. Flow (vph)         | 171   | 599   | 0    | 0    | 2028  | 65   | 75    | 94    | 121   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       | 10%  |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 171   | 599   | 0    | 0    | 2093  | 0    | 67    | 102   | 121   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 1.0   | 10.0  |      |      | 1.0   |      | 10.0  | 10.0  | 10.0  |      |      |      |
| Minimum Split (s)       | 5.5   | 26.0  |      |      | 5.5   |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (s)         | 15.0  | 94.0  |      |      | 79.0  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (%)         | 12.5% | 78.3% |      |      | 65.8% |      | 21.7% | 21.7% | 21.7% |      |      |      |
| Yellow Time (s)         | 3.5   | 4.0   |      |      | 3.5   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 4.5   | 5.0   |      |      | 4.5   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 89.5  | 89.0  |      |      | 75.0  |      | 21.0  | 21.0  | 21.0  |      |      |      |
| Actuated g/C Ratio      | 0.75  | 0.74  |      |      | 0.62  |      | 0.18  | 0.18  | 0.18  |      |      |      |
| v/c Ratio               | 0.82  | 0.23  |      |      | 0.95  |      | 0.24  | 0.33  | 0.34  |      |      |      |
| Control Delay           | 75.1  | 1.0   |      |      | 12.5  |      | 41.1  | 42.1  | 9.0   |      |      |      |
| Queue Delay             | 0.0   | 0.1   |      |      | 10.2  |      | 0.3   | 0.0   | 0.0   |      |      |      |
| Total Delay             | 75.1  | 1.1   |      |      | 22.7  |      | 41.5  | 42.1  | 9.0   |      |      |      |
| LOS                     | E     | A     |      |      | C     |      | D     | D     | A     |      |      |      |
| Approach Delay          |       | 17.6  |      |      | 22.7  |      |       | 28.2  |       |      |      |      |
| Approach LOS            |       | B     |      |      | C     |      |       | C     |       |      |      |      |
| Queue Length 50th (ft)  | 98    | 13    |      |      | 173   |      | 45    | 70    | 4     |      |      |      |
| Queue Length 95th (ft)  | #195  | 16    |      |      | m92   |      | m68   | m102  | m27   |      |      |      |
| Internal Link Dist (ft) |       | 321   |      |      | 675   |      |       | 350   |       |      | 106  |      |
| Turn Bay Length (ft)    | 120   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 217   | 2624  |      |      | 2199  |      | 277   | 306   | 359   |      |      |      |
| Starvation Cap Reductn  | 0     | 970   |      |      | 3     |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 133   |      | 46    | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.79  | 0.36  |      |      | 1.01  |      | 0.29  | 0.33  | 0.34  |      |      |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 100

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 21.9

Intersection LOS: C

Intersection Capacity Utilization 89.5%

ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Trinity St & Martin Luther King Jr. Blvd



18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

|  | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|--|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations  |      | ↑    | ↑    |      | ↑    |      |      |      |      |      | ↑    | ↑    |
| Traffic Volume (vph)                                       | 0    | 14   | 47   | 52   | 10   | 0    | 0    | 0    | 0    | 127  | 1056 | 18   |
| Future Volume (vph)  | 0    | 14   | 47   | 52   | 10   | 0    | 0    | 0    | 0    | 127  | 1056 | 18   |
| Confl. Peds. (#/hr)  |      |      | 18   |      |      |      |      |      |      | 45   |      |      |
| Peak Hour Factor   | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Parking (#/hr)   |      | 0    |      |      |      |      |      |      |      |      |      |      |
| Adj. Flow (vph)  | 0    | 15   | 51   | 57   | 11   | 0    | 0    | 0    | 0    | 138  | 1148 | 20   |
| Shared Lane Traffic (%)                                    |      |      |      |      |      |      |      |      |      |      |      |      |
| Lane Group Flow (vph)                                      | 0    | 15   | 51   | 0    | 68   | 0    | 0    | 0    | 0    | 0    | 1306 | 0    |
| Turn Type  |      | NA   | Perm | Perm | NA   |      |      |      |      | Perm | NA   |      |
| Protected Phases   | 4 12 |      |      |      | 4 12 |      |      |      |      |      | 2 10 |      |
| Permitted Phases   |      |      | 4 12 | 4 12 |      |      |      |      |      | 2 10 |      |      |
| Detector Phase   | 4 12 |      | 4 12 | 4 12 | 4 12 |      |      |      |      | 2 10 | 2 10 |      |
| Switch Phase   |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Initial (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Split (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (%)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Yellow Time (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| All-Red Time (s)   |      |      |      |      |      |      |      |      |      |      |      |      |
| Lost Time Adjust (s)                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Lost Time (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead/Lag   |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead-Lag Optimize?   |      |      |      |      |      |      |      |      |      |      |      |      |
| Recall Mode  |      |      |      |      |      |      |      |      |      |      |      |      |
| Act Effect Green (s)                                       | 21.6 | 21.6 |      | 21.6 |      |      |      |      |      |      | 83.1 |      |
| Actuated g/C Ratio   | 0.18 | 0.18 |      | 0.18 |      |      |      |      |      |      | 0.69 |      |
| v/c Ratio  | 0.05 | 0.16 |      | 0.27 |      |      |      |      |      |      | 0.55 |      |
| Control Delay  | 20.6 | 3.9  |      | 24.2 |      |      |      |      |      |      | 7.3  |      |
| Queue Delay  | 0.0  | 0.0  |      | 0.0  |      |      |      |      |      |      | 0.0  |      |
| Total Delay  | 20.6 | 3.9  |      | 24.2 |      |      |      |      |      |      | 7.3  |      |
| LOS  | C    | A    |      | C    |      |      |      |      |      |      | A    |      |
| Approach Delay   | 7.7  |      |      | 24.2 |      |      |      |      |      |      | 7.3  |      |
| Approach LOS   | A    |      |      | C    |      |      |      |      |      |      | A    |      |
| Queue Length 50th (ft)                                     | 5    | 0    |      | 34   |      |      |      |      |      |      | 161  |      |
| Queue Length 95th (ft)                                     | 16   | 13   |      | 48   |      |      |      |      |      |      | 196  |      |
| Internal Link Dist (ft)                                    | 177  |      |      | 244  |      |      |      | 271  |      |      | 262  |      |
| Turn Bay Length (ft)                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| Base Capacity (vph)  | 754  | 714  |      | 628  |      |      |      |      |      |      | 2393 |      |
| Starvation Cap Reductn                                     | 0    | 0    |      | 0    |      |      |      |      |      |      | 0    |      |
| Spillback Cap Reductn                                      | 0    | 0    |      | 0    |      |      |      |      |      |      | 0    |      |
| Storage Cap Reductn  | 0    | 0    |      | 0    |      |      |      |      |      |      | 0    |      |
| Reduced v/c Ratio  | 0.02 | 0.07 |      | 0.11 |      |      |      |      |      |      | 0.55 |      |
| <b>Intersection Summary</b>                                |      |      |      |      |      |      |      |      |      |      |      |      |
| Cycle Length: 120  |      |      |      |      |      |      |      |      |      |      |      |      |
| Actuated Cycle Length: 120                                 |      |      |      |      |      |      |      |      |      |      |      |      |
| Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green |      |      |      |      |      |      |      |      |      |      |      |      |
| Natural Cycle: 95  |      |      |      |      |      |      |      |      |      |      |      |      |

18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 23.0  | 23.0 | 22.5 | 22.5 |
| Total Split (s)         | 26.0  | 43.0 | 28.0 | 23.0 |
| Total Split (%)         | 22%   | 36%  | 23%  | 19%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effect Green (s)    |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.55

Intersection Signal Delay: 8.2

Intersection LOS: A

Intersection Capacity Utilization 74.2%

ICU Level of Service D













Analysis Period (min) 15

Splits and Phases: 18: Guadalupe St & E. 17th St



19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

|   |  |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group  | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Traffic Volume (vph)                                      | 4   | 121   | 0   | 0   | 27  | 26  | 88  | 781   | 131   | 0   | 0   | 0   |
| Future Volume (vph)                                       | 4   | 121   | 0   | 0   | 27  | 26  | 88  | 781   | 131   | 0   | 0   | 0   |
| Confl. Peds. (#/hr)                                       | 31  |   |   |   |   |   |   |   | 33  |   |   |   |
| Peak Hour Factor  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  |
| Parking (#/hr)  |   | 0   |   |   |   |   |   |   |   |   |   |   |
| Adj. Flow (vph)   | 5   | 146   | 0   | 0   | 33  | 31  | 106   | 941   | 158   | 0   | 0   | 0   |
| Shared Lane Traffic (%)                                   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)                                     | 0   | 151   | 0   | 0   | 64  | 0   | 0   | 1047  | 158   | 0   | 0   | 0   |
| Turn Type   | Perm  | NA  |   |   | NA  |   | Perm  | NA  | Perm  |   |   |   |
| Protected Phases  |   | 4 12  |   |   | 4 12  |   |   | 2 10  |   |   |   |   |
| Permitted Phases  | 4 12  |   |   |   |   |   | 2 10  |   | 2 10  |   |   |   |
| Detector Phase  | 4 12  | 4 12  |   |   | 4 12  |   | 2 10  | 2 10  | 2 10  |   |   |   |
| Switch Phase  |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Split (s)   |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (s)   |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (%)   |   |   |   |   |   |   |   |   |   |   |   |   |
| Yellow Time (s)   |   |   |   |   |   |   |   |   |   |   |   |   |
| All-Red Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Lost Time Adjust (s)                                      |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Lost Time (s)                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead/Lag  |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?  |   |   |   |   |   |   |   |   |   |   |   |   |
| Recall Mode   |   |   |   |   |   |   |   |   |   |   |   |   |
| Act Effect Green (s)                                      | 25.6  |   |   | 25.6  |   |   | 70.4  | 70.4  |   |   |   |   |
| Actuated g/C Ratio  | 0.21  |   |   | 0.21  |   |   | 0.59  | 0.59  |   |   |   |   |
| v/c Ratio   | 0.43  |   |   | 0.16  |   |   | 0.35  | 0.18  |   |   |   |   |
| Control Delay   | 30.1  |   |   | 12.7  |   |   | 10.6  | 5.7   |   |   |   |   |
| Queue Delay   | 0.0   |   |   | 0.0   |   |   | 0.0   | 0.0   |   |   |   |   |
| Total Delay   | 30.1  |   |   | 12.7  |   |   | 10.6  | 5.7   |   |   |   |   |
| LOS   | C   |   |   | B   |   |   | B   | A   |   |   |   |   |
| Approach Delay  | 30.1  |   |   | 12.7  |   |   | 10.0  |   |   |   |   |   |
| Approach LOS  | C   |   |   | B   |   |   | A   |   |   |   |   |   |
| Queue Length 50th (ft)                                    | 64  |   |   | 14  |   |   | 143   | 40  |   |   |   |   |
| Queue Length 95th (ft)                                    | 85  |   |   | 29  |   |   | 75  | 19  |   |   |   |   |
| Internal Link Dist (ft)                                   | 244   |   |   | 319   |   |   | 272   |   |   | 254   |   |   |
| Turn Bay Length (ft)                                      |   |   |   |   |   |   |   | 100   |   |   |   |   |
| Base Capacity (vph)                                       | 595   |   |   | 644   |   |   | 3160  | 914   |   |   |   |   |
| Starvation Cap Reductn                                    | 0   |   |   | 0   |   |   | 457   | 0   |   |   |   |   |
| Spillback Cap Reductn                                     | 0   |   |   | 0   |   |   | 0   | 0   |   |   |   |   |
| Storage Cap Reductn                                       | 0   |   |   | 0   |   |   | 0   | 0   |   |   |   |   |
| Reduced v/c Ratio   | 0.25  |   |   | 0.10  |   |   | 0.39  | 0.17  |   |   |   |   |
| <b>Intersection Summary</b>                               |   |   |   |   |   |   |   |   |   |   |   |   |
| Cycle Length: 120   |   |   |   |   |   |   |   |   |   |   |   |   |
| Actuated Cycle Length: 120                                |   |   |   |   |   |   |   |   |   |   |   |   |
| Offset: 5 (4%), Referenced to phase 2:NBT, Start of Green |   |   |   |   |   |   |   |   |   |   |   |   |
| Natural Cycle: 100  |   |   |   |   |   |   |   |   |   |   |   |   |

MS

Synchro 9 Report  
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19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Lane Group                  | Ø2    | Ø4   | Ø10  | Ø12  |
|-----------------------------|-------|------|------|------|
| Lane Configurations         |       |      |      |      |
| Traffic Volume (vph)        |       |      |      |      |
| Future Volume (vph)         |       |      |      |      |
| Confl. Peds. (#/hr)         |       |      |      |      |
| Peak Hour Factor            |       |      |      |      |
| Parking (#/hr)              |       |      |      |      |
| Adj. Flow (vph)             |       |      |      |      |
| Shared Lane Traffic (%)     |       |      |      |      |
| Lane Group Flow (vph)       |       |      |      |      |
| Turn Type                   |       |      |      |      |
| Protected Phases            | 2     | 4    | 10   | 12   |
| Permitted Phases            |       |      |      |      |
| Detector Phase              |       |      |      |      |
| Switch Phase                |       |      |      |      |
| Minimum Initial (s)         | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)           | 26.0  | 28.0 | 22.5 | 22.5 |
| Total Split (s)             | 38.0  | 29.0 | 27.0 | 26.0 |
| Total Split (%)             | 32%   | 24%  | 23%  | 22%  |
| Yellow Time (s)             | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)            | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)        |       |      |      |      |
| Total Lost Time (s)         |       |      |      |      |
| Lead/Lag                    |       |      |      |      |
| Lead-Lag Optimize?          |       |      |      |      |
| Recall Mode                 | C-Max | None | None | None |
| Act Effect Green (s)        |       |      |      |      |
| Actuated g/C Ratio          |       |      |      |      |
| v/c Ratio                   |       |      |      |      |
| Control Delay               |       |      |      |      |
| Queue Delay                 |       |      |      |      |
| Total Delay                 |       |      |      |      |
| LOS                         |       |      |      |      |
| Approach Delay              |       |      |      |      |
| Approach LOS                |       |      |      |      |
| Queue Length 50th (ft)      |       |      |      |      |
| Queue Length 95th (ft)      |       |      |      |      |
| Internal Link Dist (ft)     |       |      |      |      |
| Turn Bay Length (ft)        |       |      |      |      |
| Base Capacity (vph)         |       |      |      |      |
| Starvation Cap Reductn      |       |      |      |      |
| Spillback Cap Reductn       |       |      |      |      |
| Storage Cap Reductn         |       |      |      |      |
| Reduced v/c Ratio           |       |      |      |      |
| <b>Intersection Summary</b> |       |      |      |      |

MS

Synchro 9 Report  
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19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.43

Intersection Signal Delay: 12.2

Intersection LOS: B

Intersection Capacity Utilization 39.4%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 19: Lavaca St & E. 17th St



28: Lavaca St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

|   | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|---|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations                                       |      | ↔    |      |      | ↔    |      |      | ↔↔↔  | ↔    |      |      |      |
| Traffic Volume (vph)                                      | 4    | 18   | 0    | 0    | 17   | 14   | 88   | 970  | 49   | 0    | 0    | 0    |
| Future Volume (vph)                                       | 4    | 18   | 0    | 0    | 17   | 14   | 88   | 970  | 49   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)                                       |      |      |      |      |      | 11   | 58   |      |      |      |      |      |
| Confl. Bikes (#/hr)                                       |      |      |      |      |      | 2    |      |      |      |      |      |      |
| Peak Hour Factor  | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 |
| Parking (#/hr)  |      |      |      |      | 0    |      |      |      |      |      |      |      |
| Adj. Flow (vph)   | 5    | 21   | 0    | 0    | 20   | 17   | 105  | 1155 | 58   | 0    | 0    | 0    |
| Shared Lane Traffic (%)                                   |      |      |      |      |      |      |      |      |      |      |      |      |
| Lane Group Flow (vph)                                     | 0    | 26   | 0    | 0    | 37   | 0    | 0    | 1260 | 58   | 0    | 0    | 0    |
| Turn Type   | Perm | NA   |      |      | NA   |      | Perm | NA   | Perm |      |      |      |
| Protected Phases  |      | 4 12 |      |      | 4 12 |      |      | 2 10 |      |      |      |      |
| Permitted Phases  | 4 12 |      |      |      |      |      | 2 10 |      | 2 10 |      |      |      |
| Detector Phase  | 4 12 | 4 12 |      |      | 4 12 |      | 2 10 | 2 10 | 2 10 |      |      |      |
| Switch Phase  |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Initial (s)                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Split (s)   |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (s)   |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (%)   |      |      |      |      |      |      |      |      |      |      |      |      |
| Yellow Time (s)   |      |      |      |      |      |      |      |      |      |      |      |      |
| All-Red Time (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Lost Time Adjust (s)                                      |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Lost Time (s)                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead/Lag  |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead-Lag Optimize?  |      |      |      |      |      |      |      |      |      |      |      |      |
| Recall Mode   |      |      |      |      |      |      |      |      |      |      |      |      |
| Act Effct Green (s)                                       |      | 19.6 |      |      | 19.6 |      |      | 85.0 | 85.0 |      |      |      |
| Actuated g/C Ratio  |      | 0.16 |      |      | 0.16 |      |      | 0.71 | 0.71 |      |      |      |
| v/c Ratio   |      | 0.09 |      |      | 0.14 |      |      | 0.36 | 0.05 |      |      |      |
| Control Delay   |      | 24.2 |      |      | 14.9 |      |      | 2.6  | 0.3  |      |      |      |
| Queue Delay   |      | 0.0  |      |      | 0.0  |      |      | 0.1  | 0.0  |      |      |      |
| Total Delay   |      | 24.2 |      |      | 14.9 |      |      | 2.7  | 0.3  |      |      |      |
| LOS   |      | C    |      |      | B    |      |      | A    | A    |      |      |      |
| Approach Delay  |      | 24.2 |      |      | 14.9 |      |      | 2.6  |      |      |      |      |
| Approach LOS  |      | C    |      |      | B    |      |      | A    |      |      |      |      |
| Queue Length 50th (ft)                                    |      | 11   |      |      | 8    |      |      | 32   | 0    |      |      |      |
| Queue Length 95th (ft)                                    |      | m21  |      |      | m25  |      |      | 45   | m0   |      |      |      |
| Internal Link Dist (ft)                                   |      | 233  |      |      | 60   |      |      | 281  |      |      | 272  |      |
| Turn Bay Length (ft)                                      |      |      |      |      |      |      |      |      | 100  |      |      |      |
| Base Capacity (vph)                                       |      | 638  |      |      | 568  |      |      | 3527 | 1137 |      |      |      |
| Starvation Cap Reductn                                    |      | 0    |      |      | 0    |      |      | 998  | 0    |      |      |      |
| Spillback Cap Reductn                                     |      | 0    |      |      | 0    |      |      | 0    | 0    |      |      |      |
| Storage Cap Reductn                                       |      | 0    |      |      | 0    |      |      | 0    | 0    |      |      |      |
| Reduced v/c Ratio   |      | 0.04 |      |      | 0.07 |      |      | 0.50 | 0.05 |      |      |      |
| <b>Intersection Summary</b>                               |      |      |      |      |      |      |      |      |      |      |      |      |
| Cycle Length: 120   |      |      |      |      |      |      |      |      |      |      |      |      |
| Actuated Cycle Length: 120                                |      |      |      |      |      |      |      |      |      |      |      |      |
| Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green |      |      |      |      |      |      |      |      |      |      |      |      |

28: Lavaca St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Confl. Bikes (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 28.0  | 32.0 | 21.0 | 20.0 |
| Total Split (s)         | 42.0  | 32.0 | 21.0 | 25.0 |
| Total Split (%)         | 35%   | 27%  | 18%  | 21%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effct Green (s)     |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

28: Lavaca St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.36

Intersection Signal Delay: 3.3

Intersection LOS: A

Intersection Capacity Utilization 45.8%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 28: Lavaca St & E. 16th St



34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑↑   |      | ↓     | ↑↑↑   |      |      |      |      |       | ↓↑↑   | ↑     |
| Traffic Volume (vph)    | 0    | 1671  | 324  | 199   | 966   | 0    | 0    | 0    | 0    | 103   | 682   | 74    |
| Future Volume (vph)     | 0    | 1671  | 324  | 199   | 966   | 0    | 0    | 0    | 0    | 103   | 682   | 74    |
| Confl. Peds. (#/hr)     |      |       | 32   | 32    |       |      |      |      |      | 30    |       | 37    |
| Confl. Bikes (#/hr)     |      |       |      |       |       | 1    |      |      |      |       |       | 20    |
| Peak Hour Factor        | 0.98 | 0.98  | 0.98 | 0.98  | 0.98  | 0.98 | 0.98 | 0.98 | 0.98 | 0.98  | 0.98  | 0.98  |
| Adj. Flow (vph)         | 0    | 1705  | 331  | 203   | 986   | 0    | 0    | 0    | 0    | 105   | 696   | 76    |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 2036  | 0    | 203   | 986   | 0    | 0    | 0    | 0    | 0     | 801   | 76    |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1 3   | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1 3   | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      |       | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       |      | 25.0  |      |       | 25.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (s)         |      | 56.0  |      |       | 84.0  |      |      |      |      | 36.0  | 36.0  | 36.0  |
| Total Split (%)         |      | 46.7% |      |       | 70.0% |      |      |      |      | 30.0% | 30.0% | 30.0% |
| Yellow Time (s)         |      | 4.0   |      |       | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      |       | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      |       | 0.0   |      |      |      |      |       | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      |       | 5.0   |      |      |      |      |       | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      |       |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      |       |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      |       | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effect Green (s)    |      | 51.2  |      |       | 79.0  |      |      |      |      |       | 31.0  | 31.0  |
| Actuated g/C Ratio      |      | 0.43  |      |       | 0.66  |      |      |      |      |       | 0.26  | 0.26  |
| v/c Ratio               |      | 0.96  |      |       | 0.63  |      |      |      |      |       | 0.62  | 0.17  |
| Control Delay           |      | 45.4  |      |       | 39.0  |      |      |      |      |       | 36.6  | 4.9   |
| Queue Delay             |      | 0.5   |      |       | 12.6  |      |      |      |      |       | 0.4   | 0.0   |
| Total Delay             |      | 45.9  |      |       | 51.6  |      |      |      |      |       | 37.0  | 4.9   |
| LOS                     |      | D     |      |       | D     |      |      |      |      |       | D     | A     |
| Approach Delay          |      | 45.9  |      |       | 11.9  |      |      |      |      |       | 34.2  |       |
| Approach LOS            |      | D     |      |       | B     |      |      |      |      |       | C     |       |
| Queue Length 50th (ft)  |      | 545   |      |       | 104   |      |      |      |      |       | 203   | 3     |
| Queue Length 95th (ft)  |      | #668  |      |       | 177   |      |      |      |      |       | 242   | m21   |
| Internal Link Dist (ft) |      | 262   |      |       | 240   |      |      |      | 197  |       | 285   |       |
| Turn Bay Length (ft)    |      |       |      |       | 50    |      |      |      |      |       |       | 100   |
| Base Capacity (vph)     |      | 2118  |      |       | 327   |      |      |      |      |       | 1297  | 458   |
| Starvation Cap Reductn  |      | 0     |      |       | 100   |      |      |      |      |       | 0     | 0     |
| Spillback Cap Reductn   |      | 11    |      |       | 0     |      |      |      |      |       | 144   | 0     |
| Storage Cap Reductn     |      | 0     |      |       | 0     |      |      |      |      |       | 0     | 0     |
| Reduced v/c Ratio       |      | 0.97  |      |       | 0.89  |      |      |      |      |       | 0.69  | 0.17  |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 90

MS

Synchro 9 Report  
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34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Lane Group              | Ø1   | Ø3   |
|-------------------------|------|------|
| Lane Configurations     |      |      |
| Traffic Volume (vph)    |      |      |
| Future Volume (vph)     |      |      |
| Confl. Peds. (#/hr)     |      |      |
| Confl. Bikes (#/hr)     |      |      |
| Peak Hour Factor        |      |      |
| Adj. Flow (vph)         |      |      |
| Shared Lane Traffic (%) |      |      |
| Lane Group Flow (vph)   |      |      |
| Turn Type               |      |      |
| Protected Phases        | 1    | 3    |
| Permitted Phases        |      |      |
| Detector Phase          |      |      |
| Switch Phase            |      |      |
| Minimum Initial (s)     | 8.0  | 5.0  |
| Minimum Split (s)       | 13.0 | 10.0 |
| Total Split (s)         | 14.0 | 14.0 |
| Total Split (%)         | 12%  | 12%  |
| Yellow Time (s)         | 4.0  | 4.0  |
| All-Red Time (s)        | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |
| Total Lost Time (s)     |      |      |
| Lead/Lag                | Lead |      |
| Lead-Lag Optimize?      | Yes  |      |
| Recall Mode             | Min  | None |
| Act Effect Green (s)    |      |      |
| Actuated g/C Ratio      |      |      |
| v/c Ratio               |      |      |
| Control Delay           |      |      |
| Queue Delay             |      |      |
| Total Delay             |      |      |
| LOS                     |      |      |
| Approach Delay          |      |      |
| Approach LOS            |      |      |
| Queue Length 50th (ft)  |      |      |
| Queue Length 95th (ft)  |      |      |
| Internal Link Dist (ft) |      |      |
| Turn Bay Length (ft)    |      |      |
| Base Capacity (vph)     |      |      |
| Starvation Cap Reductn  |      |      |
| Spillback Cap Reductn   |      |      |
| Storage Cap Reductn     |      |      |
| Reduced v/c Ratio       |      |      |

Intersection Summary

MS

Synchro 9 Report  
Page 24

34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay: 33.5

Intersection LOS: C

Intersection Capacity Utilization 86.0%

ICU Level of Service E

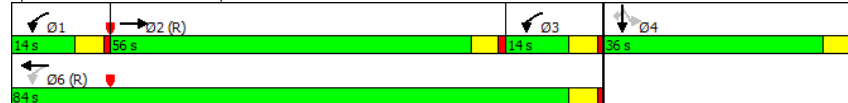
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 34: Guadalupe St & W. 15th St



35: Lavaca St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↖     | ↗     | ↘    | ↖    | ↗     | ↘    | ↖     | ↗     | ↘     | ↖    | ↗    | ↘    |
| Traffic Volume (vph)    | 275   | 1425  | 0    | 0    | 1045  | 130  | 131   | 669   | 158   | 0    | 0    | 0    |
| Future Volume (vph)     | 275   | 1425  | 0    | 0    | 1045  | 130  | 131   | 669   | 158   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 37    |       |      |      |       | 37   | 17    |       | 47    |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       |      |       |       | 11    |      |      |      |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94 | 0.94 | 0.94  | 0.94 | 0.94  | 0.94  | 0.94  | 0.94 | 0.94 | 0.94 |
| Adj. Flow (vph)         | 293   | 1516  | 0    | 0    | 1112  | 138  | 139   | 712   | 168   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 293   | 1516  | 0    | 0    | 1250  | 0    | 0     | 851   | 168   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 28.0  |      |      | 28.0  |      | 33.0  | 33.0  | 33.0  |      |      |      |
| Total Split (s)         | 19.0  | 79.0  |      |      | 60.0  |      | 41.0  | 41.0  | 41.0  |      |      |      |
| Total Split (%)         | 15.8% | 65.8% |      |      | 50.0% |      | 34.2% | 34.2% | 34.2% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 2.0   | 2.0   | 2.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      |       | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      |       | 6.0   | 6.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 74.0  | 74.0  |      |      | 55.2  |      |       | 35.0  | 35.0  |      |      |      |
| Actuated g/C Ratio      | 0.62  | 0.62  |      |      | 0.46  |      |       | 0.29  | 0.29  |      |      |      |
| v/c Ratio               | 0.90  | 0.48  |      |      | 0.54  |      |       | 0.58  | 0.36  |      |      |      |
| Control Delay           | 58.5  | 2.6   |      |      | 10.9  |      |       | 38.2  | 22.9  |      |      |      |
| Queue Delay             | 4.3   | 0.4   |      |      | 0.1   |      |       | 0.0   | 0.0   |      |      |      |
| Total Delay             | 62.8  | 2.9   |      |      | 11.0  |      |       | 38.2  | 22.9  |      |      |      |
| LOS                     | E     | A     |      |      | B     |      |       | D     | C     |      |      |      |
| Approach Delay          |       | 12.6  |      |      | 11.0  |      |       | 35.6  |       |      |      |      |
| Approach LOS            |       | B     |      |      | B     |      |       | D     |       |      |      |      |
| Queue Length 50th (ft)  | 160   | 35    |      |      | 71    |      |       | 205   | 61    |      |      |      |
| Queue Length 95th (ft)  | m174  | m48   |      |      | 80    |      |       | 251   | 125   |      |      |      |
| Internal Link Dist (ft) |       | 240   |      |      | 335   |      |       | 116   |       |      | 281  |      |
| Turn Bay Length (ft)    | 50    |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 330   | 3135  |      |      | 2295  |      |       | 1465  | 469   |      |      |      |
| Starvation Cap Reductn  | 14    | 915   |      |      | 141   |      |       | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      |       | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      |       | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.93  | 0.68  |      |      | 0.58  |      |       | 0.58  | 0.36  |      |      |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 75

35: Lavaca St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 17.9

Intersection LOS: B

Intersection Capacity Utilization 86.0%

ICU Level of Service E

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 35: Lavaca St & W. 15th St



36: Colorado St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR    |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|--------|
| Lane Group              | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR    |
| Lane Configurations     | ↔     | ↔     | ↔    | ↔     | ↔     | ↔    | ↔     | ↔     | ↔    | ↔     | ↔     | ↔      |
| Traffic Volume (vph)    | 188   | 1379  | 52   | 71    | 1108  | 139  | 1     | 21    | 21   | 5     | 19    | 20     |
| Future Volume (vph)     | 188   | 1379  | 52   | 71    | 1108  | 139  | 1     | 21    | 21   | 5     | 19    | 20     |
| Confl. Peds. (#/hr)     | 6     |       | 82   | 82    |       | 6    | 4     |       | 34   | 34    |       | 4      |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94 | 0.94  | 0.94  | 0.94 | 0.94  | 0.94  | 0.94 | 0.94  | 0.94  | 0.94   |
| Adj. Flow (vph)         | 200   | 1467  | 55   | 76    | 1179  | 148  | 1     | 22    | 22   | 5     | 20    | 21     |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |      |       |       |        |
| Lane Group Flow (vph)   | 200   | 1522  | 0    | 76    | 1327  | 0    | 0     | 45    | 0    | 0     | 25    | 21     |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | Perm  | NA    |      | Perm  | NA    | custom |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |       | 4     |      |       | 8     |        |
| Permitted Phases        | 2     |       |      | 6     |       |      | 4     |       |      | 8     |       | 6      |
| Detector Phase          | 5     | 2     |      | 1     | 6     |      | 4     | 4     |      | 8     | 8     | 6      |
| Switch Phase            |       |       |      |       |       |      |       |       |      |       |       |        |
| Minimum Initial (s)     | 5.0   | 15.0  |      | 5.0   | 15.0  |      | 5.0   | 5.0   |      | 5.0   | 5.0   | 15.0   |
| Minimum Split (s)       | 10.0  | 22.0  |      | 10.0  | 30.0  |      | 32.0  | 32.0  |      | 32.0  | 32.0  | 30.0   |
| Total Split (s)         | 15.0  | 72.0  |      | 15.0  | 72.0  |      | 33.0  | 33.0  |      | 33.0  | 33.0  | 72.0   |
| Total Split (%)         | 12.5% | 60.0% |      | 12.5% | 60.0% |      | 27.5% | 27.5% |      | 27.5% | 27.5% | 60.0%  |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0    |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0    |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0    |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      | 5.0   | 5.0   |      | 5.0   | 5.0   | 5.0    |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   |      |       |       |      |       |       | Lag    |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |       |       |      |       |       | Yes    |
| Recall Mode             | None  | C-Max |      | None  | C-Max |      | Max   | Max   |      | Max   | Max   | C-Max  |
| Act Effct Green (s)     | 79.8  | 72.0  |      | 74.8  | 67.6  |      |       | 28.0  |      |       | 28.0  | 67.6   |
| Actuated g/C Ratio      | 0.66  | 0.60  |      | 0.62  | 0.56  |      |       | 0.23  |      |       | 0.23  | 0.56   |
| v/c Ratio               | 0.67  | 0.51  |      | 0.32  | 0.47  |      |       | 0.11  |      |       | 0.06  | 0.02   |
| Control Delay           | 32.5  | 4.3   |      | 10.2  | 8.7   |      |       | 22.8  |      |       | 36.4  | 0.1    |
| Queue Delay             | 0.0   | 0.1   |      | 0.0   | 0.1   |      |       | 0.0   |      |       | 0.0   | 0.0    |
| Total Delay             | 32.5  | 4.4   |      | 10.2  | 8.7   |      |       | 22.8  |      |       | 36.4  | 0.1    |
| LOS                     | C     | A     |      | B     | A     |      |       | C     |      |       | D     | A      |
| Approach Delay          |       | 7.7   |      |       | 8.8   |      |       | 22.8  |      |       | 19.8  |        |
| Approach LOS            |       | A     |      |       | A     |      |       | C     |      |       | B     |        |
| Queue Length 50th (ft)  | 52    | 72    |      | 9     | 156   |      |       | 14    |      |       | 15    | 0      |
| Queue Length 95th (ft)  | 120   | 94    |      | 23    | 213   |      |       | 46    |      |       | 39    | 0      |
| Internal Link Dist (ft) |       | 335   |      |       | 362   |      |       | 155   |      |       | 114   |        |
| Turn Bay Length (ft)    | 90    |       |      | 90    |       |      |       |       |      |       |       | 100    |
| Base Capacity (vph)     | 306   | 3004  |      | 280   | 2819  |      |       | 410   |      |       | 416   | 904    |
| Starvation Cap Reductn  | 0     | 342   |      | 0     | 341   |      |       | 0     |      |       | 0     | 0      |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 0     |      |       | 0     |      |       | 0     | 0      |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      |       | 0     |      |       | 0     | 0      |
| Reduced v/c Ratio       | 0.65  | 0.57  |      | 0.27  | 0.54  |      |       | 0.11  |      |       | 0.06  | 0.02   |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

36: Colorado St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

Maximum v/c Ratio: 0.67

Intersection Signal Delay: 8.6

Intersection LOS: A

Intersection Capacity Utilization 80.4%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 36: Colorado St & W. 15th St



37: N. Congress Ave & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

|                         | →     | ↖    | ↗     | ←     | ↖    | ↗     |
|-------------------------|-------|------|-------|-------|------|-------|
| Lane Group              | EBT   | EBR  | WBL   | WBT   | NBL  | NBR   |
| Lane Configurations     | ↑↑↑   | ↑    | ↓     | ↑↑↑   | ↓    | ↑     |
| Traffic Volume (vph)    | 1379  | 28   | 18    | 1407  | 0    | 1     |
| Future Volume (vph)     | 1379  | 28   | 18    | 1407  | 0    | 1     |
| Confl. Peds. (#/hr)     |       | 30   | 30    |       | 13   | 20    |
| Confl. Bikes (#/hr)     |       |      |       |       |      | 13    |
| Peak Hour Factor        | 0.98  | 0.98 | 0.98  | 0.98  | 0.98 | 0.98  |
| Adj. Flow (vph)         | 1407  | 29   | 18    | 1436  | 0    | 1     |
| Shared Lane Traffic (%) |       |      |       |       |      |       |
| Lane Group Flow (vph)   | 1436  | 0    | 18    | 1436  | 0    | 1     |
| Turn Type               | NA    |      | pm+pt | NA    |      | Perm  |
| Protected Phases        | 2     |      | 1     | 6     |      |       |
| Permitted Phases        |       |      | 6     |       |      | 4     |
| Detector Phase          | 2     |      | 1     | 6     |      | 4     |
| Switch Phase            |       |      |       |       |      |       |
| Minimum Initial (s)     | 5.0   |      | 5.0   | 5.0   |      | 5.0   |
| Minimum Split (s)       | 25.0  |      | 10.0  | 25.0  |      | 33.0  |
| Total Split (s)         | 72.0  |      | 15.0  | 87.0  |      | 33.0  |
| Total Split (%)         | 60.0% |      | 12.5% | 72.5% |      | 27.5% |
| Yellow Time (s)         | 4.0   |      | 4.0   | 4.0   |      | 4.0   |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0   |      | 1.0   |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0   |      | 0.0   |
| Total Lost Time (s)     | 5.0   |      | 5.0   | 5.0   |      | 5.0   |
| Lead/Lag                | Lag   |      | Lead  |       |      |       |
| Lead-Lag Optimize?      | Yes   |      | Yes   |       |      |       |
| Recall Mode             | C-Max |      | None  | C-Max |      | Max   |
| Act Effect Green (s)    | 77.5  |      | 82.0  | 82.0  |      | 28.0  |
| Actuated g/C Ratio      | 0.65  |      | 0.68  | 0.68  |      | 0.23  |
| v/c Ratio               | 0.44  |      | 0.07  | 0.41  |      | 0.00  |
| Control Delay           | 3.4   |      | 5.2   | 7.0   |      | 0.0   |
| Queue Delay             | 0.0   |      | 0.0   | 0.1   |      | 0.0   |
| Total Delay             | 3.4   |      | 5.2   | 7.1   |      | 0.0   |
| LOS                     | A     |      | A     | A     |      | A     |
| Approach Delay          | 3.4   |      |       | 7.0   |      |       |
| Approach LOS            | A     |      |       | A     |      |       |
| Queue Length 50th (ft)  | 36    |      | 3     | 165   |      | 0     |
| Queue Length 95th (ft)  | 45    |      | m5    | 64    |      | 0     |
| Internal Link Dist (ft) | 362   |      |       | 356   | 125  |       |
| Turn Bay Length (ft)    |       |      | 100   |       |      |       |
| Base Capacity (vph)     | 3270  |      | 296   | 3474  |      | 487   |
| Starvation Cap Reductn  | 166   |      | 0     | 677   |      | 0     |
| Spillback Cap Reductn   | 0     |      | 0     | 0     |      | 0     |
| Storage Cap Reductn     | 0     |      | 0     | 0     |      | 0     |
| Reduced v/c Ratio       | 0.46  |      | 0.06  | 0.51  |      | 0.00  |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 70

37: N. Congress Ave & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.44

Intersection Signal Delay: 5.2

Intersection LOS: A

Intersection Capacity Utilization 59.0%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 37: N. Congress Ave & W. 15th St



38: Brazos St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR   | SBL   | SBT   | SBR  |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|-------|-------|-------|------|
| Lane Configurations     | ↰ ↱   | ↰ ↱   | ↰ ↱  | ↰ ↱   | ↰ ↱   | ↰ ↱  | ↰ ↱   | ↰ ↱   | ↰ ↱   | ↰ ↱   | ↰ ↱   | ↰ ↱  |
| Traffic Volume (vph)    | 79    | 1110  | 48   | 27    | 1428  | 83   | 4     | 2     | 7     | 2     | 0     | 4    |
| Future Volume (vph)     | 79    | 1110  | 48   | 27    | 1428  | 83   | 4     | 2     | 7     | 2     | 0     | 4    |
| Confl. Peds. (#/hr)     | 1     |       | 10   | 10    |       | 1    | 10    |       | 4     | 4     |       | 10   |
| Confl. Bikes (#/hr)     |       |       |      |       |       | 1    |       |       |       |       |       | 17   |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97 |
| Adj. Flow (vph)         | 81    | 1144  | 49   | 28    | 1472  | 86   | 4     | 2     | 7     | 2     | 0     | 4    |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |       |       |       |      |
| Lane Group Flow (vph)   | 81    | 1193  | 0    | 28    | 1558  | 0    | 0     | 6     | 7     | 0     | 6     | 0    |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | Perm  | NA    | Perm  | Perm  | NA    |      |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |       | 4     |       |       | 8     |      |
| Permitted Phases        | 2     |       |      | 6     |       |      | 4     |       | 4     | 8     |       |      |
| Detector Phase          | 5     | 2     |      | 1     | 6     |      | 4     | 4     | 4     | 8     | 8     |      |
| Switch Phase            |       |       |      |       |       |      |       |       |       |       |       |      |
| Minimum Initial (s)     | 5.0   | 15.0  |      | 5.0   | 15.0  |      | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  |      |
| Minimum Split (s)       | 10.0  | 22.0  |      | 10.0  | 22.0  |      | 32.0  | 32.0  | 32.0  | 32.0  | 32.0  |      |
| Total Split (s)         | 15.0  | 78.0  |      | 10.0  | 73.0  |      | 32.0  | 32.0  | 32.0  | 32.0  | 32.0  |      |
| Total Split (%)         | 12.5% | 65.0% |      | 8.3%  | 60.8% |      | 26.7% | 26.7% | 26.7% | 26.7% | 26.7% |      |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |      |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      |       | 0.0   | 0.0   |       | 0.0   |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      |       | 5.0   | 5.0   |       | 5.0   |      |
| Lead/Lag                | Lead  | Lead  |      | Lag   | Lag   |      |       |       |       |       |       |      |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |       |       |       |       |       |      |
| Recall Mode             | None  | C-Max |      | None  | C-Max |      | None  | None  | None  | None  | None  |      |
| Act Effct Green (s)     | 103.0 | 105.0 |      | 99.6  | 100.6 |      |       | 10.0  | 10.0  |       | 10.0  |      |
| Actuated g/C Ratio      | 0.86  | 0.88  |      | 0.83  | 0.84  |      |       | 0.08  | 0.08  |       | 0.08  |      |
| v/c Ratio               | 0.27  | 0.27  |      | 0.07  | 0.37  |      |       | 0.05  | 0.03  |       | 0.03  |      |
| Control Delay           | 7.6   | 4.1   |      | 1.9   | 1.7   |      |       | 51.7  | 0.3   |       | 0.2   |      |
| Queue Delay             | 0.0   | 0.0   |      | 0.0   | 0.1   |      |       | 0.0   | 0.0   |       | 0.0   |      |
| Total Delay             | 7.6   | 4.2   |      | 1.9   | 1.7   |      |       | 51.7  | 0.3   |       | 0.2   |      |
| LOS                     | A     | A     |      | A     | A     |      |       | D     | A     |       | A     |      |
| Approach Delay          |       | 4.4   |      |       | 1.8   |      |       | 24.0  |       |       | 0.2   |      |
| Approach LOS            |       | A     |      |       | A     |      |       | C     |       |       | A     |      |
| Queue Length 50th (ft)  | 11    | 107   |      | 1     | 16    |      |       | 4     | 0     |       | 0     |      |
| Queue Length 95th (ft)  | 41    | 117   |      | 3     | 126   |      |       | 18    | 0     |       | 0     |      |
| Internal Link Dist (ft) |       | 356   |      |       | 297   |      |       | 199   |       |       | 273   |      |
| Turn Bay Length (ft)    | 100   |       |      | 40    |       |      |       |       | 50    |       |       |      |
| Base Capacity (vph)     | 341   | 4413  |      | 400   | 4223  |      |       | 346   | 434   |       | 412   |      |
| Starvation Cap Reductn  | 0     | 1085  |      | 0     | 799   |      |       | 0     | 0     |       | 0     |      |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 0     |      |       | 0     | 0     |       | 0     |      |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      |       | 0     | 0     |       | 0     |      |
| Reduced v/c Ratio       | 0.24  | 0.36  |      | 0.07  | 0.46  |      |       | 0.02  | 0.02  |       | 0.01  |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 70

38: Brazos St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.37

Intersection Signal Delay: 3.0

Intersection LOS: A

Intersection Capacity Utilization 58.7%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 38: Brazos St & W. 15th St



39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

|                         | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑↑   | ↓    | ↓     | ↑↑↑   |      |      |      |      |       | ↑↑↑   | ↓     |
| Traffic Volume (vph)    | 0    | 843   | 350  | 160   | 1515  | 0    | 0    | 0    | 0    | 92    | 179   | 44    |
| Future Volume (vph)     | 0    | 843   | 350  | 160   | 1515  | 0    | 0    | 0    | 0    | 92    | 179   | 44    |
| Confl. Peds. (#/hr)     |      | 22    | 22   |       |       |      |      |      |      | 10    |       | 7     |
| Peak Hour Factor        | 0.99 | 0.99  | 0.99 | 0.99  | 0.99  | 0.99 | 0.99 | 0.99 | 0.99 | 0.99  | 0.99  | 0.99  |
| Adj. Flow (vph)         | 0    | 852   | 354  | 162   | 1530  | 0    | 0    | 0    | 0    | 93    | 181   | 44    |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 1206  | 0    | 162   | 1530  | 0    | 0    | 0    | 0    | 0     | 274   | 44    |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      | 3.0   | 10.0  |      |      |      |      | 7.0   | 7.0   | 7.0   |
| Minimum Split (s)       |      | 28.0  |      | 8.0   | 28.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (s)         |      | 68.0  |      | 20.0  | 88.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (%)         |      | 56.7% |      | 16.7% | 73.3% |      |      |      |      | 26.7% | 26.7% | 26.7% |
| Yellow Time (s)         |      | 4.0   |      | 4.0   | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      | 1.0   | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      | 0.0   | 0.0   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      | 5.0   | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      | Lead  |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      | Yes   |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      | None  | C-Max |      |      |      |      | None  | None  | None  |
| Act Effct Green (s)     |      | 85.1  |      | 97.9  | 97.9  |      |      |      |      | 12.1  | 12.1  |       |
| Actuated g/C Ratio      |      | 0.71  |      | 0.82  | 0.82  |      |      |      |      | 0.10  | 0.10  |       |
| v/c Ratio               |      | 0.35  |      | 0.42  | 0.37  |      |      |      |      | 0.55  | 0.21  |       |
| Control Delay           |      | 2.4   |      | 7.4   | 3.8   |      |      |      |      | 55.2  | 7.8   |       |
| Queue Delay             |      | 0.1   |      | 0.0   | 0.3   |      |      |      |      | 0.0   | 0.0   |       |
| Total Delay             |      | 2.6   |      | 7.4   | 4.1   |      |      |      |      | 55.2  | 7.8   |       |
| LOS                     |      | A     |      | A     | A     |      |      |      |      | E     | A     |       |
| Approach Delay          |      | 2.6   |      |       | 4.4   |      |      |      |      | 48.6  |       |       |
| Approach LOS            |      | A     |      |       | A     |      |      |      |      | D     |       |       |
| Queue Length 50th (ft)  |      | 0     |      | 24    | 94    |      |      |      |      | 75    | 0     |       |
| Queue Length 95th (ft)  |      | 0     |      | m30   | 102   |      |      |      |      | 103   | 21    |       |
| Internal Link Dist (ft) |      | 297   |      |       | 282   |      |      | 125  |      | 272   |       |       |
| Turn Bay Length (ft)    |      |       |      | 70    |       |      |      |      |      |       |       | 50    |
| Base Capacity (vph)     |      | 3438  |      | 468   | 4147  |      |      |      |      | 1119  | 398   |       |
| Starvation Cap Reductn  |      | 979   |      | 0     | 1660  |      |      |      |      | 0     | 0     |       |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     |       |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     |       |
| Reduced v/c Ratio       |      | 0.49  |      | 0.35  | 0.62  |      |      |      |      | 0.24  | 0.11  |       |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

Maximum v/c Ratio: 0.55

Intersection Signal Delay: 8.1

Intersection LOS: A

Intersection Capacity Utilization 88.8%

ICU Level of Service E

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 39: San Jacinto Blvd & W. 15th St



40: Trinity St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↰     | ↱↱↱   |      |      | ↱↱↱   |      |       | ↱↱    | ↱     |      |      |      |
| Traffic Volume (vph)    | 220   | 766   | 0    | 0    | 1625  | 644  | 59    | 167   | 12    | 0    | 0    | 0    |
| Future Volume (vph)     | 220   | 766   | 0    | 0    | 1625  | 644  | 59    | 167   | 12    | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 1     |       |      |      |       | 1    | 3     |       | 6     |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       |      |       |       | 2     |      |      |      |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97 | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph)         | 227   | 790   | 0    | 0    | 1675  | 664  | 61    | 172   | 12    | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 227   | 790   | 0    | 0    | 2339  | 0    | 0     | 233   | 12    | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 1.0   | 10.0  |      |      | 1.0   |      | 10.0  | 10.0  | 10.0  |      |      |      |
| Minimum Split (s)       | 5.5   | 28.0  |      |      | 5.5   |      | 28.0  | 28.0  | 28.0  |      |      |      |
| Total Split (s)         | 20.0  | 92.0  |      |      | 72.0  |      | 28.0  | 28.0  | 28.0  |      |      |      |
| Total Split (%)         | 16.7% | 76.7% |      |      | 60.0% |      | 23.3% | 23.3% | 23.3% |      |      |      |
| Yellow Time (s)         | 3.5   | 4.0   |      |      | 3.5   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      |       | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 4.5   | 5.0   |      |      | 4.5   |      |       | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effct Green (s)     | 87.5  | 87.0  |      |      | 69.0  |      |       | 23.0  | 23.0  |      |      |      |
| Actuated g/C Ratio      | 0.73  | 0.72  |      |      | 0.58  |      |       | 0.19  | 0.19  |      |      |      |
| v/c Ratio               | 0.85  | 0.21  |      |      | 0.82  |      |       | 0.35  | 0.03  |      |      |      |
| Control Delay           | 63.3  | 3.7   |      |      | 8.8   |      |       | 43.7  | 0.2   |      |      |      |
| Queue Delay             | 0.0   | 0.1   |      |      | 0.1   |      |       | 0.0   | 0.0   |      |      |      |
| Total Delay             | 63.3  | 3.8   |      |      | 8.9   |      |       | 43.7  | 0.2   |      |      |      |
| LOS                     | E     | A     |      |      | A     |      |       | D     | A     |      |      |      |
| Approach Delay          |       | 17.1  |      |      | 8.9   |      |       | 41.6  |       |      |      |      |
| Approach LOS            |       | B     |      |      | A     |      |       | D     |       |      |      |      |
| Queue Length 50th (ft)  | 121   | 36    |      |      | 131   |      |       | 83    | 0     |      |      |      |
| Queue Length 95th (ft)  | #227  | 42    |      |      | m160  |      |       | 123   | 0     |      |      |      |
| Internal Link Dist (ft) |       | 282   |      |      | 657   |      |       | 149   |       |      | 621  |      |
| Turn Bay Length (ft)    | 100   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 289   | 3686  |      |      | 2847  |      |       | 668   | 344   |      |      |      |
| Starvation Cap Reductn  | 0     | 1652  |      |      | 54    |      |       | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      |       | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      |       | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.79  | 0.39  |      |      | 0.84  |      |       | 0.35  | 0.03  |      |      |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 90

40: Trinity St & W. 15th St

2022 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 13.4

Intersection LOS: B

Intersection Capacity Utilization 88.8%

ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

**Splits and Phases:** 40: Trinity St & W. 15th St



11: Colorado St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 10.1 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | +    |      |      |      | +    |      |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 4    | 201  | 35   | 0    | 21   | 31   | 5    | 0    | 15   | 20   | 45   |
| Future Vol, veh/h   | 0    | 4    | 201  | 35   | 0    | 21   | 31   | 5    | 0    | 15   | 20   | 45   |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 5    | 228  | 40   | 0    | 24   | 35   | 6    | 0    | 17   | 23   | 51   |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB  | NB  |
|----------------------------|------|-----|-----|
| Opposing Approach          | WB   | EB  | SB  |
| Opposing Lanes             | 1    | 1   | 1   |
| Conflicting Approach Left  | SB   | NB  | EB  |
| Conflicting Lanes Left     | 1    | 1   | 1   |
| Conflicting Approach Right | NB   | SB  | WB  |
| Conflicting Lanes Right    | 1    | 1   | 1   |
| HCM Control Delay          | 10.6 | 8.8 | 8.5 |
| HCM LOS                    | B    | A   | A   |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 19%   | 2%    | 37%   | 2%    |
| Vol Thru, %            | 25%   | 84%   | 54%   | 91%   |
| Vol Right, %           | 56%   | 15%   | 9%    | 7%    |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 80    | 240   | 57    | 231   |
| LT Vol                 | 15    | 4     | 21    | 4     |
| Through Vol            | 20    | 201   | 31    | 211   |
| RT Vol                 | 45    | 35    | 5     | 16    |
| Lane Flow Rate         | 91    | 273   | 65    | 262   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.121 | 0.362 | 0.093 | 0.352 |
| Departure Headway (Hd) | 4.797 | 4.785 | 5.163 | 4.832 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 740   | 747   | 687   | 740   |
| Service Time           | 2.874 | 2.847 | 3.244 | 2.893 |
| HCM Lane V/C Ratio     | 0.123 | 0.365 | 0.095 | 0.354 |
| HCM Control Delay      | 8.5   | 10.6  | 8.8   | 10.5  |
| HCM Lane LOS           | A     | B     | A     | B     |
| HCM 95th-tile Q        | 0.4   | 1.7   | 0.3   | 1.6   |

11: Colorado St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 4    | 211  | 16   |
| Future Vol, veh/h   | 0    | 4    | 211  | 16   |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 5    | 240  | 18   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 10.5 |
| HCM LOS                    | B    |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Intersection              |     |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 8.6 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | A   |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↰    |      |      |      | ↱    |      |      |      | ↲    |      |
| Traffic Vol, veh/h  | 0    | 0    | 252  | 0    | 0    | 0    | 55   | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h   | 0    | 0    | 252  | 0    | 0    | 0    | 55   | 0    | 0    | 0    | 0    | 0    |
| Peak Hour Factor    | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 290  | 0    | 0    | 0    | 63   | 0    | 0    | 0    | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB  | WB  | NB |
|----------------------------|-----|-----|----|
| Opposing Approach          | WB  | EB  | SB |
| Opposing Lanes             | 1   | 1   | 1  |
| Conflicting Approach Left  | SB  | NB  | EB |
| Conflicting Lanes Left     | 1   | 1   | 1  |
| Conflicting Approach Right | NB  | SB  | WB |
| Conflicting Lanes Right    | 1   | 1   | 1  |
| HCM Control Delay          | 8.9 | 7.6 | 0  |
| HCM LOS                    | A   | A   | -  |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 0%    | 0%    | 0%    | 0%    |
| Vol Thru, %            | 100%  | 100%  | 100%  | 0%    |
| Vol Right, %           | 0%    | 0%    | 0%    | 100%  |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 0     | 252   | 55    | 8     |
| LT Vol                 | 0     | 0     | 0     | 0     |
| Through Vol            | 0     | 252   | 55    | 0     |
| RT Vol                 | 0     | 0     | 0     | 8     |
| Lane Flow Rate         | 0     | 290   | 63    | 9     |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0     | 0.322 | 0.073 | 0.01  |
| Departure Headway (Hd) | 4.702 | 3.997 | 4.165 | 4.086 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 0     | 901   | 853   | 881   |
| Service Time           | 2.702 | 2.015 | 2.223 | 2.086 |
| HCM Lane V/C Ratio     | 0     | 0.322 | 0.074 | 0.01  |
| HCM Control Delay      | 7.7   | 8.9   | 7.6   | 7.1   |
| HCM Lane LOS           | N     | A     | A     | A     |
| HCM 95th-tile Q        | 0     | 1.4   | 0.2   | 0     |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      |      | ↰    |
| Traffic Vol, veh/h  | 0    | 0    | 0    | 8    |
| Future Vol, veh/h   | 0    | 0    | 0    | 8    |
| Peak Hour Factor    | 0.87 | 0.87 | 0.87 | 0.87 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 0    | 9    |
| Number of Lanes     | 0    | 0    | 0    | 1    |

| Approach                   | SB  |
|----------------------------|-----|
| Opposing Approach          | NB  |
| Opposing Lanes             | 1   |
| Conflicting Approach Left  | WB  |
| Conflicting Lanes Left     | 1   |
| Conflicting Approach Right | EB  |
| Conflicting Lanes Right    | 1   |
| HCM Control Delay          | 7.1 |
| HCM LOS                    | A   |

14: Brazos St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 12.7 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |      |      | ↕    |      |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 118  | 80   | 7    | 0    | 17   | 116  | 106  | 0    | 20   | 0    | 0    |
| Future Vol, veh/h   | 0    | 118  | 80   | 7    | 0    | 17   | 116  | 106  | 0    | 20   | 0    | 0    |
| Peak Hour Factor    | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 149  | 101  | 9    | 0    | 22   | 147  | 134  | 0    | 25   | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB   | NB  |
|----------------------------|------|------|-----|
| Opposing Approach          | WB   | EB   | SB  |
| Opposing Lanes             | 1    | 1    | 1   |
| Conflicting Approach Left  | SB   | NB   | EB  |
| Conflicting Lanes Left     | 1    | 1    | 1   |
| Conflicting Approach Right | NB   | SB   | WB  |
| Conflicting Lanes Right    | 1    | 1    | 1   |
| HCM Control Delay          | 12.2 | 12.1 | 9.6 |
| HCM LOS                    | B    | B    | A   |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 100%  | 58%   | 7%    | 5%    |
| Vol Thru, %            | 0%    | 39%   | 49%   | 86%   |
| Vol Right, %           | 0%    | 3%    | 44%   | 9%    |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 20    | 205   | 239   | 266   |
| LT Vol                 | 20    | 118   | 17    | 14    |
| Through Vol            | 0     | 80    | 116   | 228   |
| RT Vol                 | 0     | 7     | 106   | 24    |
| Lane Flow Rate         | 25    | 259   | 303   | 337   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.044 | 0.398 | 0.432 | 0.507 |
| Departure Headway (Hd) | 6.276 | 5.528 | 5.141 | 5.421 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 569   | 651   | 699   | 663   |
| Service Time           | 4.336 | 3.568 | 3.179 | 3.458 |
| HCM Lane V/C Ratio     | 0.044 | 0.398 | 0.433 | 0.508 |
| HCM Control Delay      | 9.6   | 12.2  | 12.1  | 13.9  |
| HCM Lane LOS           | A     | B     | B     | B     |
| HCM 95th-tile Q        | 0.1   | 1.9   | 2.2   | 2.9   |

14: Brazos St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 14   | 228  | 24   |
| Future Vol, veh/h   | 0    | 14   | 228  | 24   |
| Peak Hour Factor    | 0.79 | 0.79 | 0.79 | 0.79 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 18   | 289  | 30   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 13.9 |
| HCM LOS                    | B    |

16: San Jacinto Blvd & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 14.3 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↱    |      |      |      | ↱    |      |      |      |      |      |
| Traffic Vol, veh/h  | 0    | 0    | 13   | 97   | 0    | 72   | 172  | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h   | 0    | 0    | 13   | 97   | 0    | 72   | 172  | 0    | 0    | 0    | 0    | 0    |
| Peak Hour Factor    | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 14   | 103  | 0    | 77   | 183  | 0    | 0    | 0    | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    |

| Approach                   |  | EB   | WB   |
|----------------------------|--|------|------|
| Opposing Approach          |  | WB   | EB   |
| Opposing Lanes             |  | 1    | 1    |
| Conflicting Approach Left  |  | SB   |      |
| Conflicting Lanes Left     |  | 3    | 0    |
| Conflicting Approach Right |  |      | SB   |
| Conflicting Lanes Right    |  | 0    | 3    |
| HCM Control Delay          |  | 10.5 | 15.4 |
| HCM LOS                    |  | B    | C    |

| Lane                   | EBLn1 | WBLn1 | SBLn1 | SBLn2 | SBLn3 |
|------------------------|-------|-------|-------|-------|-------|
| Vol Left, %            | 0%    | 30%   | 0%    | 0%    | 0%    |
| Vol Thru, %            | 12%   | 70%   | 100%  | 100%  | 0%    |
| Vol Right, %           | 88%   | 0%    | 0%    | 0%    | 100%  |
| Sign Control           | Stop  | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 110   | 244   | 323   | 323   | 68    |
| LT Vol                 | 0     | 72    | 0     | 0     | 0     |
| Through Vol            | 13    | 172   | 323   | 323   | 0     |
| RT Vol                 | 97    | 0     | 0     | 0     | 68    |
| Lane Flow Rate         | 117   | 260   | 343   | 343   | 72    |
| Geometry Grp           | 7     | 7     | 7     | 7     | 7     |
| Degree of Util (X)     | 0.2   | 0.48  | 0.55  | 0.55  | 0.067 |
| Departure Headway (Hd) | 6.166 | 6.66  | 5.775 | 5.775 | 3.316 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 582   | 543   | 624   | 624   | 1078  |
| Service Time           | 3.908 | 4.395 | 3.503 | 3.503 | 1.043 |
| HCM Lane V/C Ratio     | 0.201 | 0.479 | 0.55  | 0.55  | 0.067 |
| HCM Control Delay      | 10.5  | 15.4  | 15.4  | 15.4  | 6.3   |
| HCM Lane LOS           | B     | C     | C     | C     | A     |
| HCM 95th-tile Q        | 0.7   | 2.6   | 3.3   | 3.3   | 0.2   |

16: San Jacinto Blvd & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↱↱   | ↱    |
| Traffic Vol, veh/h  | 0    | 0    | 645  | 68   |
| Future Vol, veh/h   | 0    | 0    | 645  | 68   |
| Peak Hour Factor    | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 686  | 72   |
| Number of Lanes     | 0    | 0    | 2    | 1    |

| Approach                   |  | SB   |
|----------------------------|--|------|
| Opposing Approach          |  |      |
| Opposing Lanes             |  | 0    |
| Conflicting Approach Left  |  | WB   |
| Conflicting Lanes Left     |  | 1    |
| Conflicting Approach Right |  | EB   |
| Conflicting Lanes Right    |  | 1    |
| HCM Control Delay          |  | 14.5 |
| HCM LOS                    |  | B    |

20: Colorado St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 10.2 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | +    |      |      |      | +    |      |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 31   | 185  | 35   | 0    | 0    | 25   | 0    | 0    | 15   | 41   | 0    |
| Future Vol, veh/h   | 0    | 31   | 185  | 35   | 0    | 0    | 25   | 0    | 0    | 15   | 41   | 0    |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 35   | 210  | 40   | 0    | 0    | 28   | 0    | 0    | 17   | 47   | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB  | NB  |
|----------------------------|------|-----|-----|
| Opposing Approach          | WB   | EB  | SB  |
| Opposing Lanes             | 1    | 1   | 1   |
| Conflicting Approach Left  | SB   | NB  | EB  |
| Conflicting Lanes Left     | 1    | 1   | 1   |
| Conflicting Approach Right | NB   | SB  | WB  |
| Conflicting Lanes Right    | 1    | 1   | 1   |
| HCM Control Delay          | 10.6 | 8.4 | 8.7 |
| HCM LOS                    | B    | A   | A   |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 27%   | 12%   | 0%    | 0%    |
| Vol Thru, %            | 73%   | 74%   | 100%  | 88%   |
| Vol Right, %           | 0%    | 14%   | 0%    | 12%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 56    | 251   | 25    | 238   |
| LT Vol                 | 15    | 31    | 0     | 0     |
| Through Vol            | 41    | 185   | 25    | 210   |
| RT Vol                 | 0     | 35    | 0     | 28    |
| Lane Flow Rate         | 64    | 285   | 28    | 270   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.09  | 0.374 | 0.04  | 0.354 |
| Departure Headway (Hd) | 5.088 | 4.716 | 5.105 | 4.708 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 699   | 759   | 696   | 760   |
| Service Time           | 3.153 | 2.765 | 3.178 | 2.757 |
| HCM Lane V/C Ratio     | 0.092 | 0.375 | 0.04  | 0.355 |
| HCM Control Delay      | 8.7   | 10.6  | 8.4   | 10.3  |
| HCM Lane LOS           | A     | B     | A     | B     |
| HCM 95th-tile Q        | 0.3   | 1.7   | 0.1   | 1.6   |

20: Colorado St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 0    | 210  | 28   |
| Future Vol, veh/h   | 0    | 0    | 210  | 28   |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 239  | 32   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 10.3 |
| HCM LOS                    | B    |

24: E. 17th St & Brazos St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Intersection              |     |
|---------------------------|-----|
| Intersection Delay, s/veh | 8.4 |
| Intersection LOS          | A   |

| Movement            | EBU  | EBL  | EBT  | WBU  | WBT  | WBR  | SBU  | SBL  | SBR  |
|---------------------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↰    |      | ↰    |      |      | ↰    |      |
| Traffic Vol, veh/h  | 0    | 0    | 28   | 0    | 206  | 16   | 0    | 38   | 0    |
| Future Vol, veh/h   | 0    | 0    | 28   | 0    | 206  | 16   | 0    | 38   | 0    |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 32   | 0    | 234  | 18   | 0    | 43   | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 1    | 0    | 0    | 1    | 0    |

| Approach                   | EB  | WB  | SB |
|----------------------------|-----|-----|----|
| Opposing Approach          | WB  | EB  |    |
| Opposing Lanes             | 1   | 1   | 0  |
| Conflicting Approach Left  | SB  |     | WB |
| Conflicting Lanes Left     | 1   | 0   | 1  |
| Conflicting Approach Right |     | SB  | EB |
| Conflicting Lanes Right    | 0   | 1   | 1  |
| HCM Control Delay          | 7.5 | 8.6 | 8  |
| HCM LOS                    | A   | A   | A  |

| Lane                   | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, %            | 0%    | 0%    | 100%  |
| Vol Thru, %            | 100%  | 93%   | 0%    |
| Vol Right, %           | 0%    | 7%    | 0%    |
| Sign Control           | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 28    | 222   | 38    |
| LT Vol                 | 0     | 0     | 38    |
| Through Vol            | 28    | 206   | 0     |
| RT Vol                 | 0     | 16    | 0     |
| Lane Flow Rate         | 32    | 252   | 43    |
| Geometry Grp           | 1     | 1     | 1     |
| Degree of Util (X)     | 0.037 | 0.28  | 0.057 |
| Departure Headway (Hd) | 4.199 | 3.989 | 4.747 |
| Convergence, Y/N       | Yes   | Yes   | Yes   |
| Cap                    | 840   | 896   | 759   |
| Service Time           | 2.286 | 2.035 | 2.747 |
| HCM Lane V/C Ratio     | 0.038 | 0.281 | 0.057 |
| HCM Control Delay      | 7.5   | 8.6   | 8     |
| HCM Lane LOS           | A     | A     | A     |
| HCM 95th-ile Q         | 0.1   | 1.2   | 0.2   |

4: Colorado St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.2  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑↑   |      | ↑    | ↑↑   | ↑    |      |
| Traffic Vol, veh/h       | 1101 | 93   | 146  | 776  | 0    | 21   |
| Future Vol, veh/h        | 1101 | 93   | 146  | 776  | 0    | 21   |
| Conflicting Peds, #/hr   | 0    | 1    | 1    | 0    | 0    | 5    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | 40   | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 87   | 87   | 87   | 87   | 87   | 87   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 1266 | 107  | 168  | 892  | 0    | 24   |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |      |
|----------------------|--------|---|--------|---|--------|------|
| Conflicting Flow All | 0      | 0 | 1373   | 0 | 2102   | 692  |
| Stage 1              | -      | - | -      | - | 1320   | -    |
| Stage 2              | -      | - | -      | - | 782    | -    |
| Critical Hdwy        | -      | - | 4.14   | - | 6.84   | 6.94 |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.84   | -    |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.84   | -    |
| Follow-up Hdwy       | -      | - | 2.22   | - | 3.52   | 3.32 |
| Pot Cap-1 Maneuver   | -      | - | 496    | - | 44     | 386  |
| Stage 1              | -      | - | -      | - | 214    | -    |
| Stage 2              | -      | - | -      | - | 411    | -    |
| Platoon blocked, %   | -      | - | -      | - | -      | -    |
| Mov Cap-1 Maneuver   | -      | - | 494    | - | 29     | 384  |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 29     | -    |
| Stage 1              | -      | - | -      | - | 214    | -    |
| Stage 2              | -      | - | -      | - | 271    | -    |

| Approach             | EB |  | WB  |  | NB |  |
|----------------------|----|--|-----|--|----|--|
| HCM Control Delay, s | 0  |  | 2.5 |  | 15 |  |
| HCM LOS              |    |  |     |  | C  |  |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL  | WBT |
|-----------------------|-------|-----|-----|------|-----|
| Capacity (veh/h)      | 384   | -   | -   | 494  | -   |
| HCM Lane V/C Ratio    | 0.063 | -   | -   | 0.34 | -   |
| HCM Control Delay (s) | 15    | -   | -   | 16   | -   |
| HCM Lane LOS          | C     | -   | -   | C    | -   |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | 1.5  | -   |

9: Guadalupe St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.4  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    | ↑    |      | ↑    |      |      |      |      |      | ↑↑   |      |
| Traffic Vol, veh/h       | 0    | 13   | 47   | 60   | 10   | 0    | 0    | 0    | 0    | 75   | 1093 | 18   |
| Future Vol, veh/h        | 0    | 13   | 47   | 60   | 10   | 0    | 0    | 0    | 0    | 75   | 1093 | 18   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 13   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 37   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 0    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 14   | 49   | 63   | 11   | 0    | 0    | 0    | 0    | 79   | 1151 | 19   |

| Major/Minor          | Minor2 |      |      | Minor1 |      |   | Major2 |   |   |
|----------------------|--------|------|------|--------|------|---|--------|---|---|
| Conflicting Flow All | -      | 1355 | 635  | 753    | 1364 | - | 0      | 0 | 0 |
| Stage 1              | -      | 1355 | -    | 0      | 0    | - | -      | - | - |
| Stage 2              | -      | 0    | -    | 753    | 1364 | - | -      | - | - |
| Critical Hdwy        | -      | 6.54 | 6.94 | 7.54   | 6.54 | - | 4.14   | - | - |
| Critical Hdwy Stg 1  | -      | 5.54 | -    | -      | -    | - | -      | - | - |
| Critical Hdwy Stg 2  | -      | -    | -    | 6.54   | 5.54 | - | -      | - | - |
| Follow-up Hdwy       | -      | 4.02 | 3.32 | 3.52   | 4.02 | - | 2.22   | - | - |
| Pot Cap-1 Maneuver   | 0      | 148  | 421  | 298    | 146  | 0 | -      | - | - |
| Stage 1              | 0      | 216  | -    | -      | -    | 0 | -      | - | - |
| Stage 2              | 0      | -    | -    | 368    | 214  | 0 | -      | - | - |
| Platoon blocked, %   | -      | -    | -    | -      | -    | - | -      | - | - |
| Mov Cap-1 Maneuver   | -      | 143  | 406  | 243    | 141  | - | -      | - | - |
| Mov Cap-2 Maneuver   | -      | 143  | -    | 243    | 141  | - | -      | - | - |
| Stage 1              | -      | 208  | -    | -      | -    | - | -      | - | - |
| Stage 2              | -      | -    | -    | 302    | 206  | - | -      | - | - |

| Approach             | EB   |  |  | WB   |  |  | SB |  |  |
|----------------------|------|--|--|------|--|--|----|--|--|
| HCM Control Delay, s | 18.9 |  |  | 29.4 |  |  |    |  |  |
| HCM LOS              | C    |  |  | D    |  |  |    |  |  |

| Minor Lane/Major Mvmt | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-------|-------|-----|-----|-----|
| Capacity (veh/h)      | 143   | 406   | 220   | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.096 | 0.122 | 0.335 | -   | -   | -   |
| HCM Control Delay (s) | 32.8  | 15.1  | 29.4  | -   | -   | -   |
| HCM Lane LOS          | D     | C     | D     | -   | -   | -   |
| HCM 95th %tile Q(veh) | 0.3   | 0.4   | 1.4   | -   | -   | -   |

10: Lavaca St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |       |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|-------|------|------|------|------|------|
| Int Delay, s/veh         | 4    |      |      |      |      |      |       |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL   | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      | ↕ ↕ ↕ |      |      |      |      |      |
| Traffic Vol, veh/h       | 4    | 69   | 0    | 0    | 34   | 19   | 88    | 541  | 172  | 0    | 0    | 0    |
| Future Vol, veh/h        | 4    | 69   | 0    | 0    | 34   | 19   | 88    | 541  | 172  | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 29   | 17    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free  | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -     | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 0     | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | -    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 94   | 94   | 94   | 94   | 94   | 94   | 94    | 94   | 94   | 94   | 94   | 94   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2     | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 4    | 73   | 0    | 0    | 36   | 20   | 94    | 576  | 183  | 0    | 0    | 0    |

| Major/Minor          | Minor2 |      | Minor1 |   | Major1 |      |
|----------------------|--------|------|--------|---|--------|------|
| Conflicting Flow All | 482    | 963  | -      | - | 871    | 408  |
| Stage 1              | 17     | 17   | -      | - | 854    | -    |
| Stage 2              | 465    | 946  | -      | - | 17     | -    |
| Critical Hdwy        | 6.44   | 6.54 | -      | - | 6.54   | 7.14 |
| Critical Hdwy Stg 1  | -      | -    | -      | - | 5.54   | -    |
| Critical Hdwy Stg 2  | 6.74   | 5.54 | -      | - | -      | -    |
| Follow-up Hdwy       | 3.82   | 4.02 | -      | - | 4.02   | 3.92 |
| Pot Cap-1 Maneuver   | 508    | 254  | 0      | 0 | 288    | 506  |
| Stage 1              | -      | -    | 0      | 0 | 373    | -    |
| Stage 2              | 500    | 338  | 0      | 0 | -      | -    |
| Platoon blocked, %   | -      | -    | -      | - | -      | -    |
| Mov Cap-1 Maneuver   | 402    | 229  | -      | - | 260    | 506  |
| Mov Cap-2 Maneuver   | 402    | 229  | -      | - | 260    | -    |
| Stage 1              | -      | -    | -      | - | 342    | -    |
| Stage 2              | 394    | 310  | -      | - | -      | -    |

| Approach             | EB   |  | WB   |  | NB  |  |
|----------------------|------|--|------|--|-----|--|
| HCM Control Delay, s | 27.7 |  | 18.9 |  | 0.9 |  |
| HCM LOS              | D    |  | C    |  |     |  |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1 | WBLn1 |
|-----------------------|-------|-----|-----|-------|-------|
| Capacity (veh/h)      | 1133  | -   | -   | 235   | 315   |
| HCM Lane V/C Ratio    | 0.083 | -   | -   | 0.33  | 0.179 |
| HCM Control Delay (s) | 8.5   | -   | -   | 27.7  | 18.9  |
| HCM Lane LOS          | A     | -   | -   | D     | C     |
| HCM 95th %tile Q(veh) | 0.3   | -   | -   | 1.4   | 0.6   |

MS

Synchro 9 Report  
Page 3

13: W. 18th St & Parking Dr. 2  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.9  |      |      |      |      |      |
| Movement                 | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
| Lane Configurations      |      | ↕    |      | ↕    | ↕    |      |
| Traffic Vol, veh/h       | 123  | 129  | 57   | 103  | 14   | 17   |
| Future Vol, veh/h        | 123  | 129  | 57   | 103  | 14   | 17   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | -    | 0    | 0    | -    | 0    | -    |
| Grade, %                 | -    | 0    | 0    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 134  | 140  | 62   | 112  | 15   | 18   |

| Major/Minor          | Major1 |   | Major2 |   | Minor2 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 174    | 0 | -      | 0 | 526    | 118   |
| Stage 1              | -      | - | -      | - | 118    | -     |
| Stage 2              | -      | - | -      | - | 408    | -     |
| Critical Hdwy        | 4.12   | - | -      | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | 2.218  | - | -      | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | 1403   | - | -      | - | 512    | 934   |
| Stage 1              | -      | - | -      | - | 907    | -     |
| Stage 2              | -      | - | -      | - | 671    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | 1403   | - | -      | - | 459    | 934   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 459    | -     |
| Stage 1              | -      | - | -      | - | 907    | -     |
| Stage 2              | -      | - | -      | - | 601    | -     |

| Approach             | EB  |  | WB |  | SB |  |
|----------------------|-----|--|----|--|----|--|
| HCM Control Delay, s | 3.8 |  | 0  |  | 11 |  |
| HCM LOS              |     |  |    |  | B  |  |

| Minor Lane/Major Mvmt | EBL   | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h)      | 1403  | -   | -   | -   | 637   |
| HCM Lane V/C Ratio    | 0.095 | -   | -   | -   | 0.053 |
| HCM Control Delay (s) | 7.8   | 0   | -   | -   | 11    |
| HCM Lane LOS          | A     | A   | -   | -   | B     |
| HCM 95th %tile Q(veh) | 0.3   | -   | -   | -   | 0.2   |

MS

Synchro 9 Report  
Page 4

15: Brazos St & Parking Dr. 1  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |  |
|--------------------------|------|------|------|------|------|------|--|
| Int Delay, s/veh         | 3.1  |      |      |      |      |      |  |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |  |
| Lane Configurations      | ↑    |      |      | ↑    | ↑    |      |  |
| Traffic Vol, veh/h       | 35   | 21   | 154  | 70   | 262  | 257  |  |
| Future Vol, veh/h        | 35   | 21   | 154  | 70   | 262  | 257  |  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |  |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |  |
| RT Channelized           | -    | None | -    | None | -    | None |  |
| Storage Length           | 0    | -    | -    | -    | -    | -    |  |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |  |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |  |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |  |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |  |
| Mvmt Flow                | 38   | 23   | 167  | 76   | 285  | 279  |  |

| Major/Minor          | Minor2 | Major1 | Major2 |   |     |
|----------------------|--------|--------|--------|---|-----|
| Conflicting Flow All | 835    | 424    | 564    | 0 | - 0 |
| Stage 1              | 424    | -      | -      | - | -   |
| Stage 2              | 411    | -      | -      | - | -   |
| Critical Hdwy        | 7.12   | 6.22   | 4.12   | - | - - |
| Critical Hdwy Stg 1  | 6.12   | -      | -      | - | -   |
| Critical Hdwy Stg 2  | 6.12   | -      | -      | - | -   |
| Follow-up Hdwy       | 3.518  | 3.318  | 2.218  | - | - - |
| Pot Cap-1 Maneuver   | 287    | 630    | 1008   | - | - - |
| Stage 1              | 608    | -      | -      | - | -   |
| Stage 2              | 618    | -      | -      | - | -   |
| Platoon blocked, %   |        |        |        | - | -   |
| Mov Cap-1 Maneuver   | 249    | 630    | 1008   | - | - - |
| Mov Cap-2 Maneuver   | 249    | -      | -      | - | -   |
| Stage 1              | 503    | -      | -      | - | -   |
| Stage 2              | 511    | -      | -      | - | -   |

| Approach             | EB   | NB  | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 18.8 | 6.4 | 0  |
| HCM LOS              | C    |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1008  | -   | 322   | -   | -   |
| HCM Lane V/C Ratio    | 0.166 | -   | 0.189 | -   | -   |
| HCM Control Delay (s) | 9.3   | 0   | 18.8  | -   | -   |
| HCM Lane LOS          | A     | A   | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.6   | -   | 0.7   | -   | -   |

17: Trinity St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 5.5  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    |      |      | ↑    |      | ↑    | ↑↑↑  |      |      |      |      |
| Traffic Vol, veh/h       | 27   | 0    | 0    | 0    | 0    | 0    | 344  | 223  | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 27   | 0    | 0    | 0    | 0    | 0    | 344  | 223  | 0    | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 5    | 0    | 0    | 0    | 6    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 115  | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | -    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 88   | 88   | 88   | 88   | 88   | 88   | 88   | 88   | 88   | 88   | 88   | 88   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 31   | 0    | 0    | 0    | 0    | 0    | 391  | 253  | 0    | 0    | 0    | 0    |

| Major/Minor          | Minor2 | Major2 | Major1 |       |           |
|----------------------|--------|--------|--------|-------|-----------|
| Conflicting Flow All | 890    | 1042   | -      | - - 0 | 7 0 -     |
| Stage 1              | 7      | 7      | -      | - - - | - - -     |
| Stage 2              | 883    | 1035   | -      | - - - | - - -     |
| Critical Hdwy        | 6.08   | 6.53   | -      | - - - | 4.13 - -  |
| Critical Hdwy Stg 1  | 5.43   | 5.53   | -      | - - - | - - -     |
| Critical Hdwy Stg 2  | 6.03   | 5.53   | -      | - - - | - - -     |
| Follow-up Hdwy       | 3.669  | 4.019  | -      | - - - | 2.219 - - |
| Pot Cap-1 Maneuver   | 332    | 229    | 0      | 0 - - | 1613 - 0  |
| Stage 1              | 974    | 890    | 0      | 0 - - | - - 0     |
| Stage 2              | 339    | 308    | 0      | 0 - - | - - 0     |
| Platoon blocked, %   |        |        |        | - - - | -         |
| Mov Cap-1 Maneuver   | 249    | 0      | -      | - - - | 1613 - -  |
| Mov Cap-2 Maneuver   | 249    | 0      | -      | - - - | - - -     |
| Stage 1              | 968    | 0      | -      | - - - | - - -     |
| Stage 2              | 255    | 0      | -      | - - - | - - -     |

| Approach             | EB   | WB | NB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 21.5 | 0  | 4.8 |
| HCM LOS              | C    |    |     |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | WBT | WBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1613  | -   | 249   | -   | -   |
| HCM Lane V/C Ratio    | 0.242 | -   | 0.123 | -   | -   |
| HCM Control Delay (s) | 7.9   | -   | 21.5  | -   | -   |
| HCM Lane LOS          | A     | -   | C     | -   | -   |
| HCM 95th %tile Q(veh) | 1     | -   | 0.4   | -   | -   |

25: San Jacinto Blvd & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 6.9  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    | ↑    |      | ↑    |      |      |      |      | ↑↑   | ↑    | ↑    |
| Traffic Vol, veh/h       | 0    | 20   | 59   | 71   | 121  | 0    | 0    | 0    | 0    | 47   | 549  | 103  |
| Future Vol, veh/h        | 0    | 20   | 59   | 71   | 121  | 0    | 0    | 0    | 0    | 47   | 549  | 103  |
| Conflicting Peds, #/hr   | 0    | 0    | 22   | 0    | 0    | 0    | 0    | 0    | 0    | 4    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 40   | -    | -    | -    | -    | -    | -    | -    | -    | 50   |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 22   | 64   | 77   | 132  | 0    | 0    | 0    | 0    | 51   | 597  | 112  |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |   |
|----------------------|--------|------|--------|------|--------|---|
| Conflicting Flow All | -      | 703  | 320    | 437  | 703    | - |
| Stage 1              | -      | 699  | -      | 4    | 4      | - |
| Stage 2              | -      | 4    | -      | 433  | 699    | - |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | - |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | - |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | - |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | - |
| Pot Cap-1 Maneuver   | 0      | 360  | 676    | 503  | 360    | 0 |
| Stage 1              | 0      | 440  | -      | -    | -      | 0 |
| Stage 2              | 0      | -    | -      | 571  | 440    | 0 |
| Platoon blocked, %   | -      | -    | -      | -    | -      | - |
| Mov Cap-1 Maneuver   | -      | 340  | 676    | 414  | 340    | - |
| Mov Cap-2 Maneuver   | -      | 340  | -      | 414  | 340    | - |
| Stage 1              | -      | 417  | -      | -    | -      | - |
| Stage 2              | -      | -    | -      | 464  | 417    | - |

| Approach             | EB   | WB   | SB  |
|----------------------|------|------|-----|
| HCM Control Delay, s | 12.3 | 27.4 | 0.6 |
| HCM LOS              | B    | D    |     |

| Minor Lane/Major Mvmt | EBLn1 | EBLn2 | WBLn1 | SBL   | SBT | SBR |
|-----------------------|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h)      | 340   | 676   | 364   | 1616  | -   | -   |
| HCM Lane V/C Ratio    | 0.064 | 0.095 | 0.573 | 0.032 | -   | -   |
| HCM Control Delay (s) | 16.3  | 10.9  | 27.4  | 7.3   | 0.1 | -   |
| HCM Lane LOS          | C     | B     | D     | A     | A   | -   |
| HCM 95th %tile Q(veh) | 0.2   | 0.3   | 3.4   | 0.1   | -   | -   |

26: Trinity St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.6  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | ↓    |      | ↑↑↑  | ↑↑↑  |      |      |
| Traffic Vol, veh/h       | 35   | 0    | 103  | 534  | 0    | 0    |
| Future Vol, veh/h        | 35   | 0    | 103  | 534  | 0    | 0    |
| Conflicting Peds, #/hr   | 3    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | -    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 87   | 87   | 87   | 87   | 87   | 87   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 40   | 0    | 118  | 614  | 0    | 0    |

| Major/Minor          | Minor2 | Major1 |      |
|----------------------|--------|--------|------|
| Conflicting Flow All | 485    | -      | 0    |
| Stage 1              | 0      | -      | -    |
| Stage 2              | 485    | -      | -    |
| Critical Hdwy        | 5.74   | -      | 5.34 |
| Critical Hdwy Stg 1  | -      | -      | -    |
| Critical Hdwy Stg 2  | 6.04   | -      | -    |
| Follow-up Hdwy       | 3.82   | -      | 3.12 |
| Pot Cap-1 Maneuver   | 556    | 0      | -    |
| Stage 1              | -      | 0      | -    |
| Stage 2              | 534    | 0      | -    |
| Platoon blocked, %   | -      | -      | -    |
| Mov Cap-1 Maneuver   | 556    | -      | -    |
| Mov Cap-2 Maneuver   | 556    | -      | -    |
| Stage 1              | -      | -      | -    |
| Stage 2              | 534    | -      | -    |

| Approach             | EB | NB |
|----------------------|----|----|
| HCM Control Delay, s | 12 |    |
| HCM LOS              | B  |    |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 |
|-----------------------|-----|-----|-------|
| Capacity (veh/h)      | -   | -   | 556   |
| HCM Lane V/C Ratio    | -   | -   | 0.072 |
| HCM Control Delay (s) | -   | -   | 12    |
| HCM Lane LOS          | -   | -   | B     |
| HCM 95th %tile Q(veh) | -   | -   | 0.2   |

27: Guadalupe St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.8  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      |      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 0    | 13   | 47   | 40   | 8    | 0    | 0    | 0    | 0    | 23   | 1108 | 18   |
| Future Vol, veh/h        | 0    | 13   | 47   | 40   | 8    | 0    | 0    | 0    | 0    | 23   | 1108 | 18   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 20   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 24   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 14   | 51   | 43   | 9    | 0    | 0    | 0    | 0    | 25   | 1204 | 20   |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |   |
|----------------------|--------|------|--------|------|--------|---|
| Conflicting Flow All | -      | 1278 | 646    | 679  | 1278   | - |
| Stage 1              | -      | 1278 | -      | 0    | 0      | - |
| Stage 2              | -      | 0    | -      | 679  | 1278   | - |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | - |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | - |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | - |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | - |
| Pot Cap-1 Maneuver   | 0      | 165  | 414    | 338  | 165    | 0 |
| Stage 1              | 0      | 235  | -      | -    | -      | 0 |
| Stage 2              | 0      | -    | -      | 408  | 235    | 0 |
| Platoon blocked, %   | -      | -    | -      | -    | -      | - |
| Mov Cap-1 Maneuver   | -      | 161  | 405    | 276  | 161    | - |
| Mov Cap-2 Maneuver   | -      | 161  | -      | 276  | 161    | - |
| Stage 1              | -      | 230  | -      | -    | -      | - |
| Stage 2              | -      | -    | -      | 335  | 230    | - |

| Approach             | EB | WB   | SB |
|----------------------|----|------|----|
| HCM Control Delay, s | 20 | 23.4 |    |
| HCM LOS              | C  | C    |    |

| Minor Lane/Major Mvmt | EBLn1WBLn1 | SBL   | SBT | SBR |
|-----------------------|------------|-------|-----|-----|
| Capacity (veh/h)      | 305        | 247   | -   | -   |
| HCM Lane V/C Ratio    | 0.214      | 0.211 | -   | -   |
| HCM Control Delay (s) | 20         | 23.4  | -   | -   |
| HCM Lane LOS          | C          | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.8        | 0.8   | -   | -   |

29: Colorado St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.4  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      |      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 3    | 25   | 34   | 10   | 7    | 5    | 15   | 286  | 8    | 2    | 47   | 16   |
| Future Vol, veh/h        | 3    | 25   | 34   | 10   | 7    | 5    | 15   | 286  | 8    | 2    | 47   | 16   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 15   | 3    | 0    | 0    | 0    | 0    | 3    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 4    | 32   | 43   | 13   | 9    | 6    | 19   | 362  | 10   | 3    | 59   | 20   |

| Major/Minor          | Minor2 |       | Minor1 |       | Major1 |       | Major2 |   |
|----------------------|--------|-------|--------|-------|--------|-------|--------|---|
| Conflicting Flow All | 506    | 488   | 73     | 517   | 493    | 382   | 83     | 0 |
| Stage 1              | 78     | 78    | -      | 405   | 405    | -     | -      | - |
| Stage 2              | 428    | 410   | -      | 112   | 88     | -     | -      | - |
| Critical Hdwy        | 7.12   | 6.52  | 6.22   | 7.12  | 6.52   | 6.22  | 4.12   | - |
| Critical Hdwy Stg 1  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -      | - |
| Critical Hdwy Stg 2  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -      | - |
| Follow-up Hdwy       | 3.518  | 4.018 | 3.318  | 3.518 | 4.018  | 3.318 | 2.218  | - |
| Pot Cap-1 Maneuver   | 477    | 480   | 989    | 469   | 477    | 665   | 1514   | - |
| Stage 1              | 931    | 830   | -      | 622   | 598    | -     | -      | - |
| Stage 2              | 605    | 595   | -      | 893   | 822    | -     | -      | - |
| Platoon blocked, %   | -      | -     | -      | -     | -      | -     | -      | - |
| Mov Cap-1 Maneuver   | 451    | 470   | 986    | 419   | 467    | 656   | 1514   | - |
| Mov Cap-2 Maneuver   | 451    | 470   | -      | 419   | 467    | -     | -      | - |
| Stage 1              | 913    | 825   | -      | 612   | 588    | -     | -      | - |
| Stage 2              | 572    | 585   | -      | 819   | 817    | -     | -      | - |

| Approach             | EB   | WB   | NB  | SB  |
|----------------------|------|------|-----|-----|
| HCM Control Delay, s | 11.2 | 13.1 | 0.4 | 0.2 |
| HCM LOS              | B    | B    |     |     |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1WBLn1 | SBL   | SBT   | SBR |
|-----------------------|-------|-----|-----|------------|-------|-------|-----|
| Capacity (veh/h)      | 1514  | -   | -   | 657        | 473   | 1169  | -   |
| HCM Lane V/C Ratio    | 0.013 | -   | -   | 0.119      | 0.059 | 0.002 | -   |
| HCM Control Delay (s) | 7.4   | 0   | -   | 11.2       | 13.1  | 8.1   | 0   |
| HCM Lane LOS          | A     | A   | -   | B          | B     | A     | A   |
| HCM 95th %tile Q(veh) | 0     | -   | -   | 0.4        | 0.2   | 0     | -   |

30: N. Congress Ave & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 9    |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    |      |      | ↑    |      |      | ↑    |      |      | ↑    |      |
| Traffic Vol, veh/h       | 0    | 36   | 0    | 0    | 18   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 0    | 36   | 0    | 0    | 18   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 11   | 0    | 11   | 12   | 0    | 0    | 0    | 0    | 12   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 39   | 0    | 0    | 20   | 0    | 0    | 0    | 0    | 0    | 0    | 0    |

| Major/Minor          | Minor2 |       | Minor1 |   | Major1 |   | Major2 |   |
|----------------------|--------|-------|--------|---|--------|---|--------|---|
| Conflicting Flow All | -      | 1     | -      | - | 1      | - | -      | 0 |
| Stage 1              | -      | 1     | -      | - | 0      | - | -      | - |
| Stage 2              | -      | 0     | -      | - | 1      | - | -      | - |
| Critical Hdwy        | -      | 6.52  | -      | - | 6.52   | - | -      | - |
| Critical Hdwy Stg 1  | -      | 5.52  | -      | - | 5.52   | - | -      | - |
| Critical Hdwy Stg 2  | -      | 5.52  | -      | - | 5.52   | - | -      | - |
| Follow-up Hdwy       | -      | 4.018 | -      | - | 4.018  | - | -      | - |
| Pot Cap-1 Maneuver   | 0      | 895   | 0      | 0 | 895    | 0 | 0      | - |
| Stage 1              | 0      | 895   | 0      | 0 | -      | 0 | 0      | - |
| Stage 2              | 0      | -     | 0      | 0 | 895    | 0 | 0      | - |
| Platoon blocked, %   | -      | -     | -      | - | -      | - | -      | - |
| Mov Cap-1 Maneuver   | -      | 895   | -      | - | 895    | - | -      | - |
| Mov Cap-2 Maneuver   | -      | 895   | -      | - | 895    | - | -      | - |
| Stage 1              | -      | 895   | -      | - | -      | - | -      | - |
| Stage 2              | -      | -     | -      | - | 895    | - | -      | - |

| Approach             | EB  |  | WB  |  | NB |  | SB |  |
|----------------------|-----|--|-----|--|----|--|----|--|
| HCM Control Delay, s | 9.2 |  | 9.1 |  | 0  |  | 0  |  |
| HCM LOS              | A   |  | A   |  |    |  |    |  |

| Minor Lane/Major Mvmt | NBT | EBLn1 | WBLn1 | SBT |
|-----------------------|-----|-------|-------|-----|
| Capacity (veh/h)      | -   | 895   | 895   | -   |
| HCM Lane V/C Ratio    | -   | 0.044 | 0.022 | -   |
| HCM Control Delay (s) | -   | 9.2   | 9.1   | -   |
| HCM Lane LOS          | -   | A     | A     | -   |
| HCM 95th %tile Q(veh) | -   | 0.1   | 0.1   | -   |

MS

Synchro 9 Report  
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31: Brazos St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.3  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑    |      |      | ↑    | ↑    |      |
| Traffic Vol, veh/h       | 35   | 0    | 3    | 13   | 14   | 0    |
| Future Vol, veh/h        | 35   | 0    | 3    | 13   | 14   | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 25   | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 83   | 83   | 83   | 83   | 83   | 83   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 42   | 0    | 4    | 16   | 17   | 0    |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 0      | 0 | 67     | 0 | 90     | 67    |
| Stage 1              | -      | - | -      | - | 67     | -     |
| Stage 2              | -      | - | -      | - | 23     | -     |
| Critical Hdwy        | -      | - | 4.12   | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | -      | - | 2.218  | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | -      | - | 1535   | - | 910    | 997   |
| Stage 1              | -      | - | -      | - | 956    | -     |
| Stage 2              | -      | - | -      | - | 1000   | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | -      | - | 1535   | - | 886    | 973   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 886    | -     |
| Stage 1              | -      | - | -      | - | 933    | -     |
| Stage 2              | -      | - | -      | - | 997    | -     |

| Approach             | EB |  | WB  |  | NB  |  |
|----------------------|----|--|-----|--|-----|--|
| HCM Control Delay, s | 0  |  | 1.4 |  | 9.1 |  |
| HCM LOS              |    |  |     |  | A   |  |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 886   | -   | -   | 1535  | -   |
| HCM Lane V/C Ratio    | 0.019 | -   | -   | 0.002 | -   |
| HCM Control Delay (s) | 9.1   | -   | -   | 7.4   | 0   |
| HCM Lane LOS          | A     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 0.1   | -   | -   | 0     | -   |

MS

Synchro 9 Report  
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





32: San Jacinto Blvd & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: AM

| Intersection             |        |      |      |      |        |      |
|--------------------------|--------|------|------|------|--------|------|
| Int Delay, s/veh         | 1.4    |      |      |      |        |      |
| Movement                 | EBL    | EBR  | NBL  | NBT  | SBT    | SBR  |
| Lane Configurations      |        | ↑    |      |      | ↑↑↑    | ↑    |
| Traffic Vol, veh/h       | 0      | 45   | 0    | 0    | 339    | 34   |
| Future Vol, veh/h        | 0      | 45   | 0    | 0    | 339    | 34   |
| Conflicting Peds, #/hr   | 0      | 0    | 0    | 0    | 0      | 122  |
| Sign Control             | Stop   | Stop | Free | Free | Free   | Free |
| RT Channelized           | -      | None | -    | None | -      | None |
| Storage Length           | -      | 0    | -    | -    | -      | 50   |
| Veh in Median Storage, # | 0      | -    | -    | -    | 0      | -    |
| Grade, %                 | 0      | -    | -    | 0    | 0      | -    |
| Peak Hour Factor         | 83     | 83   | 83   | 83   | 83     | 83   |
| Heavy Vehicles, %        | 2      | 2    | 2    | 2    | 2      | 2    |
| Mvmt Flow                | 0      | 54   | 0    | 0    | 408    | 41   |
| Major/Minor              |        |      |      |      |        |      |
|                          | Minor2 |      |      |      | Major2 |      |
| Conflicting Flow All     | -      | 326  |      |      | -      | 0    |
| Stage 1                  | -      | -    |      |      | -      | -    |
| Stage 2                  | -      | -    |      |      | -      | -    |
| Critical Hdwy            | -      | 7.14 |      |      | -      | -    |
| Critical Hdwy Stg 1      | -      | -    |      |      | -      | -    |
| Critical Hdwy Stg 2      | -      | -    |      |      | -      | -    |
| Follow-up Hdwy           | -      | 3.92 |      |      | -      | -    |
| Pot Cap-1 Maneuver       | 0      | 572  |      |      | -      | -    |
| Stage 1                  | 0      | -    |      |      | -      | -    |
| Stage 2                  | 0      | -    |      |      | -      | -    |
| Platoon blocked, %       |        |      |      |      | -      | -    |
| Mov Cap-1 Maneuver       | -      | 506  |      |      | -      | -    |
| Mov Cap-2 Maneuver       | -      | -    |      |      | -      | -    |
| Stage 1                  | -      | -    |      |      | -      | -    |
| Stage 2                  | -      | -    |      |      | -      | -    |
| Approach                 |        |      |      |      |        |      |
|                          | EB     |      |      |      | SB     |      |
| HCM Control Delay, s     | 13     |      |      |      | 0      |      |
| HCM LOS                  | B      |      |      |      |        |      |
| Minor Lane/Major Mvmt    |        |      |      |      |        |      |
|                          | EBLn1  | SBT  | SBR  |      |        |      |
| Capacity (veh/h)         | 506    | -    | -    |      |        |      |
| HCM Lane V/C Ratio       | 0.107  | -    | -    |      |        |      |
| HCM Control Delay (s)    | 13     | -    | -    |      |        |      |
| HCM Lane LOS             | B      | -    | -    |      |        |      |
| HCM 95th %tile Q(veh)    | 0.4    | -    | -    |      |        |      |

1: Martin Luther King Jr. Blvd & Guadalupe St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     |  |  |   |   |  |  |   |   |   |  |  |  |
| Traffic Volume (vph)    | 152   | 369   | 131   | 0   | 1183  | 681   | 0   | 0   | 0   | 190   | 632   | 232   |
| Future Volume (vph)     | 152   | 369   | 131   | 0   | 1183  | 681   | 0   | 0   | 0   | 190   | 632   | 232   |
| Confl. Peds. (#/hr)     | 30  |   | 69  | 69  |   | 30  |   |   |   | 41  |   | 69  |
| Confl. Bikes (#/hr)     |   |   | 1   |   |   | 6   |   |   |   |   |   | 3   |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  |
| Adj. Flow (vph)         | 162   | 393   | 139   | 0   | 1259  | 724   | 0   | 0   | 0   | 202   | 672   | 247   |
| Shared Lane Traffic (%) |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)   | 162   | 532   | 0   | 0   | 1259  | 724   | 0   | 0   | 0   | 202   | 672   | 247   |
| Turn Type               | Prot  | NA  |   |   | NA  | pm+ov   |   |   |   | pm+pt   | NA  | Perm  |
| Protected Phases        | 5   | 2   |   |   | 6   | 7   |   |   |   | 7   | 4   |   |
| Permitted Phases        |   |   |   |   |   | 6   |   |   |   | 4   |   | 4   |
| Detector Phase          | 5   | 2   |   |   | 6   | 7   |   |   |   | 7   | 4   | 4   |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     | 2.0   | 15.0  |   |   | 15.0  | 10.0  |   |   |   | 10.0  | 5.0   | 5.0   |
| Minimum Split (s)       | 7.0   | 27.0  |   |   | 34.0  | 15.0  |   |   |   | 15.0  | 32.0  | 32.0  |
| Total Split (s)         | 25.0  | 92.0  |   |   | 67.0  | 43.0  |   |   |   | 43.0  | 43.0  | 43.0  |
| Total Split (%)         | 18.5%   | 68.1%   |   |   | 49.6%   | 31.9%   |   |   |   | 31.9%   | 31.9%   | 31.9%   |
| Yellow Time (s)         | 4.0   | 4.0   |   |   | 4.0   | 4.0   |   |   |   | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |   |   | 1.0   | 1.0   |   |   |   | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |   |   | 0.0   | 0.0   |   |   |   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   | 5.0   |   |   | 5.0   | 5.0   |   |   |   | 5.0   | 5.0   | 5.0   |
| Lead/Lag                | Lag   |   |   |   | Lead  |   |   |   |   |   |   |   |
| Lead-Lag Optimize?      | Yes   |   |   |   | Yes   |   |   |   |   |   |   |   |
| Recall Mode             | None  | C-Max   |   |   | C-Max   | None  |   |   |   | None  | Max   | Max   |
| Act Effect Green (s)    | 20.0  | 87.0  |   |   | 62.0  | 100.0   |   |   |   | 38.0  | 38.0  | 38.0  |
| Actuated g/C Ratio      | 0.15  | 0.64  |   |   | 0.46  | 0.74  |   |   |   | 0.28  | 0.28  | 0.28  |
| v/c Ratio               | 0.62  | 0.25  |   |   | 0.77  | 0.62  |   |   |   | 0.41  | 0.67  | 0.49  |
| Control Delay           | 65.1  | 10.1  |   |   | 26.0  | 2.5   |   |   |   | 42.3  | 47.0  | 19.2  |
| Queue Delay             | 0.0   | 0.0   |   |   | 18.6  | 0.2   |   |   |   | 0.0   | 0.0   | 0.0   |
| Total Delay             | 65.1  | 10.1  |   |   | 44.6  | 2.7   |   |   |   | 42.3  | 47.0  | 19.2  |
| LOS                     | E   | B   |   |   | D   | A   |   |   |   | D   | D   | B   |
| Approach Delay          |   | 22.9  |   |   | 29.3  |   |   |   |   |   | 40.1  |   |
| Approach LOS            |   | C   |   |   | C   |   |   |   |   |   | D   |   |
| Queue Length 50th (ft)  | 135   | 92  |   |   | 433   | 22  |   |   |   | 144   | 275   | 67  |
| Queue Length 95th (ft)  | 213   | 120   |   |   | 514   | m49   |   |   |   | 220   | 345   | 153   |
| Internal Link Dist (ft) |   | 228   |   |   | 45  |   |   | 159   |   |   | 210   |   |
| Turn Bay Length (ft)    | 160   |   |   |   |   |   |   |   |   | 130   |   | 120   |
| Base Capacity (vph)     | 262   | 2121  |   |   | 1625  | 1174  |   |   |   | 498   | 996   | 502   |
| Starvation Cap Reductn  | 0   | 0   |   |   | 392   | 80  |   |   |   | 0   | 0   | 0   |
| Spillback Cap Reductn   | 0   | 0   |   |   | 0   | 0   |   |   |   | 0   | 0   | 0   |
| Storage Cap Reductn     | 0   | 0   |   |   | 0   | 0   |   |   |   | 0   | 0   | 0   |
| Reduced v/c Ratio       | 0.62  | 0.25  |   |   | 1.02  | 0.66  |   |   |   | 0.41  | 0.67  | 0.49  |

### Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 80

1: Martin Luther King Jr. Blvd & Guadalupe St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

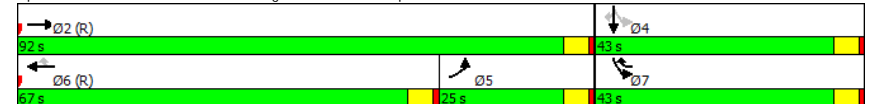
Intersection Signal Delay: 31.3 Intersection LOS: C

Intersection Capacity Utilization 76.1%

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Martin Luther King Jr. Blvd & Guadalupe St



3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

|                         | →     | ↖    | ↗    | ←     | ↖     | ↗     |
|-------------------------|-------|------|------|-------|-------|-------|
| Lane Group              | EBT   | EBR  | WBL  | WBT   | NBL   | NBR   |
| Lane Configurations     | ↑↑    |      |      | ↑↑    | ↖↗    | ↖↗    |
| Traffic Volume (vph)    | 538   | 0    | 0    | 1321  | 871   | 243   |
| Future Volume (vph)     | 538   | 0    | 0    | 1321  | 871   | 243   |
| Confl. Peds. (#/hr)     |       |      |      |       |       | 81    |
| Peak Hour Factor        | 0.91  | 0.91 | 0.91 | 0.91  | 0.91  | 0.91  |
| Adj. Flow (vph)         | 591   | 0    | 0    | 1452  | 957   | 267   |
| Shared Lane Traffic (%) |       |      |      |       |       |       |
| Lane Group Flow (vph)   | 591   | 0    | 0    | 1452  | 957   | 267   |
| Turn Type               | NA    |      |      | NA    | Prot  | Perm  |
| Protected Phases        | 2     |      |      | 6     | 8     |       |
| Permitted Phases        |       |      |      |       |       | 3     |
| Detector Phase          | 2     |      |      | 6     | 8     | 3     |
| Switch Phase            |       |      |      |       |       |       |
| Minimum Initial (s)     | 10.0  |      |      | 10.0  | 5.0   | 5.0   |
| Minimum Split (s)       | 30.0  |      |      | 15.0  | 10.0  | 10.0  |
| Total Split (s)         | 86.0  |      |      | 86.0  | 49.0  | 49.0  |
| Total Split (%)         | 63.7% |      |      | 63.7% | 36.3% | 36.3% |
| Yellow Time (s)         | 4.0   |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |       |      |      |       |       |       |
| Lead-Lag Optimize?      |       |      |      |       |       |       |
| Recall Mode             | C-Max |      |      | C-Max | Max   | Max   |
| Act Effect Green (s)    | 81.0  |      |      | 81.0  | 44.0  | 44.0  |
| Actuated g/C Ratio      | 0.60  |      |      | 0.60  | 0.33  | 0.33  |
| v/c Ratio               | 0.28  |      |      | 0.68  | 0.86  | 0.42  |
| Control Delay           | 13.9  |      |      | 13.9  | 61.0  | 18.9  |
| Queue Delay             | 0.3   |      |      | 0.3   | 0.0   | 0.0   |
| Total Delay             | 14.2  |      |      | 14.2  | 61.0  | 18.9  |
| LOS                     | B     |      |      | B     | E     | B     |
| Approach Delay          | 14.2  |      |      | 14.2  | 51.8  |       |
| Approach LOS            | B     |      |      | B     | D     |       |
| Queue Length 50th (ft)  | 124   |      |      | 256   | 444   | 84    |
| Queue Length 95th (ft)  | 152   |      |      | 311   | 517   | 117   |
| Internal Link Dist (ft) | 272   |      |      | 277   | 337   |       |
| Turn Bay Length (ft)    |       |      |      |       |       |       |
| Base Capacity (vph)     | 2123  |      |      | 2123  | 1118  | 631   |
| Starvation Cap Reductn  | 880   |      |      | 137   | 0     | 0     |
| Spillback Cap Reductn   | 0     |      |      | 211   | 0     | 0     |
| Storage Cap Reductn     | 0     |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       | 0.48  |      |      | 0.76  | 0.86  | 0.42  |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green  
Natural Cycle: 60  
Control Type: Actuated-Coordinated

MS

Synchro 9 Report  
Page 3

3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 28.3

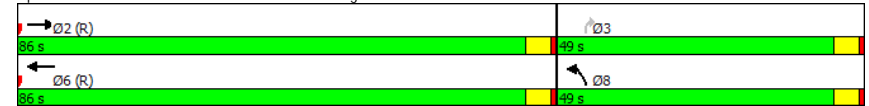
Intersection LOS: C

Intersection Capacity Utilization 88.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 3: Lavaca St & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 4

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

|                         | →     | ↖    | ↗     | ←      | ↖    | ↗    |
|-------------------------|-------|------|-------|--------|------|------|
| Lane Group              | EBT   | EBR  | WBL   | WBT    | NBL  | NBR  |
| Lane Configurations     | ↔↔    |      | ↖↗    | ↔↔     |      |      |
| Traffic Volume (vph)    | 752   | 0    | 13    | 1265   | 0    | 0    |
| Future Volume (vph)     | 752   | 0    | 13    | 1265   | 0    | 0    |
| Confl. Peds. (#/hr)     |       | 33   | 33    |        | 35   |      |
| Confl. Bikes (#/hr)     |       | 4    |       |        |      |      |
| Peak Hour Factor        | 0.94  | 0.94 | 0.94  | 0.94   | 0.94 | 0.94 |
| Adj. Flow (vph)         | 800   | 0    | 14    | 1346   | 0    | 0    |
| Shared Lane Traffic (%) |       |      |       |        |      |      |
| Lane Group Flow (vph)   | 800   | 0    | 14    | 1346   | 0    | 0    |
| Turn Type               | NA    |      | pm+pt | NA     |      |      |
| Protected Phases        | 2     |      | 1     | 6      |      |      |
| Permitted Phases        |       |      | 6     |        |      |      |
| Detector Phase          | 2     |      | 1     | 6      |      |      |
| Switch Phase            |       |      |       |        |      |      |
| Minimum Initial (s)     | 15.0  |      | 3.0   | 15.0   |      |      |
| Minimum Split (s)       | 34.0  |      | 8.0   | 20.0   |      |      |
| Total Split (s)         | 121.0 |      | 14.0  | 135.0  |      |      |
| Total Split (%)         | 89.6% |      | 10.4% | 100.0% |      |      |
| Yellow Time (s)         | 4.0   |      | 4.0   | 4.0    |      |      |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0    |      |      |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0    |      |      |
| Total Lost Time (s)     | 5.0   |      | 5.0   | 5.0    |      |      |
| Lead/Lag                | Lead  |      | Lag   |        |      |      |
| Lead-Lag Optimize?      | Yes   |      | Yes   |        |      |      |
| Recall Mode             | C-Max |      | None  | C-Max  |      |      |
| Act Effect Green (s)    | 127.4 |      | 133.0 | 135.0  |      |      |
| Actuated g/C Ratio      | 0.94  |      | 0.99  | 1.00   |      |      |
| v/c Ratio               | 0.24  |      | 0.02  | 0.38   |      |      |
| Control Delay           | 0.7   |      | 0.1   | 0.3    |      |      |
| Queue Delay             | 0.0   |      | 0.0   | 0.0    |      |      |
| Total Delay             | 0.7   |      | 0.1   | 0.3    |      |      |
| LOS                     | A     |      | A     | A      |      |      |
| Approach Delay          | 0.7   |      |       | 0.3    |      |      |
| Approach LOS            | A     |      |       | A      |      |      |
| Queue Length 50th (ft)  | 0     |      | 0     | 3      |      |      |
| Queue Length 95th (ft)  | 42    |      | m0    | 0      |      |      |
| Internal Link Dist (ft) | 366   |      |       | 377    | 331  |      |
| Turn Bay Length (ft)    |       |      | 115   |        |      |      |
| Base Capacity (vph)     | 3339  |      | 686   | 3539   |      |      |
| Starvation Cap Reductn  | 0     |      | 0     | 0      |      |      |
| Spillback Cap Reductn   | 0     |      | 0     | 0      |      |      |
| Storage Cap Reductn     | 0     |      | 0     | 0      |      |      |
| Reduced v/c Ratio       | 0.24  |      | 0.02  | 0.38   |      |      |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 45

MS

Synchro 9 Report  
Page 5

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.38

Intersection Signal Delay: 0.5

Intersection LOS: A

Intersection Capacity Utilization 39.1%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: N. Congress Ave & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 6

6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Lane Group              | EBL   | EBT   | EBR  | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations     |       |       |      |       |       |       |       |       |       |       |       |       |
| Traffic Volume (vph)    | 89    | 745   | 31   | 45    | 887   | 134   | 124   | 23    | 303   | 98    | 25    | 248   |
| Future Volume (vph)     | 89    | 745   | 31   | 45    | 887   | 134   | 124   | 23    | 303   | 98    | 25    | 248   |
| Confl. Peds. (#/hr)     | 44    |       | 7    | 7     |       | 44    | 22    |       | 23    | 23    |       | 22    |
| Confl. Bikes (#/hr)     |       |       | 4    |       |       | 3     |       |       |       |       |       |       |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  |
| Adj. Flow (vph)         | 92    | 768   | 32   | 46    | 914   | 138   | 128   | 24    | 312   | 101   | 26    | 256   |
| Shared Lane Traffic (%) |       |       |      |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)   | 92    | 800   | 0    | 46    | 914   | 138   | 0     | 152   | 312   | 0     | 127   | 256   |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    | Perm  | Perm  | NA    | Perm  | Perm  | NA    | Perm  |
| Protected Phases        | 5     | 2     |      | 1     | 6     |       |       | 8     |       |       | 4     |       |
| Permitted Phases        | 2     |       |      | 6     |       | 6     | 8     |       | 8     | 4     |       | 4     |
| Detector Phase          | 5     | 2     |      | 1     | 6     | 6     | 8     | 8     | 8     | 4     | 4     | 4     |
| Switch Phase            |       |       |      |       |       |       |       |       |       |       |       |       |
| Minimum Initial (s)     | 3.0   | 10.0  |      | 3.0   | 10.0  | 10.0  | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       | 8.0   | 22.0  |      | 8.0   | 28.0  | 28.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  |
| Total Split (s)         | 15.0  | 89.0  |      | 15.0  | 89.0  | 89.0  | 31.0  | 31.0  | 31.0  | 31.0  | 31.0  | 31.0  |
| Total Split (%)         | 11.1% | 65.9% |      | 11.1% | 65.9% | 65.9% | 23.0% | 23.0% | 23.0% | 23.0% | 23.0% | 23.0% |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   | 5.0   |       | 5.0   | 5.0   |       | 5.0   | 5.0   |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   | Lag   |       |       |       |       |       |       |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   | Yes   |       |       |       |       |       |       |
| Recall Mode             | None  | C-Max |      | None  | C-Max | C-Max | Max   | Max   | Max   | Max   | Max   | Max   |
| Act Effect Green (s)    | 95.9  | 89.7  |      | 93.0  | 86.6  | 86.6  |       | 26.0  | 26.0  |       | 26.0  | 26.0  |
| Actuated g/C Ratio      | 0.71  | 0.66  |      | 0.69  | 0.64  | 0.64  |       | 0.19  | 0.19  |       | 0.19  | 0.19  |
| v/c Ratio               | 0.23  | 0.34  |      | 0.10  | 0.40  | 0.15  |       | 0.74  | 0.58  |       | 0.67  | 0.54  |
| Control Delay           | 5.2   | 7.3   |      | 2.1   | 5.5   | 2.0   |       | 73.1  | 10.3  |       | 69.2  | 12.5  |
| Queue Delay             | 0.0   | 0.3   |      | 0.0   | 0.3   | 0.0   |       | 0.0   | 0.2   |       | 0.0   | 0.0   |
| Total Delay             | 5.2   | 7.5   |      | 2.1   | 5.8   | 2.0   |       | 73.1  | 10.5  |       | 69.2  | 12.5  |
| LOS                     | A     | A     |      | A     | A     | A     |       | E     | B     |       | E     | B     |
| Approach Delay          |       | 7.3   |      |       | 5.2   |       |       | 31.0  |       |       | 31.3  |       |
| Approach LOS            |       | A     |      |       | A     |       |       | C     |       |       | C     |       |
| Queue Length 50th (ft)  | 15    | 104   |      | 2     | 117   | 10    |       | 127   | 5     |       | 104   | 17    |
| Queue Length 95th (ft)  | 24    | 112   |      | 6     | 156   | 28    |       | #233  | 92    |       | #193  | 101   |
| Internal Link Dist (ft) |       | 377   |      |       | 273   |       |       | 135   |       |       | 212   |       |
| Turn Bay Length (ft)    | 160   |       |      | 100   |       | 100   |       |       | 100   |       |       |       |
| Base Capacity (vph)     | 437   | 2334  |      | 512   | 2269  | 901   |       | 206   | 536   |       | 189   | 477   |
| Starvation Cap Reductn  | 0     | 799   |      | 0     | 648   | 0     |       | 0     | 0     |       | 0     | 0     |
| Spillback Cap Reductn   | 0     | 289   |      | 0     | 0     | 0     |       | 0     | 24    |       | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Reduced v/c Ratio       | 0.21  | 0.52  |      | 0.09  | 0.56  | 0.15  |       | 0.74  | 0.61  |       | 0.67  | 0.54  |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 70

MS

Synchro 9 Report  
Page 7

6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 13.6

Intersection LOS: B

Intersection Capacity Utilization 78.7%

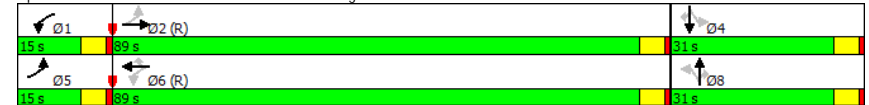
ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: Brazos St & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 8

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑    |      | ↓     | ↑↑    |      |      |      |      | ↓     | ↑↑    | ↑     |
| Traffic Volume (vph)    | 0    | 1084  | 29   | 341   | 1122  | 0    | 0    | 0    | 0    | 38    | 200   | 141   |
| Future Volume (vph)     | 0    | 1084  | 29   | 341   | 1122  | 0    | 0    | 0    | 0    | 38    | 200   | 141   |
| Confl. Peds. (#/hr)     |      |       | 37   | 37    |       |      |      |      |      | 72    |       | 17    |
| Confl. Bikes (#/hr)     |      |       | 7    |       |       |      |      |      |      |       |       | 14    |
| Peak Hour Factor        | 0.93 | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93 | 0.93 | 0.93 | 0.93  | 0.93  | 0.93  |
| Adj. Flow (vph)         | 0    | 1166  | 31   | 367   | 1206  | 0    | 0    | 0    | 0    | 41    | 215   | 152   |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 1197  | 0    | 367   | 1206  | 0    | 0    | 0    | 0    | 41    | 215   | 152   |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      | 3.0   | 10.0  |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       |      | 32.0  |      | 8.0   | 30.0  |      |      |      |      | 30.0  | 30.0  | 30.0  |
| Total Split (s)         |      | 78.0  |      | 25.0  | 103.0 |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (%)         |      | 57.8% |      | 18.5% | 76.3% |      |      |      |      | 23.7% | 23.7% | 23.7% |
| Yellow Time (s)         |      | 4.0   |      | 4.0   | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      | 1.0   | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      | 0.0   | 0.0   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      | 5.0   | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      | Lead  |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      | Yes   |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      | None  | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effect Green (s)    |      | 74.2  |      | 98.0  | 98.0  |      |      |      |      | 27.0  | 27.0  | 27.0  |
| Actuated g/C Ratio      |      | 0.55  |      | 0.73  | 0.73  |      |      |      |      | 0.20  | 0.20  | 0.20  |
| v/c Ratio               |      | 0.62  |      | 0.92  | 0.47  |      |      |      |      | 0.13  | 0.30  | 0.38  |
| Control Delay           |      | 16.2  |      | 65.4  | 4.3   |      |      |      |      | 45.8  | 47.4  | 15.2  |
| Queue Delay             |      | 0.5   |      | 2.6   | 0.3   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             |      | 16.8  |      | 68.0  | 4.6   |      |      |      |      | 45.8  | 47.4  | 15.2  |
| LOS                     |      | B     |      | E     | A     |      |      |      |      | D     | D     | B     |
| Approach Delay          |      | 16.8  |      |       | 19.4  |      |      |      |      |       | 35.2  |       |
| Approach LOS            |      | B     |      |       | B     |      |      |      |      |       | D     |       |
| Queue Length 50th (ft)  |      | 312   |      | 221   | 123   |      |      |      |      | 30    | 85    | 22    |
| Queue Length 95th (ft)  |      | 386   |      | m#368 | m129  |      |      |      |      | 65    | 124   | 85    |
| Internal Link Dist (ft) |      | 273   |      |       | 321   |      |      | 343  |      |       | 244   |       |
| Turn Bay Length (ft)    |      |       |      | 120   |       |      |      |      |      | 100   |       | 100   |
| Base Capacity (vph)     |      | 1934  |      | 410   | 2569  |      |      |      |      | 312   | 707   | 397   |
| Starvation Cap Reductn  |      | 336   |      | 12    | 626   |      |      |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       |      | 0.75  |      | 0.92  | 0.62  |      |      |      |      | 0.13  | 0.30  | 0.38  |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 90

MS

Synchro 9 Report  
Page 9

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.92

Intersection Signal Delay: 20.4

Intersection LOS: C

Intersection Capacity Utilization 83.2%

ICU Level of Service E

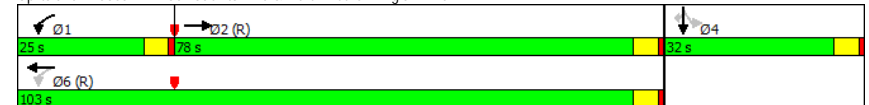
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: San Jacinto Blvd & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 10

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↩     | ↩↩    |      |      | ↩↩    |      | ↩     | ↩     | ↩     |      | ↓    | ↩    |
| Traffic Volume (vph)    | 85    | 1116  | 0    | 0    | 1198  | 52   | 215   | 321   | 486   | 0    | 0    | 0    |
| Future Volume (vph)     | 85    | 1116  | 0    | 0    | 1198  | 52   | 215   | 321   | 486   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     |       |       | 34   |      |       | 89   | 17    |       | 151   |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       | 4    |       |       | 13    |      |      |      |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97 | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph)         | 88    | 1151  | 0    | 0    | 1235  | 54   | 222   | 331   | 501   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       | 10%  |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 88    | 1151  | 0    | 0    | 1289  | 0    | 200   | 353   | 501   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 26.0  |      |      | 26.0  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (s)         | 15.0  | 104.0 |      |      | 89.0  |      | 31.0  | 31.0  | 31.0  |      |      |      |
| Total Split (%)         | 11.1% | 77.0% |      |      | 65.9% |      | 23.0% | 23.0% | 23.0% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 99.0  | 99.0  |      |      | 86.6  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Actuated g/C Ratio      | 0.73  | 0.73  |      |      | 0.64  |      | 0.19  | 0.19  | 0.19  |      |      |      |
| v/c Ratio               | 0.31  | 0.44  |      |      | 0.58  |      | 0.64  | 1.04  | 1.62  |      |      |      |
| Control Delay           | 5.6   | 1.4   |      |      | 7.3   |      | 70.0  | 120.2 | 324.4 |      |      |      |
| Queue Delay             | 0.0   | 0.0   |      |      | 0.7   |      | 1.4   | 21.5  | 0.0   |      |      |      |
| Total Delay             | 5.6   | 1.5   |      |      | 8.0   |      | 71.5  | 141.7 | 324.4 |      |      |      |
| LOS                     | A     | A     |      |      | A     |      | E     | F     | F     |      |      |      |
| Approach Delay          |       | 1.8   |      |      | 8.0   |      |       | 215.2 |       |      |      |      |
| Approach LOS            |       | A     |      |      | A     |      |       | F     |       |      |      |      |
| Queue Length 50th (ft)  | 3     | 23    |      |      | 115   |      | 180   | -354  | -548  |      |      |      |
| Queue Length 95th (ft)  | m14   | 25    |      |      | 128   |      | 269   | #566  | #770  |      |      |      |
| Internal Link Dist (ft) |       | 321   |      |      | 699   |      |       | 350   |       |      | 106  |      |
| Turn Bay Length (ft)    | 120   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 310   | 2595  |      |      | 2231  |      | 313   | 339   | 309   |      |      |      |
| Starvation Cap Reductn  | 0     | 220   |      |      | 532   |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      | 30    | 33    | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.28  | 0.48  |      |      | 0.76  |      | 0.71  | 1.15  | 1.62  |      |      |      |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green  
Natural Cycle: 65

MS

Synchro 9 Report  
Page 11

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.62

Intersection Signal Delay: 66.8

Intersection LOS: E

Intersection Capacity Utilization 83.2%

ICU Level of Service E

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

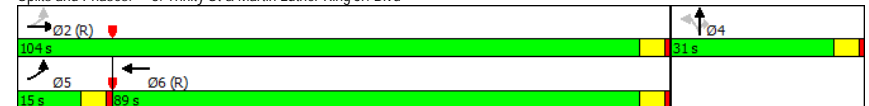
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Trinity St & Martin Luther King Jr. Blvd




















MS

Synchro 9 Report  
Page 12

18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     |   |  |  |   |  |   |   |   |   |   |  |  |
| Traffic Volume (vph)    | 0   | 20  | 12  | 164   | 96  | 0   | 0   | 0   | 0   | 47  | 1156  | 22  |
| Future Volume (vph)     | 0   | 20  | 12  | 164   | 96  | 0   | 0   | 0   | 0   | 47  | 1156  | 22  |
| Confl. Peds. (#/hr)     |   |   | 68  |   |   |   |   |   |   |   | 44  |   |
| Confl. Bikes (#/hr)     |   |   |   |   |   |   |   |   | 2   |   |   |   |
| Peak Hour Factor        | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  |
| Parking (#/hr)          |   | 0   |   |   |   |   |   |   |   |   |   |   |
| Adj. Flow (vph)         | 0   | 21  | 13  | 171   | 100   | 0   | 0   | 0   | 0   | 49  | 1204  | 23  |
| Shared Lane Traffic (%) |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)   | 0   | 21  | 13  | 0   | 271   | 0   | 0   | 0   | 0   | 0   | 1276  | 0   |
| Turn Type               | NA  | Perm  | Perm  | NA  |   |   |   |   |   | Perm  | NA  |   |
| Protected Phases        | 4 12  |   |   | 4 12  |   |   |   |   |   |   | 2 10  |   |
| Permitted Phases        |   |   | 4 12  | 4 12  |   |   |   |   |   | 2 10  |   |   |
| Detector Phase          | 4 12  | 4 12  | 4 12  | 4 12  |   |   |   |   |   | 2 10  | 2 10  |   |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Split (s)       |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (s)         |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (%)         |   |   |   |   |   |   |   |   |   |   |   |   |
| Yellow Time (s)         |   |   |   |   |   |   |   |   |   |   |   |   |
| All-Red Time (s)        |   |   |   |   |   |   |   |   |   |   |   |   |
| Lost Time Adjust (s)    |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Lost Time (s)     |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead/Lag                |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?      |   |   |   |   |   |   |   |   |   |   |   |   |
| Recall Mode             |   |   |   |   |   |   |   |   |   |   |   |   |
| Act Effct Green (s)     |   | 31.5  | 31.5  |   | 31.5  |   |   |   |   |   | 79.5  |   |
| Actuated g/C Ratio      |   | 0.23  | 0.23  |   | 0.23  |   |   |   |   |   | 0.59  |   |
| v/c Ratio               |   | 0.05  | 0.03  |   | 0.79  |   |   |   |   |   | 0.62  |   |
| Control Delay           |   | 21.9  | 0.2   |   | 35.0  |   |   |   |   |   | 12.4  |   |
| Queue Delay             |   | 0.0   | 0.0   |   | 0.0   |   |   |   |   |   | 0.0   |   |
| Total Delay             |   | 21.9  | 0.2   |   | 35.1  |   |   |   |   |   | 12.4  |   |
| LOS                     |   | C   | A   |   | D   |   |   |   |   |   | B   |   |
| Approach Delay          |   | 13.6  |   |   | 35.1  |   |   |   |   |   | 12.4  |   |
| Approach LOS            |   | B   |   |   | D   |   |   |   |   |   | B   |   |
| Queue Length 50th (ft)  |   | 10  | 0   |   | 85  |   |   |   |   |   | 200   |   |
| Queue Length 95th (ft)  |   | 24  | 0   |   | 108   |   |   |   |   |   | 256   |   |
| Internal Link Dist (ft) |   | 177   |   |   | 244   |   |   | 271   |   |   | 262   |   |
| Turn Bay Length (ft)    |   |   |   |   |   |   |   |   |   |   |   |   |
| Base Capacity (vph)     |   | 533   | 509   |   | 472   |   |   |   |   |   | 2071  |   |
| Starvation Cap Reductn  |   | 0   | 0   |   | 1   |   |   |   |   |   | 0   |   |
| Spillback Cap Reductn   |   | 0   | 0   |   | 0   |   |   |   |   |   | 0   |   |
| Storage Cap Reductn     |   | 0   | 0   |   | 0   |   |   |   |   |   | 0   |   |
| Reduced v/c Ratio       |   | 0.04  | 0.03  |   | 0.58  |   |   |   |   |   | 0.62  |   |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green

MS

Synchro 9 Report  
Page 13

18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Confl. Bikes (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 21.0  | 21.0 | 22.5 | 22.5 |
| Total Split (s)         | 56.0  | 29.0 | 24.0 | 26.0 |
| Total Split (%)         | 41%   | 21%  | 18%  | 19%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effct Green (s)     |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |

Intersection Summary

MS

Synchro 9 Report  
Page 14

18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 16.3

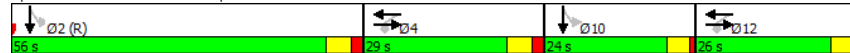
Intersection LOS: B

Intersection Capacity Utilization 75.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 18: Guadalupe St & E. 17th St



19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

|                         | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations     |      | ↔    |      |      | ↔    |      |      | ↔↔↔  | ↔    |      |      |      |
| Traffic Volume (vph)    | 11   | 64   | 0    | 0    | 133  | 123  | 65   | 1041 | 69   | 0    | 0    | 0    |
| Future Volume (vph)     | 11   | 64   | 0    | 0    | 133  | 123  | 65   | 1041 | 69   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 34   |      |      |      |      |      |      |      | 47   |      |      |      |
| Peak Hour Factor        | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Parking (#/hr)          |      | 0    |      |      |      |      |      |      |      |      |      |      |
| Adj. Flow (vph)         | 12   | 70   | 0    | 0    | 145  | 134  | 71   | 1132 | 75   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |      |      |      |      |      |      |      |      |      |      |      |      |
| Lane Group Flow (vph)   | 0    | 82   | 0    | 0    | 279  | 0    | 0    | 1203 | 75   | 0    | 0    | 0    |
| Turn Type               | Perm | NA   |      |      | NA   |      | Perm | NA   | Perm |      |      |      |
| Protected Phases        |      | 4 12 |      |      | 4 12 |      |      | 2 10 |      |      |      |      |
| Permitted Phases        | 4 12 |      |      |      |      |      | 2 10 |      | 2 10 |      |      |      |
| Detector Phase          | 4 12 | 4 12 |      |      | 4 12 |      | 2 10 | 2 10 | 2 10 |      |      |      |
| Switch Phase            |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Initial (s)     |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Split (s)       |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (s)         |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (%)         |      |      |      |      |      |      |      |      |      |      |      |      |
| Yellow Time (s)         |      |      |      |      |      |      |      |      |      |      |      |      |
| All-Red Time (s)        |      |      |      |      |      |      |      |      |      |      |      |      |
| Lost Time Adjust (s)    |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Lost Time (s)     |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead/Lag                |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead-Lag Optimize?      |      |      |      |      |      |      |      |      |      |      |      |      |
| Recall Mode             |      |      |      |      |      |      |      |      |      |      |      |      |
| Act Effct Green (s)     | 31.3 |      |      | 31.3 |      |      | 79.7 | 79.7 |      |      |      |      |
| Actuated g/C Ratio      | 0.23 |      |      | 0.23 |      |      | 0.59 | 0.59 |      |      |      |      |
| v/c Ratio               | 0.23 |      |      | 0.65 |      |      | 0.40 | 0.09 |      |      |      |      |
| Control Delay           | 21.8 |      |      | 30.4 |      |      | 8.7  | 2.4  |      |      |      |      |
| Queue Delay             | 0.0  |      |      | 0.0  |      |      | 0.1  | 0.0  |      |      |      |      |
| Total Delay             | 21.8 |      |      | 30.4 |      |      | 8.8  | 2.4  |      |      |      |      |
| LOS                     | C    |      |      | C    |      |      | A    | A    |      |      |      |      |
| Approach Delay          | 21.8 |      |      | 30.4 |      |      | 8.4  |      |      |      |      |      |
| Approach LOS            | C    |      |      | C    |      |      | A    |      |      |      |      |      |
| Queue Length 50th (ft)  | 33   |      |      | 129  |      |      | 149  | 2    |      |      |      |      |
| Queue Length 95th (ft)  | m63  |      |      | 183  |      |      | 102  | 13   |      |      |      |      |
| Internal Link Dist (ft) | 244  |      |      | 319  |      |      | 272  |      |      | 254  |      |      |
| Turn Bay Length (ft)    |      |      |      |      |      |      |      | 100  |      |      |      |      |
| Base Capacity (vph)     | 508  |      |      | 592  |      |      | 3048 | 809  |      |      |      |      |
| Starvation Cap Reductn  | 0    |      |      | 0    |      |      | 443  | 0    |      |      |      |      |
| Spillback Cap Reductn   | 0    |      |      | 0    |      |      | 0    | 0    |      |      |      |      |
| Storage Cap Reductn     | 0    |      |      | 0    |      |      | 0    | 0    |      |      |      |      |
| Reduced v/c Ratio       | 0.16 |      |      | 0.47 |      |      | 0.46 | 0.09 |      |      |      |      |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green

Natural Cycle: 100

19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 26.0  | 28.0 | 22.5 | 22.5 |
| Total Split (s)         | 54.0  | 28.0 | 25.0 | 28.0 |
| Total Split (%)         | 40%   | 21%  | 19%  | 21%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effect Green (s)    |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 12.8

Intersection LOS: B

Intersection Capacity Utilization 46.0%

ICU Level of Service A

Analysis Period (min) 15

















m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 19: Lavaca St & E. 17th St



28: Lavaca St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

|  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group   | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations  |   |  |   |   |  |   |   |  |  |   |   |   |
| Traffic Volume (vph)                                       | 11  | 44  | 0   | 0   | 55  | 28  | 64  | 1123  | 52  | 0   | 0   | 0   |
| Future Volume (vph)  | 11  | 44  | 0   | 0   | 55  | 28  | 64  | 1123  | 52  | 0   | 0   | 0   |
| Confl. Peds. (#/hr)  |   |   |   |   |   | 167   |   | 87  |   |   |   |   |
| Confl. Bikes (#/hr)  |   |   |   |   |   | 2   |   |   |   |   |   |   |
| Peak Hour Factor   | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  |
| Parking (#/hr)   |   |   |   |   | 0   |   |   |   |   |   |   |   |
| Adj. Flow (vph)  | 12  | 46  | 0   | 0   | 58  | 29  | 67  | 1182  | 55  | 0   | 0   | 0   |
| Shared Lane Traffic (%)                                    |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)                                      | 0   | 58  | 0   | 0   | 87  | 0   | 0   | 1249  | 55  | 0   | 0   | 0   |
| Turn Type  | Perm  | NA  |   |   | NA  |   | Perm  | NA  | Perm  |   |   |   |
| Protected Phases   |   | 4 12  |   |   | 4 12  |   |   | 2 10  |   |   |   |   |
| Permitted Phases   | 4 12  |   |   |   |   |   | 2 10  |   | 2 10  |   |   |   |
| Detector Phase   | 4 12  | 4 12  |   |   | 4 12  |   | 2 10  | 2 10  | 2 10  |   |   |   |
| Switch Phase   |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (%)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Yellow Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| All-Red Time (s)   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lost Time Adjust (s)                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Lost Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead/Lag   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?   |   |   |   |   |   |   |   |   |   |   |   |   |
| Recall Mode  |   |   |   |   |   |   |   |   |   |   |   |   |
| Act Effct Green (s)  |   | 20.8  |   |   | 20.8  |   |   | 90.2  | 90.2  |   |   |   |
| Actuated g/C Ratio   |   | 0.15  |   |   | 0.15  |   |   | 0.67  | 0.67  |   |   |   |
| v/c Ratio  |   | 0.22  |   |   | 0.36  |   |   | 0.37  | 0.05  |   |   |   |
| Control Delay  |   | 29.7  |   |   | 26.0  |   |   | 6.0   | 2.1   |   |   |   |
| Queue Delay  |   | 0.0   |   |   | 0.0   |   |   | 0.5   | 0.0   |   |   |   |
| Total Delay  |   | 29.7  |   |   | 26.0  |   |   | 6.4   | 2.1   |   |   |   |
| LOS  |   | C   |   |   | C   |   |   | A   | A   |   |   |   |
| Approach Delay   |   | 29.7  |   |   | 26.0  |   |   | 6.2   |   |   |   |   |
| Approach LOS   |   | C   |   |   | C   |   |   | A   |   |   |   |   |
| Queue Length 50th (ft)                                     |   | 34  |   |   | 37  |   |   | 141   | 6   |   |   |   |
| Queue Length 95th (ft)                                     |   | m52   |   |   | 64  |   |   | m127  | m5  |   |   |   |
| Internal Link Dist (ft)                                    |   | 233   |   |   | 60  |   |   | 281   |   |   | 272   |   |
| Turn Bay Length (ft)                                       |   |   |   |   |   |   |   |   | 100   |   |   |   |
| Base Capacity (vph)  |   | 568   |   |   | 488   |   |   | 3355  | 1083  |   |   |   |
| Starvation Cap Reductn                                     |   | 0   |   |   | 0   |   |   | 1459  | 0   |   |   |   |
| Spillback Cap Reductn                                      |   | 0   |   |   | 0   |   |   | 0   | 0   |   |   |   |
| Storage Cap Reductn  |   | 0   |   |   | 0   |   |   | 0   | 0   |   |   |   |
| Reduced v/c Ratio  |   | 0.10  |   |   | 0.18  |   |   | 0.66  | 0.05  |   |   |   |
| <b>Intersection Summary</b>                                |   |   |   |   |   |   |   |   |   |   |   |   |
| Cycle Length: 135  |   |   |   |   |   |   |   |   |   |   |   |   |
| Actuated Cycle Length: 135                                 |   |   |   |   |   |   |   |   |   |   |   |   |
| Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green |   |   |   |   |   |   |   |   |   |   |   |   |

MS

Synchro 9 Report  
Page 19

28: Lavaca St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Lane Group                  | Ø2    | Ø4   | Ø10  | Ø12  |
|-----------------------------|-------|------|------|------|
| Lane Configurations         |       |      |      |      |
| Traffic Volume (vph)        |       |      |      |      |
| Future Volume (vph)         |       |      |      |      |
| Confl. Peds. (#/hr)         |       |      |      |      |
| Confl. Bikes (#/hr)         |       |      |      |      |
| Peak Hour Factor            |       |      |      |      |
| Parking (#/hr)              |       |      |      |      |
| Adj. Flow (vph)             |       |      |      |      |
| Shared Lane Traffic (%)     |       |      |      |      |
| Lane Group Flow (vph)       |       |      |      |      |
| Turn Type                   |       |      |      |      |
| Protected Phases            | 2     | 4    | 10   | 12   |
| Permitted Phases            |       |      |      |      |
| Detector Phase              |       |      |      |      |
| Switch Phase                |       |      |      |      |
| Minimum Initial (s)         | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)           | 28.0  | 32.0 | 21.0 | 20.0 |
| Total Split (s)             | 55.0  | 32.0 | 24.0 | 24.0 |
| Total Split (%)             | 41%   | 24%  | 18%  | 18%  |
| Yellow Time (s)             | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)            | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)        |       |      |      |      |
| Total Lost Time (s)         |       |      |      |      |
| Lead/Lag                    |       |      |      |      |
| Lead-Lag Optimize?          |       |      |      |      |
| Recall Mode                 | C-Max | None | None | None |
| Act Effct Green (s)         |       |      |      |      |
| Actuated g/C Ratio          |       |      |      |      |
| v/c Ratio                   |       |      |      |      |
| Control Delay               |       |      |      |      |
| Queue Delay                 |       |      |      |      |
| Total Delay                 |       |      |      |      |
| LOS                         |       |      |      |      |
| Approach Delay              |       |      |      |      |
| Approach LOS                |       |      |      |      |
| Queue Length 50th (ft)      |       |      |      |      |
| Queue Length 95th (ft)      |       |      |      |      |
| Internal Link Dist (ft)     |       |      |      |      |
| Turn Bay Length (ft)        |       |      |      |      |
| Base Capacity (vph)         |       |      |      |      |
| Starvation Cap Reductn      |       |      |      |      |
| Spillback Cap Reductn       |       |      |      |      |
| Storage Cap Reductn         |       |      |      |      |
| Reduced v/c Ratio           |       |      |      |      |
| <b>Intersection Summary</b> |       |      |      |      |

MS

Synchro 9 Report  
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28: Lavaca St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.37

Intersection Signal Delay: 8.4

Intersection LOS: A

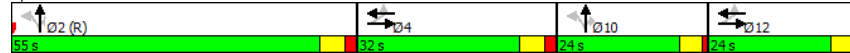
Intersection Capacity Utilization 54.6%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 28: Lavaca St & E. 16th St



34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

|                         | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑↑   |      | ↑     | ↑↑↑   |      |      |      |      |       | ↑↑↑   | ↑     |
| Traffic Volume (vph)    | 0    | 918   | 97   | 217   | 1741  | 0    | 0    | 0    | 0    | 152   | 906   | 418   |
| Future Volume (vph)     | 0    | 918   | 97   | 217   | 1741  | 0    | 0    | 0    | 0    | 152   | 906   | 418   |
| Confl. Peds. (#/hr)     |      |       | 18   | 18    |       |      |      |      |      | 20    |       | 28    |
| Confl. Bikes (#/hr)     |      |       |      |       |       |      |      |      |      |       |       | 28    |
| Peak Hour Factor        | 0.86 | 0.86  | 0.86 | 0.86  | 0.86  | 0.86 | 0.86 | 0.86 | 0.86 | 0.86  | 0.86  | 0.86  |
| Adj. Flow (vph)         | 0    | 1067  | 113  | 252   | 2024  | 0    | 0    | 0    | 0    | 177   | 1053  | 486   |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 1180  | 0    | 252   | 2024  | 0    | 0    | 0    | 0    | 0     | 1230  | 486   |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1 3   | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1 3   | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      |       | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       |      | 25.0  |      |       | 25.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (s)         |      | 58.0  |      |       | 88.0  |      |      |      |      | 47.0  | 47.0  | 47.0  |
| Total Split (%)         |      | 43.0% |      |       | 65.2% |      |      |      |      | 34.8% | 34.8% | 34.8% |
| Yellow Time (s)         |      | 4.0   |      |       | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      |       | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      |       | 0.0   |      |      |      |      |       | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      |       | 5.0   |      |      |      |      |       | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      |       |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      |       |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      |       | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effect Green (s)    |      | 53.0  |      | 83.0  | 83.0  |      |      |      |      |       | 42.0  | 42.0  |
| Actuated g/C Ratio      |      | 0.39  |      | 0.61  | 0.61  |      |      |      |      |       | 0.31  | 0.31  |
| v/c Ratio               |      | 0.60  |      | 0.67  | 0.65  |      |      |      |      |       | 0.79  | 0.93  |
| Control Delay           |      | 33.6  |      | 27.0  | 7.2   |      |      |      |      |       | 44.5  | 57.5  |
| Queue Delay             |      | 0.0   |      | 9.0   | 0.3   |      |      |      |      |       | 0.0   | 0.0   |
| Total Delay             |      | 33.6  |      | 36.0  | 7.5   |      |      |      |      |       | 44.5  | 57.5  |
| LOS                     |      | C     |      | D     | A     |      |      |      |      |       | D     | E     |
| Approach Delay          |      | 33.6  |      |       | 10.6  |      |      |      |      |       | 48.2  |       |
| Approach LOS            |      | C     |      |       | B     |      |      |      |      |       | D     |       |
| Queue Length 50th (ft)  |      | 294   |      | 87    | 136   |      |      |      |      |       | 316   | 282   |
| Queue Length 95th (ft)  |      | 323   |      | m141  | 139   |      |      |      |      |       | 365   | #506  |
| Internal Link Dist (ft) |      | 262   |      |       | 240   |      |      | 197  |      |       | 285   |       |
| Turn Bay Length (ft)    |      |       |      | 50    |       |      |      |      |      |       |       | 100   |
| Base Capacity (vph)     |      | 1969  |      | 378   | 3126  |      |      |      |      |       | 1564  | 524   |
| Starvation Cap Reductn  |      | 0     |      | 93    | 411   |      |      |      |      |       | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      |       | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      |       | 0     | 0     |
| Reduced v/c Ratio       |      | 0.60  |      | 0.88  | 0.75  |      |      |      |      |       | 0.79  | 0.93  |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 80

34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Lane Group              | Ø1   | Ø3   |
|-------------------------|------|------|
| Lane Configurations     |      |      |
| Traffic Volume (vph)    |      |      |
| Future Volume (vph)     |      |      |
| Confl. Peds. (#/hr)     |      |      |
| Confl. Bikes (#/hr)     |      |      |
| Peak Hour Factor        |      |      |
| Adj. Flow (vph)         |      |      |
| Shared Lane Traffic (%) |      |      |
| Lane Group Flow (vph)   |      |      |
| Turn Type               |      |      |
| Protected Phases        | 1    | 3    |
| Permitted Phases        |      |      |
| Detector Phase          |      |      |
| Switch Phase            |      |      |
| Minimum Initial (s)     | 5.0  | 8.0  |
| Minimum Split (s)       | 10.0 | 13.0 |
| Total Split (s)         | 15.0 | 15.0 |
| Total Split (%)         | 11%  | 11%  |
| Yellow Time (s)         | 4.0  | 4.0  |
| All-Red Time (s)        | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |
| Total Lost Time (s)     |      |      |
| Lead/Lag                | Lead |      |
| Lead-Lag Optimize?      | Yes  |      |
| Recall Mode             | Min  | None |
| Act Effect Green (s)    |      |      |
| Actuated g/C Ratio      |      |      |
| v/c Ratio               |      |      |
| Control Delay           |      |      |
| Queue Delay             |      |      |
| Total Delay             |      |      |
| LOS                     |      |      |
| Approach Delay          |      |      |
| Approach LOS            |      |      |
| Queue Length 50th (ft)  |      |      |
| Queue Length 95th (ft)  |      |      |
| Internal Link Dist (ft) |      |      |
| Turn Bay Length (ft)    |      |      |
| Base Capacity (vph)     |      |      |
| Starvation Cap Reductn  |      |      |
| Spillback Cap Reductn   |      |      |
| Storage Cap Reductn     |      |      |
| Reduced v/c Ratio       |      |      |
| Intersection Summary    |      |      |

34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 28.3

Intersection LOS: C

Intersection Capacity Utilization 78.4%

ICU Level of Service D

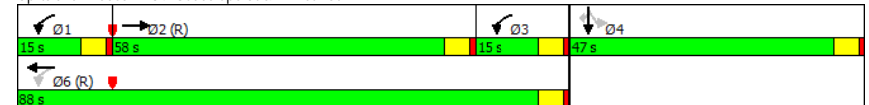
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 34: Guadalupe St & W. 15th St



35: Lavaca St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

|                         | ←     | →     | ↙    | ↘    | ←     | ↙    | ↘     | →     | ↙     | ↘    | →    | ↙    | ↘ |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|---|
| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |   |
| Lane Configurations     | ↙     | ↘     |      |      | ↘     | ↙    | ↘     | ↙     | ↘     |      |      |      |   |
| Traffic Volume (vph)    | 120   | 918   | 0    | 0    | 1638  | 67   | 393   | 889   | 160   | 0    | 0    | 0    |   |
| Future Volume (vph)     | 120   | 918   | 0    | 0    | 1638  | 67   | 393   | 889   | 160   | 0    | 0    | 0    |   |
| Confl. Peds. (#/hr)     | 48    |       |      |      |       | 48   | 31    |       | 18    |      |      |      |   |
| Confl. Bikes (#/hr)     |       |       | 2    |      |       |      |       |       | 28    |      |      |      |   |
| Peak Hour Factor        | 0.90  | 0.90  | 0.90 | 0.90 | 0.90  | 0.90 | 0.90  | 0.90  | 0.90  | 0.90 | 0.90 | 0.90 |   |
| Adj. Flow (vph)         | 133   | 1020  | 0    | 0    | 1820  | 74   | 437   | 988   | 178   | 0    | 0    | 0    |   |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       |       |      |      |      |   |
| Lane Group Flow (vph)   | 133   | 1020  | 0    | 0    | 1894  | 0    | 0     | 1425  | 178   | 0    | 0    | 0    |   |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |   |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |   |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |   |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |   |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |   |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |   |
| Minimum Split (s)       | 8.0   | 28.0  |      |      | 28.0  |      | 33.0  | 33.0  | 33.0  |      |      |      |   |
| Total Split (s)         | 20.0  | 86.0  |      |      | 66.0  |      | 49.0  | 49.0  | 49.0  |      |      |      |   |
| Total Split (%)         | 14.8% | 63.7% |      |      | 48.9% |      | 36.3% | 36.3% | 36.3% |      |      |      |   |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |   |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 2.0   | 2.0   | 2.0   |      |      |      |   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |   |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 6.0   | 6.0   | 6.0   |      |      |      |   |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |   |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |   |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |   |
| Act Effect Green (s)    | 81.0  | 81.0  |      |      | 65.0  |      | 43.0  | 43.0  | 43.0  |      |      |      |   |
| Actuated g/C Ratio      | 0.60  | 0.60  |      |      | 0.48  |      | 0.32  | 0.32  | 0.32  |      |      |      |   |
| v/c Ratio               | 0.67  | 0.33  |      |      | 0.78  |      | 0.91  | 0.32  | 0.32  |      |      |      |   |
| Control Delay           | 69.5  | 3.2   |      |      | 13.1  |      | 53.4  | 14.6  | 14.6  |      |      |      |   |
| Queue Delay             | 0.0   | 0.1   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |   |
| Total Delay             | 69.5  | 3.4   |      |      | 13.1  |      | 53.4  | 14.6  | 14.6  |      |      |      |   |
| LOS                     | E     | A     |      |      | B     |      | D     | B     | B     |      |      |      |   |
| Approach Delay          |       | 11.0  |      |      | 13.1  |      | 49.1  |       |       |      |      |      |   |
| Approach LOS            |       | B     |      |      | B     |      | D     |       |       |      |      |      |   |
| Queue Length 50th (ft)  | 83    | 44    |      |      | 120   |      | 438   | 39    | 39    |      |      |      |   |
| Queue Length 95th (ft)  | m149  | 50    |      |      | 119   |      | 504   | 101   | 101   |      |      |      |   |
| Internal Link Dist (ft) |       | 240   |      |      | 335   |      | 116   |       |       |      | 281  |      |   |
| Turn Bay Length (ft)    | 50    |       |      |      |       |      |       |       |       |      |      |      |   |
| Base Capacity (vph)     | 248   | 3051  |      |      | 2428  |      | 1572  | 553   | 553   |      |      |      |   |
| Starvation Cap Reductn  | 0     | 872   |      |      | 0     |      | 0     | 0     | 0     |      |      |      |   |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |   |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |   |
| Reduced v/c Ratio       | 0.54  | 0.47  |      |      | 0.78  |      | 0.91  | 0.32  | 0.32  |      |      |      |   |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green  
Natural Cycle: 75

MS

Synchro 9 Report  
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35: Lavaca St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 25.0

Intersection LOS: C

Intersection Capacity Utilization 78.4%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 35: Lavaca St & W. 15th St



MS

Synchro 9 Report  
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36: Colorado St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

|                         | ←     | →     | ↖    | ↗     | ←     | ↖    | ↗     | ↖     | ↗    | ↖     | ↗     | ↖      | ↗ |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|--------|---|
| Lane Group              | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR    |   |
| Lane Configurations     | ↖     | ↖↖    | ↖    | ↖     | ↖↖    | ↖    | ↖     | ↖     | ↖    | ↖     | ↖     | ↖      |   |
| Traffic Volume (vph)    | 28    | 1082  | 21   | 22    | 1401  | 14   | 8     | 27    | 110  | 130   | 6     | 273    |   |
| Future Volume (vph)     | 28    | 1082  | 21   | 22    | 1401  | 14   | 8     | 27    | 110  | 130   | 6     | 273    |   |
| Confl. Peds. (#/hr)     | 33    |       | 35   | 35    |       | 33   | 98    |       | 6    | 6     |       | 98     |   |
| Confl. Bikes (#/hr)     |       |       | 1    |       |       | 2    |       |       | 2    |       |       | 1      |   |
| Peak Hour Factor        | 0.87  | 0.87  | 0.87 | 0.87  | 0.87  | 0.87 | 0.87  | 0.87  | 0.87 | 0.87  | 0.87  | 0.87   |   |
| Adj. Flow (vph)         | 32    | 1244  | 24   | 25    | 1610  | 16   | 9     | 31    | 126  | 149   | 7     | 314    |   |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |      |       |       |        |   |
| Lane Group Flow (vph)   | 32    | 1268  | 0    | 25    | 1626  | 0    | 0     | 166   | 0    | 0     | 156   | 314    |   |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | Perm  | NA    |      | Perm  | NA    | custom |   |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |       | 4     |      |       | 8     |        |   |
| Permitted Phases        | 2     |       |      | 6     |       |      | 4     |       |      | 8     |       | 6      |   |
| Detector Phase          | 5     | 2     |      | 1     | 6     |      | 4     | 4     |      | 8     | 8     | 6      |   |
| Switch Phase            |       |       |      |       |       |      |       |       |      |       |       |        |   |
| Minimum Initial (s)     | 5.0   | 15.0  |      | 5.0   | 15.0  |      | 5.0   | 5.0   |      | 5.0   | 5.0   | 15.0   |   |
| Minimum Split (s)       | 10.0  | 20.0  |      | 10.0  | 22.0  |      | 36.0  | 36.0  |      | 10.0  | 10.0  | 22.0   |   |
| Total Split (s)         | 10.0  | 79.0  |      | 10.0  | 79.0  |      | 46.0  | 46.0  |      | 46.0  | 46.0  | 79.0   |   |
| Total Split (%)         | 7.4%  | 58.5% |      | 7.4%  | 58.5% |      | 34.1% | 34.1% |      | 34.1% | 34.1% | 58.5%  |   |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0    |   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0    |   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      |       | 0.0   |      |       | 0.0   | 0.0    |   |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      |       | 5.0   |      |       | 5.0   | 5.0    |   |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   |      |       |       |      |       |       | Lag    |   |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |       |       |      |       |       | Yes    |   |
| Recall Mode             | None  | C-Max |      | None  | C-Max |      | Max   | Max   |      | Max   | Max   | C-Max  |   |
| Act Effect Green (s)    | 81.0  | 78.0  |      | 81.0  | 78.0  |      |       | 41.0  |      |       | 41.0  | 78.0   |   |
| Actuated g/C Ratio      | 0.60  | 0.58  |      | 0.60  | 0.58  |      |       | 0.30  |      |       | 0.30  | 0.58   |   |
| v/c Ratio               | 0.19  | 0.43  |      | 0.11  | 0.55  |      |       | 0.29  |      |       | 0.51  | 0.38   |   |
| Control Delay           | 6.6   | 6.5   |      | 5.5   | 8.9   |      |       | 14.4  |      |       | 45.7  | 3.0    |   |
| Queue Delay             | 0.0   | 0.2   |      | 0.0   | 0.1   |      |       | 0.0   |      |       | 0.0   | 0.0    |   |
| Total Delay             | 6.6   | 6.7   |      | 5.5   | 9.0   |      |       | 14.4  |      |       | 45.7  | 3.0    |   |
| LOS                     | A     | A     |      | A     | A     |      |       | B     |      |       | D     | A      |   |
| Approach Delay          |       | 6.7   |      |       | 9.0   |      |       | 14.4  |      |       |       | 17.2   |   |
| Approach LOS            |       | A     |      |       | A     |      |       | B     |      |       |       | B      |   |
| Queue Length 50th (ft)  | 0     | 105   |      | 3     | 357   |      |       | 35    |      |       | 113   | 0      |   |
| Queue Length 95th (ft)  | 0     | 120   |      | 7     | 179   |      |       | 87    |      |       | 180   | 38     |   |
| Internal Link Dist (ft) |       | 335   |      |       | 362   |      |       | 155   |      |       | 114   |        |   |
| Turn Bay Length (ft)    | 90    |       |      | 90    |       |      |       |       |      |       |       | 100    |   |
| Base Capacity (vph)     | 167   | 2927  |      | 236   | 2931  |      |       | 566   |      |       | 307   | 826    |   |
| Starvation Cap Reductn  | 0     | 666   |      | 0     | 327   |      |       | 0     |      |       | 0     | 0      |   |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 62    |      |       | 0     |      |       | 0     | 14     |   |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      |       | 0     |      |       | 0     | 0      |   |
| Reduced v/c Ratio       | 0.19  | 0.56  |      | 0.11  | 0.62  |      |       | 0.29  |      |       | 0.51  | 0.39   |   |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 75

MS

Synchro 9 Report  
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36: Colorado St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.55

Intersection Signal Delay: 9.5

Intersection LOS: A

Intersection Capacity Utilization 88.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 36: Colorado St & W. 15th St



MS

Synchro 9 Report  
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37: N. Congress Ave & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

|                         | →     | ↖    | ↗     | ←     | ↖    | ↗     |
|-------------------------|-------|------|-------|-------|------|-------|
| Lane Group              | EBT   | EBR  | WBL   | WBT   | NBL  | NBR   |
| Lane Configurations     | ↑↑↑   |      | ↖     | ↑↑↑   |      | ↗     |
| Traffic Volume (vph)    | 1380  | 0    | 0     | 1198  | 0    | 1     |
| Future Volume (vph)     | 1380  | 0    | 0     | 1198  | 0    | 1     |
| Confl. Peds. (#/hr)     |       | 49   | 49    |       | 40   | 14    |
| Confl. Bikes (#/hr)     |       |      |       |       |      | 4     |
| Peak Hour Factor        | 0.86  | 0.86 | 0.86  | 0.86  | 0.86 | 0.86  |
| Adj. Flow (vph)         | 1605  | 0    | 0     | 1393  | 0    | 1     |
| Shared Lane Traffic (%) |       |      |       |       |      |       |
| Lane Group Flow (vph)   | 1605  | 0    | 0     | 1393  | 0    | 1     |
| Turn Type               | NA    |      | pm+pt | NA    |      | Perm  |
| Protected Phases        | 2     |      | 1     | 6     |      |       |
| Permitted Phases        |       |      | 6     |       |      | 4     |
| Detector Phase          | 2     |      | 1     | 6     |      | 4     |
| Switch Phase            |       |      |       |       |      |       |
| Minimum Initial (s)     | 5.0   |      | 5.0   | 5.0   |      | 5.0   |
| Minimum Split (s)       | 25.0  |      | 10.0  | 25.0  |      | 33.0  |
| Total Split (s)         | 92.0  |      | 10.0  | 102.0 |      | 33.0  |
| Total Split (%)         | 68.1% |      | 7.4%  | 75.6% |      | 24.4% |
| Yellow Time (s)         | 4.0   |      | 4.0   | 4.0   |      | 4.0   |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0   |      | 1.0   |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0   |      | 0.0   |
| Total Lost Time (s)     | 5.0   |      | 5.0   | 5.0   |      | 5.0   |
| Lead/Lag                | Lag   |      | Lead  |       |      |       |
| Lead-Lag Optimize?      | Yes   |      | Yes   |       |      |       |
| Recall Mode             | C-Max |      | None  | C-Max |      | Max   |
| Act Effect Green (s)    | 97.0  |      |       | 97.0  |      | 28.0  |
| Actuated g/C Ratio      | 0.72  |      |       | 0.72  |      | 0.21  |
| v/c Ratio               | 0.44  |      |       | 0.38  |      | 0.00  |
| Control Delay           | 4.5   |      |       | 5.9   |      | 0.0   |
| Queue Delay             | 0.0   |      |       | 0.1   |      | 0.0   |
| Total Delay             | 4.5   |      |       | 6.0   |      | 0.0   |
| LOS                     | A     |      |       | A     |      | A     |
| Approach Delay          | 4.5   |      |       | 6.0   |      |       |
| Approach LOS            | A     |      |       | A     |      |       |
| Queue Length 50th (ft)  | 81    |      |       | 171   |      | 0     |
| Queue Length 95th (ft)  | 92    |      |       | 87    |      | 0     |
| Internal Link Dist (ft) | 362   |      |       | 356   | 125  |       |
| Turn Bay Length (ft)    |       |      |       |       |      |       |
| Base Capacity (vph)     | 3653  |      |       | 3653  |      | 391   |
| Starvation Cap Reductn  | 365   |      |       | 882   |      | 0     |
| Spillback Cap Reductn   | 0     |      |       | 230   |      | 0     |
| Storage Cap Reductn     | 0     |      |       | 0     |      | 0     |
| Reduced v/c Ratio       | 0.49  |      |       | 0.50  |      | 0.00  |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 70

MS

Synchro 9 Report  
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37: N. Congress Ave & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.44

Intersection Signal Delay: 5.2

Intersection LOS: A

Intersection Capacity Utilization 58.3%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 37: N. Congress Ave & W. 15th St



MS

Synchro 9 Report  
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## 38: Brazos St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2022 Background

Timing Plan: PM

|                         | ←     | →     | ↖    | ↗     | ←     | ↖    | ↗     | ↖     | ↗     | ↖     | ↗     | ↖    | ↗ |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|-------|-------|-------|------|---|
| Lane Group              | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR   | SBL   | SBT   | SBR  |   |
| Lane Configurations     | ↖     | ↖↖↖   |      | ↖     | ↖↖↖   |      |       | ↖     | ↖     |       | ↖↖    |      |   |
| Traffic Volume (vph)    | 5     | 1368  | 38   | 10    | 1055  | 5    | 133   | 3     | 117   | 65    | 3     | 87   |   |
| Future Volume (vph)     | 5     | 1368  | 38   | 10    | 1055  | 5    | 133   | 3     | 117   | 65    | 3     | 87   |   |
| Confl. Peds. (#/hr)     | 8     |       | 10   | 10    |       | 8    | 5     |       | 19    | 19    |       | 5    |   |
| Confl. Bikes (#/hr)     |       |       |      |       |       | 1    |       |       |       |       |       | 1    |   |
| Peak Hour Factor        | 0.93  | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93 |   |
| Adj. Flow (vph)         | 5     | 1471  | 41   | 11    | 1134  | 5    | 143   | 3     | 126   | 70    | 3     | 94   |   |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |       |       |       |      |   |
| Lane Group Flow (vph)   | 5     | 1512  | 0    | 11    | 1139  | 0    | 0     | 146   | 126   | 0     | 167   | 0    |   |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | Perm  | NA    | Perm  | Perm  | NA    |      |   |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |       | 4     |       |       | 8     |      |   |
| Permitted Phases        | 2     |       |      | 6     |       |      | 4     |       | 4     | 8     |       |      |   |
| Detector Phase          | 5     | 2     |      | 1     | 6     |      | 4     | 4     | 4     | 8     | 8     |      |   |
| Switch Phase            |       |       |      |       |       |      |       |       |       |       |       |      |   |
| Minimum Initial (s)     | 5.0   | 15.0  |      | 5.0   | 15.0  |      | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  |      |   |
| Minimum Split (s)       | 10.0  | 22.0  |      | 10.0  | 22.0  |      | 32.0  | 32.0  | 32.0  | 32.0  | 32.0  |      |   |
| Total Split (s)         | 12.0  | 77.0  |      | 12.0  | 77.0  |      | 46.0  | 46.0  | 46.0  | 46.0  | 46.0  |      |   |
| Total Split (%)         | 8.9%  | 57.0% |      | 8.9%  | 57.0% |      | 34.1% | 34.1% | 34.1% | 34.1% | 34.1% |      |   |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |      |   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |      |   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      |       | 0.0   | 0.0   |       | 0.0   |      |   |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      |       | 5.0   | 5.0   |       | 5.0   |      |   |
| Lead/Lag                | Lead  | Lead  |      | Lead  | Lag   |      |       |       |       |       |       |      |   |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |       |       |       |       |       |      |   |
| Recall Mode             | None  | C-Max |      | None  | C-Max |      | None  | None  | None  | None  | None  |      |   |
| Act Effect Green (s)    | 96.6  | 96.6  |      | 99.1  | 99.1  |      | 23.6  | 23.6  |       |       | 23.6  |      |   |
| Actuated g/C Ratio      | 0.72  | 0.72  |      | 0.73  | 0.73  |      | 0.17  | 0.17  |       |       | 0.17  |      |   |
| v/c Ratio               | 0.02  | 0.42  |      | 0.04  | 0.31  |      | 0.85  | 0.36  |       |       | 0.74  |      |   |
| Control Delay           | 3.8   | 2.6   |      | 7.7   | 6.2   |      | 90.1  | 15.5  |       |       | 54.6  |      |   |
| Queue Delay             | 0.0   | 0.0   |      | 0.0   | 0.1   |      | 0.0   | 0.0   |       |       | 0.0   |      |   |
| Total Delay             | 3.8   | 2.7   |      | 7.7   | 6.4   |      | 90.1  | 15.5  |       |       | 54.6  |      |   |
| LOS                     | A     | A     |      | A     | A     |      | F     | B     |       |       | D     |      |   |
| Approach Delay          |       | 2.7   |      |       | 6.4   |      |       | 55.6  |       |       | 54.6  |      |   |
| Approach LOS            |       | A     |      |       | A     |      |       | E     |       |       | D     |      |   |
| Queue Length 50th (ft)  | 0     | 12    |      | 2     | 82    |      |       | 125   | 20    |       | 100   |      |   |
| Queue Length 95th (ft)  | m1    | 49    |      | m10   | 198   |      |       | 192   | 71    |       | 170   |      |   |
| Internal Link Dist (ft) |       | 356   |      |       | 297   |      |       | 199   |       |       | 273   |      |   |
| Turn Bay Length (ft)    | 100   |       |      | 40    |       |      |       | 50    |       |       |       |      |   |
| Base Capacity (vph)     | 346   | 3618  |      | 278   | 3730  |      | 300   | 530   |       |       | 358   |      |   |
| Starvation Cap Reductn  | 0     | 401   |      | 0     | 1319  |      | 0     | 0     |       |       | 0     |      |   |
| Spillback Cap Reductn   | 0     | 114   |      | 0     | 0     |      | 0     | 2     |       |       | 1     |      |   |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      | 0     | 0     |       |       | 0     |      |   |
| Reduced v/c Ratio       | 0.01  | 0.47  |      | 0.04  | 0.47  |      | 0.49  | 0.24  |       |       | 0.47  |      |   |

## Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 10 (7%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 65

MS

Synchro 9 Report  
Page 31

## 38: Brazos St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2022 Background

Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 11.5

Intersection LOS: B

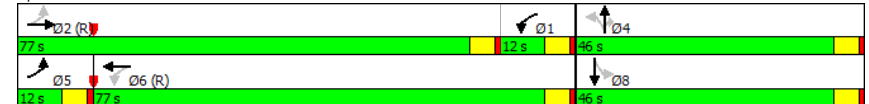
Intersection Capacity Utilization 66.6%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 38: Brazos St &amp; W. 15th St



MS

Synchro 9 Report  
Page 32

39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

|                         | ↖    | →     | ↘    | ↙     | ←     | ↖    | ↗    | ↘    | ↙    | ↓      | ↘     | ↙     |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|--------|-------|-------|
| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL    | SBT   | SBR   |
| Lane Configurations     |      | ↖↖↖   |      | ↙     | ↖↖↖   |      |      |      |      | ↖↖↖    | ↙     |       |
| Traffic Volume (vph)    | 0    | 1667  | 115  | 66    | 858   | 0    | 0    | 0    | 0    | 516    | 636   | 310   |
| Future Volume (vph)     | 0    | 1667  | 115  | 66    | 858   | 0    | 0    | 0    | 0    | 516    | 636   | 310   |
| Confl. Peds. (#/hr)     |      |       | 12   | 12    |       |      |      |      |      | 32     |       | 5     |
| Confl. Bikes (#/hr)     |      |       |      |       |       |      |      |      |      |        |       | 2     |
| Peak Hour Factor        | 0.93 | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93 | 0.93 | 0.93 | 0.93   | 0.93  | 0.93  |
| Adj. Flow (vph)         | 0    | 1792  | 124  | 71    | 923   | 0    | 0    | 0    | 0    | 555    | 684   | 333   |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |        |       |       |
| Lane Group Flow (vph)   | 0    | 1916  | 0    | 71    | 923   | 0    | 0    | 0    | 0    | 0      | 1239  | 333   |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm   | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |        | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4      |       | 4     |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4      | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |        |       |       |
| Minimum Initial (s)     |      | 10.0  |      | 3.0   | 10.0  |      |      |      |      | 7.0    | 7.0   | 7.0   |
| Minimum Split (s)       |      | 28.0  |      | 8.0   | 28.0  |      |      |      |      | 32.0   | 32.0  | 32.0  |
| Total Split (s)         |      | 80.0  |      | 15.0  | 95.0  |      |      |      |      | 40.0   | 40.0  | 40.0  |
| Total Split (%)         |      | 59.3% |      | 11.1% | 70.4% |      |      |      |      | 29.6%  | 29.6% | 29.6% |
| Yellow Time (s)         |      | 4.0   |      | 4.0   | 4.0   |      |      |      |      | 4.0    | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      | 1.0   | 1.0   |      |      |      |      | 1.0    | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      | 0.0   | 0.0   |      |      |      |      | 0.0    | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      | 5.0   | 5.0   |      |      |      |      | 5.0    | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      | Lead  |       |      |      |      |      |        |       |       |
| Lead-Lag Optimize?      |      | Yes   |      | Yes   |       |      |      |      |      |        |       |       |
| Recall Mode             |      | C-Max |      | None  | C-Max |      |      |      |      | None   | None  | None  |
| Act Effect Green (s)    |      | 79.6  |      | 90.0  | 90.0  |      |      |      |      | 35.0   | 35.0  | 35.0  |
| Actuated g/C Ratio      |      | 0.59  |      | 0.67  | 0.67  |      |      |      |      | 0.26   | 0.26  | 0.26  |
| v/c Ratio               |      | 0.65  |      | 0.43  | 0.27  |      |      |      |      | 1.24dl | 0.72  | 0.72  |
| Control Delay           |      | 8.6   |      | 32.5  | 6.2   |      |      |      |      | 71.0   | 44.6  | 44.6  |
| Queue Delay             |      | 0.1   |      | 0.0   | 0.2   |      |      |      |      | 0.0    | 0.0   | 0.0   |
| Total Delay             |      | 8.7   |      | 32.5  | 6.4   |      |      |      |      | 71.0   | 44.6  | 44.6  |
| LOS                     |      | A     |      | C     | A     |      |      |      |      | E      | D     | D     |
| Approach Delay          |      | 8.7   |      |       | 8.2   |      |      |      |      | 65.4   |       |       |
| Approach LOS            |      | A     |      |       | A     |      |      |      |      | E      |       |       |
| Queue Length 50th (ft)  |      | 147   |      | 17    | 83    |      |      |      |      | 397    | 207   | 207   |
| Queue Length 95th (ft)  |      | 264   |      | m61   | 97    |      |      |      |      | #502   | 323   | 323   |
| Internal Link Dist (ft) |      | 297   |      |       | 282   |      |      | 125  |      | 272    |       |       |
| Turn Bay Length (ft)    |      |       |      | 70    |       |      |      |      |      |        |       | 50    |
| Base Capacity (vph)     |      | 2967  |      | 196   | 3390  |      |      |      |      | 1261   | 460   | 460   |
| Starvation Cap Reductn  |      | 203   |      | 0     | 1365  |      |      |      |      | 0      | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 33    |      |      |      |      | 0      | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      | 0      | 0     | 0     |
| Reduced v/c Ratio       |      | 0.69  |      | 0.36  | 0.46  |      |      |      |      | 0.98   | 0.72  | 0.72  |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 75

MS

Synchro 9 Report  
Page 33

39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.98

Intersection Signal Delay: 28.5

Intersection LOS: C

Intersection Capacity Utilization 73.8%

ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 39: San Jacinto Blvd & W. 15th St



MS

Synchro 9 Report  
Page 34

40: Trinity St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

|                         | ↖     | →     | ↘    | ↙    | ←     | ↖    | ↙     | ↗     | ↘     | ↓    | ↘    | ↙    |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
| Lane Configurations     | ↖     | ↖↖↖   |      |      | ↖↖↖   |      |       | ↖↖    | ↖     |      |      |      |
| Traffic Volume (vph)    | 88    | 1868  | 0    | 0    | 750   | 146  | 179   | 309   | 283   | 0    | 0    | 0    |
| Future Volume (vph)     | 88    | 1868  | 0    | 0    | 750   | 146  | 179   | 309   | 283   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 2     |       |      |      |       | 2    | 7     |       | 8     |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       |      |       |       | 8     |      |      |      |
| Peak Hour Factor        | 0.96  | 0.96  | 0.96 | 0.96 | 0.96  | 0.96 | 0.96  | 0.96  | 0.96  | 0.96 | 0.96 | 0.96 |
| Adj. Flow (vph)         | 92    | 1946  | 0    | 0    | 781   | 152  | 186   | 322   | 295   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 92    | 1946  | 0    | 0    | 933   | 0    | 0     | 508   | 295   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 28.0  |      |      | 28.0  |      | 35.0  | 35.0  | 35.0  |      |      |      |
| Total Split (s)         | 10.0  | 100.0 |      |      | 90.0  |      | 35.0  | 35.0  | 35.0  |      |      |      |
| Total Split (%)         | 7.4%  | 74.1% |      |      | 66.7% |      | 25.9% | 25.9% | 25.9% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 95.0  | 95.0  |      |      | 85.0  |      | 30.0  | 30.0  | 30.0  |      |      |      |
| Actuated g/C Ratio      | 0.70  | 0.70  |      |      | 0.63  |      | 0.22  | 0.22  | 0.22  |      |      |      |
| v/c Ratio               | 0.24  | 0.54  |      |      | 0.30  |      | 0.66  | 0.77  | 0.77  |      |      |      |
| Control Delay           | 6.2   | 7.2   |      |      | 15.2  |      | 52.6  | 53.7  | 53.7  |      |      |      |
| Queue Delay             | 0.0   | 0.2   |      |      | 0.0   |      | 0.0   | 0.1   | 0.1   |      |      |      |
| Total Delay             | 6.2   | 7.4   |      |      | 15.2  |      | 52.6  | 53.7  | 53.7  |      |      |      |
| LOS                     | A     | A     |      |      | B     |      | D     | D     | D     |      |      |      |
| Approach Delay          |       | 7.3   |      |      | 15.2  |      | 53.0  |       |       |      |      |      |
| Approach LOS            |       | A     |      |      | B     |      | D     |       |       |      |      |      |
| Queue Length 50th (ft)  | 20    | 159   |      |      | 178   |      | 215   | 200   | 200   |      |      |      |
| Queue Length 95th (ft)  | m29   | m168  |      |      | 193   |      | 278   | #331  | #331  |      |      |      |
| Internal Link Dist (ft) |       | 282   |      |      | 641   |      | 149   |       |       | 621  |      |      |
| Turn Bay Length (ft)    | 100   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 383   | 3578  |      |      | 3138  |      | 769   | 385   | 385   |      |      |      |
| Starvation Cap Reductn  | 0     | 714   |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 156   |      |      | 0     |      | 0     | 1     | 1     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.24  | 0.68  |      |      | 0.30  |      | 0.66  | 0.77  | 0.77  |      |      |      |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 75

MS

Synchro 9 Report  
Page 35

40: Trinity St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 19.0

Intersection LOS: B

Intersection Capacity Utilization 73.8%

ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 40: Trinity St & W. 15th St



MS

Synchro 9 Report  
Page 36

11: Colorado St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 13.6 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | +    |      |      |      | +    |      |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 6    | 105  | 14   | 0    | 64   | 202  | 10   | 0    | 15   | 91   | 154  |
| Future Vol, veh/h   | 0    | 6    | 105  | 14   | 0    | 64   | 202  | 10   | 0    | 15   | 91   | 154  |
| Peak Hour Factor    | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 8    | 135  | 18   | 0    | 82   | 259  | 13   | 0    | 19   | 117  | 197  |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB   | NB   |
|----------------------------|------|------|------|
| Opposing Approach          | WB   | EB   | SB   |
| Opposing Lanes             | 1    | 1    | 1    |
| Conflicting Approach Left  | SB   | NB   | EB   |
| Conflicting Lanes Left     | 1    | 1    | 1    |
| Conflicting Approach Right | NB   | SB   | WB   |
| Conflicting Lanes Right    | 1    | 1    | 1    |
| HCM Control Delay          | 11.2 | 15.7 | 13.8 |
| HCM LOS                    | B    | C    | B    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 6%    | 5%    | 23%   | 14%   |
| Vol Thru, %            | 35%   | 84%   | 73%   | 56%   |
| Vol Right, %           | 59%   | 11%   | 4%    | 31%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 260   | 125   | 276   | 133   |
| LT Vol                 | 15    | 6     | 64    | 18    |
| Through Vol            | 91    | 105   | 202   | 74    |
| RT Vol                 | 154   | 14    | 10    | 41    |
| Lane Flow Rate         | 333   | 160   | 354   | 171   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.499 | 0.265 | 0.557 | 0.278 |
| Departure Headway (Hd) | 5.391 | 5.942 | 5.663 | 5.859 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 663   | 599   | 633   | 607   |
| Service Time           | 3.464 | 4.03  | 3.733 | 3.948 |
| HCM Lane V/C Ratio     | 0.502 | 0.267 | 0.559 | 0.282 |
| HCM Control Delay      | 13.8  | 11.2  | 15.7  | 11.2  |
| HCM Lane LOS           | B     | B     | C     | B     |
| HCM 95th-tile Q        | 2.8   | 1.1   | 3.4   | 1.1   |

11: Colorado St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 18   | 74   | 41   |
| Future Vol, veh/h   | 0    | 18   | 74   | 41   |
| Peak Hour Factor    | 0.78 | 0.78 | 0.78 | 0.78 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 23   | 95   | 53   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 11.2 |
| HCM LOS                    | B    |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 10.5 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |      |      | ↕    |      |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 0    | 279  | 0    | 0    | 0    | 334  | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h   | 0    | 0    | 279  | 0    | 0    | 0    | 334  | 0    | 0    | 0    | 0    | 0    |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 324  | 0    | 0    | 0    | 388  | 0    | 0    | 0    | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB | NB |
|----------------------------|------|----|----|
| Opposing Approach          | WB   | EB | SB |
| Opposing Lanes             | 1    | 1  | 1  |
| Conflicting Approach Left  | SB   | NB | EB |
| Conflicting Lanes Left     | 1    | 1  | 1  |
| Conflicting Approach Right | NB   | SB | WB |
| Conflicting Lanes Right    | 1    | 1  | 1  |
| HCM Control Delay          | 10.1 | 11 | 0  |
| HCM LOS                    | B    | B  | -  |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 0%    | 0%    | 0%    | 0%    |
| Vol Thru, %            | 100%  | 100%  | 100%  | 0%    |
| Vol Right, %           | 0%    | 0%    | 0%    | 100%  |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 0     | 279   | 334   | 13    |
| LT Vol                 | 0     | 0     | 0     | 0     |
| Through Vol            | 0     | 279   | 334   | 0     |
| RT Vol                 | 0     | 0     | 0     | 13    |
| Lane Flow Rate         | 0     | 324   | 388   | 15    |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0     | 0.392 | 0.464 | 0.02  |
| Departure Headway (Hd) | 5.479 | 4.352 | 4.303 | 4.841 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 0     | 831   | 843   | 739   |
| Service Time           | 3.514 | 2.364 | 2.303 | 2.874 |
| HCM Lane V/C Ratio     | 0     | 0.39  | 0.46  | 0.02  |
| HCM Control Delay      | 8.5   | 10.1  | 11    | 8     |
| HCM Lane LOS           | N     | B     | B     | A     |
| HCM 95th-tile Q        | 0     | 1.9   | 2.5   | 0.1   |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      |      | ↕    |
| Traffic Vol, veh/h  | 0    | 0    | 0    | 13   |
| Future Vol, veh/h   | 0    | 0    | 0    | 13   |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 0    | 15   |
| Number of Lanes     | 0    | 0    | 0    | 1    |

| Approach                   | SB |
|----------------------------|----|
| Opposing Approach          | NB |
| Opposing Lanes             | 1  |
| Conflicting Approach Left  | WB |
| Conflicting Lanes Left     | 1  |
| Conflicting Approach Right | EB |
| Conflicting Lanes Right    | 1  |
| HCM Control Delay          | 8  |
| HCM LOS                    | A  |

14: Brazos St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 21.9 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | C    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |      |      | ↕    |      |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 40   | 274  | 25   | 0    | 11   | 64   | 25   | 0    | 187  | 163  | 0    |
| Future Vol, veh/h   | 0    | 40   | 274  | 25   | 0    | 11   | 64   | 25   | 0    | 187  | 163  | 0    |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 47   | 319  | 29   | 0    | 13   | 74   | 29   | 0    | 217  | 190  | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB   | NB   |
|----------------------------|------|------|------|
| Opposing Approach          | WB   | EB   | SB   |
| Opposing Lanes             | 1    | 1    | 1    |
| Conflicting Approach Left  | SB   | NB   | EB   |
| Conflicting Lanes Left     | 1    | 1    | 1    |
| Conflicting Approach Right | NB   | SB   | WB   |
| Conflicting Lanes Right    | 1    | 1    | 1    |
| HCM Control Delay          | 24.3 | 12.6 | 25.7 |
| HCM LOS                    | C    | B    | D    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 53%   | 12%   | 11%   | 36%   |
| Vol Thru, %            | 47%   | 81%   | 64%   | 21%   |
| Vol Right, %           | 0%    | 7%    | 25%   | 43%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 350   | 339   | 100   | 270   |
| LT Vol                 | 187   | 40    | 11    | 97    |
| Through Vol            | 163   | 274   | 64    | 57    |
| RT Vol                 | 0     | 25    | 25    | 116   |
| Lane Flow Rate         | 407   | 394   | 116   | 314   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.735 | 0.713 | 0.237 | 0.561 |
| Departure Headway (Hd) | 6.499 | 6.516 | 7.337 | 6.436 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 553   | 552   | 492   | 556   |
| Service Time           | 4.58  | 4.594 | 5.337 | 4.525 |
| HCM Lane V/C Ratio     | 0.736 | 0.714 | 0.236 | 0.565 |
| HCM Control Delay      | 25.7  | 24.3  | 12.6  | 17.5  |
| HCM Lane LOS           | D     | C     | B     | C     |
| HCM 95th-tile Q        | 6.2   | 5.8   | 0.9   | 3.4   |

14: Brazos St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 97   | 57   | 116  |
| Future Vol, veh/h   | 0    | 97   | 57   | 116  |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 113  | 66   | 135  |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 17.5 |
| HCM LOS                    | C    |

16: San Jacinto Blvd & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 15.8 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | C    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↶    |      |      |      | ↷    |      |      |      |      |      |
| Traffic Vol, veh/h  | 0    | 0    | 97   | 303  | 0    | 36   | 53   | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h   | 0    | 0    | 97   | 303  | 0    | 36   | 53   | 0    | 0    | 0    | 0    | 0    |
| Peak Hour Factor    | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 102  | 319  | 0    | 38   | 56   | 0    | 0    | 0    | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    |

| Approach                   | EB   | WB   |
|----------------------------|------|------|
| Opposing Approach          | WB   | EB   |
| Opposing Lanes             | 1    | 1    |
| Conflicting Approach Left  | SB   |      |
| Conflicting Lanes Left     | 3    | 0    |
| Conflicting Approach Right |      | SB   |
| Conflicting Lanes Right    | 0    | 3    |
| HCM Control Delay          | 19.3 | 11.2 |
| HCM LOS                    | C    | B    |

| Lane                   | EBLn1 | WBLn1 | SBLn1 | SBLn2 | SBLn3 |
|------------------------|-------|-------|-------|-------|-------|
| Vol Left, %            | 0%    | 40%   | 0%    | 0%    | 0%    |
| Vol Thru, %            | 24%   | 60%   | 100%  | 100%  | 0%    |
| Vol Right, %           | 76%   | 0%    | 0%    | 0%    | 100%  |
| Sign Control           | Stop  | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 400   | 89    | 269   | 269   | 23    |
| LT Vol                 | 0     | 36    | 0     | 0     | 0     |
| Through Vol            | 97    | 53    | 269   | 269   | 0     |
| RT Vol                 | 303   | 0     | 0     | 0     | 23    |
| Lane Flow Rate         | 421   | 94    | 283   | 283   | 24    |
| Geometry Grp           | 7     | 7     | 7     | 7     | 7     |
| Degree of Util (X)     | 0.669 | 0.181 | 0.478 | 0.478 | 0.024 |
| Departure Headway (Hd) | 5.723 | 6.943 | 6.083 | 6.083 | 3.617 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 632   | 516   | 594   | 594   | 986   |
| Service Time           | 3.465 | 4.699 | 3.82  | 3.82  | 1.353 |
| HCM Lane V/C Ratio     | 0.666 | 0.182 | 0.476 | 0.476 | 0.024 |
| HCM Control Delay      | 19.3  | 11.2  | 14.3  | 14.3  | 6.4   |
| HCM Lane LOS           | C     | B     | B     | B     | A     |
| HCM 95th-tile Q        | 5.1   | 0.7   | 2.6   | 2.6   | 0.1   |

16: San Jacinto Blvd & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↶↷   | ↶    |
| Traffic Vol, veh/h  | 0    | 0    | 537  | 23   |
| Future Vol, veh/h   | 0    | 0    | 537  | 23   |
| Peak Hour Factor    | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 565  | 24   |
| Number of Lanes     | 0    | 0    | 2    | 1    |

| Approach                   | SB |
|----------------------------|----|
| Opposing Approach          |    |
| Opposing Lanes             | 0  |
| Conflicting Approach Left  | WB |
| Conflicting Lanes Left     | 1  |
| Conflicting Approach Right | EB |
| Conflicting Lanes Right    | 1  |
| HCM Control Delay          | 14 |
| HCM LOS                    | B  |

20: Colorado St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection              |    |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 10 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | A  |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | +    |      |      |      | +    |      |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 79   | 36   | 15   | 0    | 0    | 174  | 0    | 0    | 15   | 132  | 0    |
| Future Vol, veh/h   | 0    | 79   | 36   | 15   | 0    | 0    | 174  | 0    | 0    | 15   | 132  | 0    |
| Peak Hour Factor    | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 96   | 44   | 18   | 0    | 0    | 212  | 0    | 0    | 18   | 161  | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB  | WB   | NB   |
|----------------------------|-----|------|------|
| Opposing Approach          | WB  | EB   | SB   |
| Opposing Lanes             | 1   | 1    | 1    |
| Conflicting Approach Left  | SB  | NB   | EB   |
| Conflicting Lanes Left     | 1   | 1    | 1    |
| Conflicting Approach Right | NB  | SB   | WB   |
| Conflicting Lanes Right    | 1   | 1    | 1    |
| HCM Control Delay          | 9.9 | 10.4 | 10.1 |
| HCM LOS                    | A   | B    | B    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 10%   | 61%   | 0%    | 0%    |
| Vol Thru, %            | 90%   | 28%   | 100%  | 46%   |
| Vol Right, %           | 0%    | 12%   | 0%    | 54%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 147   | 130   | 174   | 162   |
| LT Vol                 | 15    | 79    | 0     | 0     |
| Through Vol            | 132   | 36    | 174   | 75    |
| RT Vol                 | 0     | 15    | 0     | 87    |
| Lane Flow Rate         | 179   | 159   | 212   | 198   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.261 | 0.233 | 0.305 | 0.268 |
| Departure Headway (Hd) | 5.245 | 5.293 | 5.167 | 4.891 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 687   | 679   | 698   | 737   |
| Service Time           | 3.265 | 3.321 | 3.186 | 2.91  |
| HCM Lane V/C Ratio     | 0.261 | 0.234 | 0.304 | 0.269 |
| HCM Control Delay      | 10.1  | 9.9   | 10.4  | 9.7   |
| HCM Lane LOS           | B     | A     | B     | A     |
| HCM 95th-tile Q        | 1     | 0.9   | 1.3   | 1.1   |

20: Colorado St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 0    | 75   | 87   |
| Future Vol, veh/h   | 0    | 0    | 75   | 87   |
| Peak Hour Factor    | 0.82 | 0.82 | 0.82 | 0.82 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 91   | 106  |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB  |
|----------------------------|-----|
| Opposing Approach          | NB  |
| Opposing Lanes             | 1   |
| Conflicting Approach Left  | WB  |
| Conflicting Lanes Left     | 1   |
| Conflicting Approach Right | EB  |
| Conflicting Lanes Right    | 1   |
| HCM Control Delay          | 9.7 |
| HCM LOS                    | A   |

24: E. 17th St & Brazos St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection              |     |
|---------------------------|-----|
| Intersection Delay, s/veh | 8.7 |
| Intersection LOS          | A   |

| Movement            | EBU  | EBL  | EBT  | WBU  | WBT  | WBR  | SBU  | SBL  | SBR  |
|---------------------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↰    |      | ↰    |      |      | ↰    |      |
| Traffic Vol, veh/h  | 0    | 0    | 193  | 0    | 40   | 51   | 0    | 96   | 0    |
| Future Vol, veh/h   | 0    | 0    | 193  | 0    | 40   | 51   | 0    | 96   | 0    |
| Peak Hour Factor    | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 238  | 0    | 49   | 63   | 0    | 119  | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 1    | 0    | 0    | 1    | 0    |

| Approach                   | EB  | WB  | SB  |
|----------------------------|-----|-----|-----|
| Opposing Approach          | WB  | EB  |     |
| Opposing Lanes             | 1   | 1   | 0   |
| Conflicting Approach Left  | SB  |     | WB  |
| Conflicting Lanes Left     | 1   | 0   | 1   |
| Conflicting Approach Right |     | SB  | EB  |
| Conflicting Lanes Right    | 0   | 1   | 1   |
| HCM Control Delay          | 9.1 | 7.8 | 8.9 |
| HCM LOS                    | A   | A   | A   |

| Lane                   | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, %            | 0%    | 0%    | 100%  |
| Vol Thru, %            | 100%  | 44%   | 0%    |
| Vol Right, %           | 0%    | 56%   | 0%    |
| Sign Control           | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 193   | 91    | 96    |
| LT Vol                 | 0     | 0     | 96    |
| Through Vol            | 193   | 40    | 0     |
| RT Vol                 | 0     | 51    | 0     |
| Lane Flow Rate         | 238   | 112   | 119   |
| Geometry Grp           | 1     | 1     | 1     |
| Degree of Util (X)     | 0.288 | 0.13  | 0.161 |
| Departure Headway (Hd) | 4.354 | 4.155 | 4.903 |
| Convergence, Y/N       | Yes   | Yes   | Yes   |
| Cap                    | 827   | 864   | 732   |
| Service Time           | 2.369 | 2.173 | 2.926 |
| HCM Lane V/C Ratio     | 0.288 | 0.13  | 0.163 |
| HCM Control Delay      | 9.1   | 7.8   | 8.9   |
| HCM Lane LOS           | A     | A     | A     |
| HCM 95th-ile Q         | 1.2   | 0.4   | 0.6   |

4: Colorado St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.9  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑↑   |      | ↑↑   |      | ↑↑   |      |
| Traffic Vol, veh/h       | 659  | 34   | 33   | 1340 | 2    | 118  |
| Future Vol, veh/h        | 659  | 34   | 33   | 1340 | 2    | 118  |
| Conflicting Peds, #/hr   | 0    | 8    | 8    | 0    | 0    | 12   |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | 40   | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 94   | 94   | 94   | 94   | 94   | 94   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 701  | 36   | 35   | 1426 | 2    | 126  |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |      |
|----------------------|--------|---|--------|---|--------|------|
| Conflicting Flow All | 0      | 0 | 745    | 0 | 1510   | 389  |
| Stage 1              | -      | - | -      | - | 727    | -    |
| Stage 2              | -      | - | -      | - | 783    | -    |
| Critical Hdwy        | -      | - | 4.14   | - | 6.84   | 6.94 |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.84   | -    |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.84   | -    |
| Follow-up Hdwy       | -      | - | 2.22   | - | 3.52   | 3.32 |
| Pot Cap-1 Maneuver   | -      | - | 859    | - | 111    | 610  |
| Stage 1              | -      | - | -      | - | 439    | -    |
| Stage 2              | -      | - | -      | - | 411    | -    |
| Platoon blocked, %   | -      | - | -      | - | -      | -    |
| Mov Cap-1 Maneuver   | -      | - | 849    | - | 106    | 598  |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 106    | -    |
| Stage 1              | -      | - | -      | - | 436    | -    |
| Stage 2              | -      | - | -      | - | 394    | -    |

| Approach             | EB | WB  | NB   |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0  | 0.2 | 13.4 |
| HCM LOS              |    |     | B    |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 555   | -   | -   | 849   | -   |
| HCM Lane V/C Ratio    | 0.23  | -   | -   | 0.041 | -   |
| HCM Control Delay (s) | 13.4  | -   | -   | 9.4   | -   |
| HCM Lane LOS          | B     | -   | -   | A     | -   |
| HCM 95th %tile Q(veh) | 0.9   | -   | -   | 0.1   | -   |

9: Guadalupe St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 36.1 |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    | ↑    |      | ↑    |      |      |      |      |      | ↑↑   |      |
| Traffic Vol, veh/h       | 0    | 20   | 12   | 202  | 96   | 0    | 0    | 0    | 0    | 36   | 1003 | 22   |
| Future Vol, veh/h        | 0    | 20   | 12   | 202  | 96   | 0    | 0    | 0    | 0    | 36   | 1003 | 22   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 55   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 41   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 0    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 21   | 12   | 208  | 99   | 0    | 0    | 0    | 0    | 37   | 1034 | 23   |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |   |
|----------------------|--------|------|--------|------|--------|---|
| Conflicting Flow All | -      | 1161 | 624    | 657  | 1172   | - |
| Stage 1              | -      | 1161 | -      | 0    | 0      | - |
| Stage 2              | -      | 0    | -      | 657  | 1172   | - |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | - |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | - |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | - |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | - |
| Pot Cap-1 Maneuver   | 0      | 194  | 428    | 350  | 191    | 0 |
| Stage 1              | 0      | 268  | -      | -    | -      | 0 |
| Stage 2              | 0      | -    | -      | 420  | 264    | 0 |
| Platoon blocked, %   | -      | -    | -      | -    | -      | - |
| Mov Cap-1 Maneuver   | -      | 186  | 411    | 311  | 184    | - |
| Mov Cap-2 Maneuver   | -      | 186  | -      | 311  | 184    | - |
| Stage 1              | -      | 258  | -      | -    | -      | - |
| Stage 2              | -      | -    | -      | 375  | 254    | - |

| Approach             | EB | WB  | SB |
|----------------------|----|-----|----|
| HCM Control Delay, s | 22 | 166 |    |
| HCM LOS              | C  | F   |    |

| Minor Lane/Major Mvmt | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-------|-------|-----|-----|-----|
| Capacity (veh/h)      | 186   | 411   | 254   | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.111 | 0.03  | 1.21  | -   | -   | -   |
| HCM Control Delay (s) | 26.8  | 14    | 166   | -   | -   | -   |
| HCM Lane LOS          | D     | B     | F     | -   | -   | -   |
| HCM 95th %tile Q(veh) | 0.4   | 0.1   | 14.6  | -   | -   | -   |

10: Lavaca St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |       |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|-------|------|------|------|------|------|
| Int Delay, s/veh         | 42.4 |      |      |      |      |      |       |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL   | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      | ↕ ↕ ↕ |      |      |      |      |      |
| Traffic Vol, veh/h       | 11   | 53   | 0    | 0    | 171  | 75   | 65    | 1015 | 77   | 0    | 0    | 0    |
| Future Vol, veh/h        | 11   | 53   | 0    | 0    | 171  | 75   | 65    | 1015 | 77   | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 21   | 25    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free  | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -     | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 0     | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | -    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 95   | 95   | 95   | 95   | 95   | 95   | 95    | 95   | 95   | 95   | 95   | 95   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2     | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 12   | 56   | 0    | 0    | 180  | 79   | 68    | 1068 | 81   | 0    | 0    | 0    |

| Major/Minor          | Minor2 |      | Minor1 |   | Major1 |      |
|----------------------|--------|------|--------|---|--------|------|
| Conflicting Flow All | 700    | 1311 | -      | - | 1271   | 596  |
| Stage 1              | 25     | 25   | -      | - | 1246   | -    |
| Stage 2              | 675    | 1286 | -      | - | 25     | -    |
| Critical Hdwy        | 6.44   | 6.54 | -      | - | 6.54   | 7.14 |
| Critical Hdwy Stg 1  | -      | -    | -      | - | 5.54   | -    |
| Critical Hdwy Stg 2  | 6.74   | 5.54 | -      | - | -      | -    |
| Follow-up Hdwy       | 3.82   | 4.02 | -      | - | 4.02   | 3.92 |
| Pot Cap-1 Maneuver   | 382    | 158  | 0      | 0 | ~ 167  | 383  |
| Stage 1              | -      | -    | 0      | 0 | 244    | -    |
| Stage 2              | 373    | 233  | 0      | 0 | -      | -    |
| Platoon blocked, %   | -      | -    | -      | - | -      | -    |
| Mov Cap-1 Maneuver   | -      | 145  | -      | - | ~ 153  | 383  |
| Mov Cap-2 Maneuver   | -      | 145  | -      | - | ~ 153  | -    |
| Stage 1              | -      | -    | -      | - | 229    | -    |
| Stage 2              | 60     | 219  | -      | - | -      | -    |

| Approach             | EB | WB    | NB  |
|----------------------|----|-------|-----|
| HCM Control Delay, s |    | 250.4 | 0.5 |
| HCM LOS              | -  | F     |     |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1 | WBLn1 |
|-----------------------|-------|-----|-----|-------|-------|
| Capacity (veh/h)      | 1124  | -   | -   | -     | 187   |
| HCM Lane V/C Ratio    | 0.061 | -   | -   | -     | 1.385 |
| HCM Control Delay (s) | 8.4   | -   | -   | -     | 250.4 |
| HCM Lane LOS          | A     | -   | -   | -     | F     |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | -     | 15.3  |

| Notes                      |                        |                            |                                |  |
|----------------------------|------------------------|----------------------------|--------------------------------|--|
| -: Volume exceeds capacity | \$: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |  |

13: W. 18th St & Parking Dr. 2  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 4.8  |      |      |      |      |      |
| Movement                 | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
| Lane Configurations      |      | ↕    |      | ↕    | ↕    |      |
| Traffic Vol, veh/h       | 24   | 284  | 348  | 20   | 97   | 116  |
| Future Vol, veh/h        | 24   | 284  | 348  | 20   | 97   | 116  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | -    | 0    | 0    | -    | 0    | -    |
| Grade, %                 | -    | 0    | 0    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 26   | 309  | 378  | 22   | 105  | 126  |

| Major/Minor          | Major1 |   | Major2 |   | Minor2 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 400    | 0 | -      | 0 | 750    | 389   |
| Stage 1              | -      | - | -      | - | 389    | -     |
| Stage 2              | -      | - | -      | - | 361    | -     |
| Critical Hdwy        | 4.12   | - | -      | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | 2.218  | - | -      | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | 1159   | - | -      | - | 379    | 659   |
| Stage 1              | -      | - | -      | - | 685    | -     |
| Stage 2              | -      | - | -      | - | 705    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | 1159   | - | -      | - | 369    | 659   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 369    | -     |
| Stage 1              | -      | - | -      | - | 685    | -     |
| Stage 2              | -      | - | -      | - | 686    | -     |

| Approach             | EB  | WB | SB |
|----------------------|-----|----|----|
| HCM Control Delay, s | 0.6 | 0  | 19 |
| HCM LOS              |     |    | C  |

| Minor Lane/Major Mvmt | EBL   | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h)      | 1159  | -   | -   | -   | 485   |
| HCM Lane V/C Ratio    | 0.023 | -   | -   | -   | 0.477 |
| HCM Control Delay (s) | 8.2   | 0   | -   | -   | 19    |
| HCM Lane LOS          | A     | A   | -   | -   | C     |
| HCM 95th %tile Q(veh) | 0.1   | -   | -   | -   | 2.5   |

15: Brazos St & Parking Dr. 1  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 9.4  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | ↑    |      |      | ↑    | ↑    |      |
| Traffic Vol, veh/h       | 242  | 145  | 30   | 199  | 52   | 50   |
| Future Vol, veh/h        | 242  | 145  | 30   | 199  | 52   | 50   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 263  | 158  | 33   | 216  | 57   | 54   |

| Major/Minor          | Minor2 | Major1 |       | Major2 |     |
|----------------------|--------|--------|-------|--------|-----|
| Conflicting Flow All | 366    | 84     | 111   | 0      | - 0 |
| Stage 1              | 84     | -      | -     | -      | -   |
| Stage 2              | 282    | -      | -     | -      | -   |
| Critical Hdwy        | 6.42   | 6.22   | 4.12  | -      | -   |
| Critical Hdwy Stg 1  | 5.42   | -      | -     | -      | -   |
| Critical Hdwy Stg 2  | 5.42   | -      | -     | -      | -   |
| Follow-up Hdwy       | 3.518  | 3.318  | 2.218 | -      | -   |
| Pot Cap-1 Maneuver   | 634    | 975    | 1479  | -      | -   |
| Stage 1              | 939    | -      | -     | -      | -   |
| Stage 2              | 766    | -      | -     | -      | -   |
| Platoon blocked, %   |        |        |       | -      | -   |
| Mov Cap-1 Maneuver   | 618    | 975    | 1479  | -      | -   |
| Mov Cap-2 Maneuver   | 618    | -      | -     | -      | -   |
| Stage 1              | 939    | -      | -     | -      | -   |
| Stage 2              | 747    | -      | -     | -      | -   |

| Approach             | EB   | NB |  | SB |  |
|----------------------|------|----|--|----|--|
| HCM Control Delay, s | 16.9 | 1  |  | 0  |  |
| HCM LOS              | C    |    |  |    |  |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1479  | -   | 716   | -   | -   |
| HCM Lane V/C Ratio    | 0.022 | -   | 0.588 | -   | -   |
| HCM Control Delay (s) | 7.5   | 0   | 16.9  | -   | -   |
| HCM Lane LOS          | A     | A   | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.1   | -   | 3.9   | -   | -   |

17: Trinity St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 7.1  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    |      |      | ↑    |      | ↑    | ↑↑↑  |      |      |      |      |
| Traffic Vol, veh/h       | 180  | 0    | 0    | 0    | 0    | 0    | 173  | 595  | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 180  | 0    | 0    | 0    | 0    | 0    | 173  | 595  | 0    | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 18   | 0    | 0    | 0    | 21   | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 115  | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | -    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 212  | 0    | 0    | 0    | 0    | 0    | 204  | 700  | 0    | 0    | 0    | 0    |

| Major/Minor          | Minor2 | Major2 |   |       | Major1 |   |   |
|----------------------|--------|--------|---|-------|--------|---|---|
| Conflicting Flow All | 709    | 1129   | - | - - 0 | 22     | 0 | - |
| Stage 1              | 22     | 22     | - | - - - | -      | - | - |
| Stage 2              | 687    | 1107   | - | - - - | -      | - | - |
| Critical Hdwy        | 6.08   | 6.53   | - | - - - | 4.13   | - | - |
| Critical Hdwy Stg 1  | 5.43   | 5.53   | - | - - - | -      | - | - |
| Critical Hdwy Stg 2  | 6.03   | 5.53   | - | - - - | -      | - | - |
| Follow-up Hdwy       | 3.669  | 4.019  | - | - - - | 2.219  | - | - |
| Pot Cap-1 Maneuver   | 416    | 203    | 0 | 0 - - | 1593   | - | 0 |
| Stage 1              | 960    | 877    | 0 | 0 - - | -      | - | 0 |
| Stage 2              | 432    | 285    | 0 | 0 - - | -      | - | 0 |
| Platoon blocked, %   |        |        |   | - - - | -      | - | - |
| Mov Cap-1 Maneuver   | 348    | 0      | - | - - - | 1593   | - | - |
| Mov Cap-2 Maneuver   | 348    | 0      | - | - - - | -      | - | - |
| Stage 1              | 941    | 0      | - | - - - | -      | - | - |
| Stage 2              | 369    | 0      | - | - - - | -      | - | - |

| Approach             | EB   | WB |  |  | NB  |  |  |
|----------------------|------|----|--|--|-----|--|--|
| HCM Control Delay, s | 30.2 | 0  |  |  | 1.7 |  |  |
| HCM LOS              | D    |    |  |  |     |  |  |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | WBT | WBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1593  | -   | 348   | -   | -   |
| HCM Lane V/C Ratio    | 0.128 | -   | 0.609 | -   | -   |
| HCM Control Delay (s) | 7.6   | -   | 30.2  | -   | -   |
| HCM Lane LOS          | A     | -   | D     | -   | -   |
| HCM 95th %tile Q(veh) | 0.4   | -   | 3.8   | -   | -   |

25: San Jacinto Blvd & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 69.2 |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    | ↑    |      | ↑    |      |      |      |      | ↑↑   | ↑    | ↑    |
| Traffic Vol, veh/h       | 0    | 147  | 159  | 36   | 43   | 0    | 0    | 0    | 0    | 106  | 1013 | 20   |
| Future Vol, veh/h        | 0    | 147  | 159  | 36   | 43   | 0    | 0    | 0    | 0    | 106  | 1013 | 20   |
| Conflicting Peds, #/hr   | 0    | 0    | 19   | 0    | 0    | 0    | 0    | 0    | 0    | 96   | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 40   | -    | -    | -    | -    | -    | -    | -    | -    | 50   |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 173  | 187  | 42   | 51   | 0    | 0    | 0    | 0    | 125  | 1192 | 24   |

| Major/Minor          | Minor2 |       |      | Minor1 |      |   | Major2 |   |   |
|----------------------|--------|-------|------|--------|------|---|--------|---|---|
| Conflicting Flow All | -      | 1537  | 615  | 1047   | 1537 | - | 96     | 0 | 0 |
| Stage 1              | -      | 1441  | -    | 96     | 96   | - | -      | - | - |
| Stage 2              | -      | 96    | -    | 951    | 1441 | - | -      | - | - |
| Critical Hdwy        | -      | 6.54  | 6.94 | 7.54   | 6.54 | - | 4.14   | - | - |
| Critical Hdwy Stg 1  | -      | 5.54  | -    | -      | -    | - | -      | - | - |
| Critical Hdwy Stg 2  | -      | -     | -    | 6.54   | 5.54 | - | -      | - | - |
| Follow-up Hdwy       | -      | 4.02  | 3.32 | 3.52   | 4.02 | - | 2.22   | - | - |
| Pot Cap-1 Maneuver   | 0      | ~ 115 | 434  | 182    | 115  | 0 | 1496   | - | - |
| Stage 1              | 0      | 196   | -    | -      | -    | 0 | -      | - | - |
| Stage 2              | 0      | -     | -    | 279    | 196  | 0 | -      | - | - |
| Platoon blocked, %   | -      | -     | -    | -      | -    | - | -      | - | - |
| Mov Cap-1 Maneuver   | -      | ~ 77  | 434  | -      | 77   | - | 1496   | - | - |
| Mov Cap-2 Maneuver   | -      | ~ 77  | -    | -      | 77   | - | -      | - | - |
| Stage 1              | -      | ~ 145 | -    | -      | -    | - | -      | - | - |
| Stage 2              | -      | -     | -    | -      | 145  | - | -      | - | - |

| Approach             | EB       | WB | SB  |
|----------------------|----------|----|-----|
| HCM Control Delay, s | \$ 340.1 |    | 1.2 |
| HCM LOS              | F        | -  |     |

| Minor Lane/Major Mvmt | EBLn1    | EBLn2WBLn1 | SBL | SBT   | SBR |
|-----------------------|----------|------------|-----|-------|-----|
| Capacity (veh/h)      | 77       | 434        | -   | 1496  | -   |
| HCM Lane V/C Ratio    | 2.246    | 0.431      | -   | 0.083 | -   |
| HCM Control Delay (s) | \$ 686.9 | 19.4       | -   | 7.6   | 0.5 |
| HCM Lane LOS          | F        | C          | -   | A     | A   |
| HCM 95th %tile Q(veh) | 16       | 2.1        | -   | 0.3   | -   |

| Notes                      |                        |                            |                                |  |
|----------------------------|------------------------|----------------------------|--------------------------------|--|
| -: Volume exceeds capacity | \$: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |  |

26: Trinity St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 4    |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | ↓    |      | ↑↑↑  | ↑↑↑  |      |      |
| Traffic Vol, veh/h       | 228  | 0    | 20   | 540  | 0    | 0    |
| Future Vol, veh/h        | 228  | 0    | 20   | 540  | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | -    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 83   | 83   | 83   | 83   | 83   | 83   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 275  | 0    | 24   | 651  | 0    | 0    |

| Major/Minor          | Minor2 | Major1 |      |   |
|----------------------|--------|--------|------|---|
| Conflicting Flow All | 308    | -      | 0    | 0 |
| Stage 1              | 0      | -      | -    | - |
| Stage 2              | 308    | -      | -    | - |
| Critical Hdwy        | 5.74   | -      | 5.34 | - |
| Critical Hdwy Stg 1  | -      | -      | -    | - |
| Critical Hdwy Stg 2  | 6.04   | -      | -    | - |
| Follow-up Hdwy       | 3.82   | -      | 3.12 | - |
| Pot Cap-1 Maneuver   | 676    | 0      | -    | - |
| Stage 1              | -      | 0      | -    | - |
| Stage 2              | 659    | 0      | -    | - |
| Platoon blocked, %   | -      | -      | -    | - |
| Mov Cap-1 Maneuver   | 676    | -      | -    | - |
| Mov Cap-2 Maneuver   | 676    | -      | -    | - |
| Stage 1              | -      | -      | -    | - |
| Stage 2              | 659    | -      | -    | - |

| Approach             | EB   | NB |
|----------------------|------|----|
| HCM Control Delay, s | 13.9 |    |
| HCM LOS              | B    |    |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 |
|-----------------------|-----|-----|-------|
| Capacity (veh/h)      | -   | -   | 676   |
| HCM Lane V/C Ratio    | -   | -   | 0.406 |
| HCM Control Delay (s) | -   | -   | 13.9  |
| HCM Lane LOS          | -   | -   | B     |
| HCM 95th %tile Q(veh) | -   | -   | 2     |

27: Guadalupe St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 38.7 |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↱    |      |      | ↱    |      |      |      |      | ↱↲   | ↱    | ↲    |
| Traffic Vol, veh/h       | 0    | 20   | 12   | 87   | 96   | 0    | 0    | 0    | 0    | 27   | 1268 | 23   |
| Future Vol, veh/h        | 0    | 20   | 12   | 87   | 96   | 0    | 0    | 0    | 0    | 27   | 1268 | 23   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 24   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 42   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 23   | 14   | 100  | 110  | 0    | 0    | 0    | 0    | 31   | 1457 | 26   |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |   |          |
|----------------------|--------|------|--------|------|--------|---|----------|
| Conflicting Flow All | -      | 1562 | 795    | 826  | 1562   | - | 0 0 0    |
| Stage 1              | -      | 1562 | -      | 0    | 0      | - | - - -    |
| Stage 2              | -      | 0    | -      | 826  | 1562   | - | - - -    |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | - | 4.14 - - |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | - | - - -    |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | - | - - -    |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | - | 2.22 - - |
| Pot Cap-1 Maneuver   | 0      | 111  | 330    | 264  | 111    | 0 | - - -    |
| Stage 1              | 0      | 171  | -      | -    | -      | 0 | - - -    |
| Stage 2              | 0      | -    | -      | 332  | 171    | 0 | - - -    |
| Platoon blocked, %   | -      | -    | -      | -    | -      | - | - - -    |
| Mov Cap-1 Maneuver   | -      | 107  | 317    | 211  | ~ 107  | - | - - -    |
| Mov Cap-2 Maneuver   | -      | 107  | -      | 211  | ~ 107  | - | - - -    |
| Stage 1              | -      | 164  | -      | -    | -      | - | - - -    |
| Stage 2              | -      | -    | -      | 273  | 164    | - | - - -    |

| Approach             | EB |  | WB       |  | SB |  |  |
|----------------------|----|--|----------|--|----|--|--|
| HCM Control Delay, s | 39 |  | \$ 317.5 |  |    |  |  |
| HCM LOS              | E  |  | F        |  |    |  |  |

| Minor Lane/Major Mvmt | EBLn1WBLn1  | SBL | SBT | SBR |
|-----------------------|-------------|-----|-----|-----|
| Capacity (veh/h)      | 142 140     | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.259 1.502 | -   | -   | -   |
| HCM Control Delay (s) | 39\$ 317.5  | -   | -   | -   |
| HCM Lane LOS          | E F         | -   | -   | -   |
| HCM 95th %tile Q(veh) | 1 14.3      | -   | -   | -   |

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

29: Colorado St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 5.4  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↱    |      |      | ↱    |      |      |      |      | ↱↲   | ↱    | ↲    |
| Traffic Vol, veh/h       | 6    | 70   | 14   | 18   | 36   | 8    | 15   | 67   | 41   | 10   | 367  | 41   |
| Future Vol, veh/h        | 6    | 70   | 14   | 18   | 36   | 8    | 15   | 67   | 41   | 10   | 367  | 41   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 15   | 87   | 0    | 0    | 0    | 0    | 87   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 8    | 90   | 18   | 23   | 46   | 10   | 19   | 86   | 53   | 13   | 471  | 53   |

| Major/Minor          | Minor2 |       | Minor1 |       | Major1 |       |       | Major2 |   |           |
|----------------------|--------|-------|--------|-------|--------|-------|-------|--------|---|-----------|
| Conflicting Flow All | 803    | 786   | 584    | 727   | 787    | 127   | 610   | 0      | 0 | 138 0 0   |
| Stage 1              | 609    | 609   | -      | 151   | 151    | -     | -     | -      | - | - - -     |
| Stage 2              | 194    | 177   | -      | 576   | 636    | -     | -     | -      | - | - - -     |
| Critical Hdwy        | 7.12   | 6.52  | 6.22   | 7.12  | 6.52   | 6.22  | 4.12  | -      | - | 4.12 - -  |
| Critical Hdwy Stg 1  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -     | -      | - | - - -     |
| Critical Hdwy Stg 2  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -     | -      | - | - - -     |
| Follow-up Hdwy       | 3.518  | 4.018 | 3.318  | 3.518 | 4.018  | 3.318 | 2.218 | -      | - | 2.218 - - |
| Pot Cap-1 Maneuver   | 302    | 324   | 512    | 339   | 324    | 923   | 969   | -      | - | 1446 - -  |
| Stage 1              | 482    | 485   | -      | 851   | 772    | -     | -     | -      | - | - - -     |
| Stage 2              | 808    | 753   | -      | 503   | 472    | -     | -     | -      | - | - - -     |
| Platoon blocked, %   | -      | -     | -      | -     | -      | -     | -     | -      | - | - - -     |
| Mov Cap-1 Maneuver   | 231    | 287   | 470    | 241   | 287    | 910   | 969   | -      | - | 1425 - -  |
| Mov Cap-2 Maneuver   | 231    | 287   | -      | 241   | 287    | -     | -     | -      | - | - - -     |
| Stage 1              | 433    | 439   | -      | 833   | 756    | -     | -     | -      | - | - - -     |
| Stage 2              | 724    | 737   | -      | 380   | 427    | -     | -     | -      | - | - - -     |

| Approach             | EB   |  | WB   |  | NB  |  |  | SB  |  |  |
|----------------------|------|--|------|--|-----|--|--|-----|--|--|
| HCM Control Delay, s | 24.3 |  | 21.5 |  | 1.1 |  |  | 0.2 |  |  |
| HCM LOS              | C    |  | C    |  |     |  |  |     |  |  |

| Minor Lane/Major Mvmt | NBL  | NBT | NBR | EBLn1WBLn1        | SBL | SBT | SBR |
|-----------------------|------|-----|-----|-------------------|-----|-----|-----|
| Capacity (veh/h)      | 969  | -   | -   | 300 297 1425      | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.02 | -   | -   | 0.385 0.268 0.009 | -   | -   | -   |
| HCM Control Delay (s) | 8.8  | 0   | -   | 24.3 21.5 7.5     | 0   | -   | -   |
| HCM Lane LOS          | A    | A   | -   | C C A A           | A   | -   | -   |
| HCM 95th %tile Q(veh) | 0.1  | -   | -   | 1.7 1.1 0         | -   | -   | -   |

30: N. Congress Ave  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 9.9  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    |      |      | ↑    |      |      | ↑    |      |      | ↑    |      |
| Traffic Vol, veh/h       | 0    | 124  | 0    | 0    | 125  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 0    | 124  | 0    | 0    | 125  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 58   | 0    | 25   | 21   | 0    | 0    | 0    | 0    | 21   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 153  | 0    | 0    | 154  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |

| Major/Minor          | Minor2 |       |   | Minor1 |       |   | Major1 |   |   | Major2 |   |   |
|----------------------|--------|-------|---|--------|-------|---|--------|---|---|--------|---|---|
| Conflicting Flow All | -      | 1     | - | -      | 1     | - | -      | 0 | - | -      | - | 0 |
| Stage 1              | -      | 1     | - | -      | 0     | - | -      | - | - | -      | - | - |
| Stage 2              | -      | 0     | - | -      | 1     | - | -      | - | - | -      | - | - |
| Critical Hdwy        | -      | 6.52  | - | -      | 6.52  | - | -      | - | - | -      | - | - |
| Critical Hdwy Stg 1  | -      | 5.52  | - | -      | 5.52  | - | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | -      | 5.52  | - | -      | 5.52  | - | -      | - | - | -      | - | - |
| Follow-up Hdwy       | -      | 4.018 | - | -      | 4.018 | - | -      | - | - | -      | - | - |
| Pot Cap-1 Maneuver   | 0      | 895   | 0 | 0      | 895   | 0 | 0      | - | 0 | 0      | - | 0 |
| Stage 1              | 0      | 895   | 0 | 0      | -     | 0 | 0      | - | 0 | 0      | - | 0 |
| Stage 2              | 0      | -     | 0 | 0      | 895   | 0 | 0      | - | 0 | -      | 0 | 0 |
| Platoon blocked, %   | -      | -     | - | -      | -     | - | -      | - | - | -      | - | - |
| Mov Cap-1 Maneuver   | -      | 895   | - | -      | 895   | - | -      | - | - | -      | - | - |
| Mov Cap-2 Maneuver   | -      | 895   | - | -      | 895   | - | -      | - | - | -      | - | - |
| Stage 1              | -      | 895   | - | -      | -     | - | -      | - | - | -      | - | - |
| Stage 2              | -      | -     | - | -      | 895   | - | -      | - | - | -      | - | - |

| Approach             | EB  |  |  | WB  |  |  | NB |  |  | SB |  |  |
|----------------------|-----|--|--|-----|--|--|----|--|--|----|--|--|
| HCM Control Delay, s | 9.9 |  |  | 9.9 |  |  | 0  |  |  | 0  |  |  |
| HCM LOS              | A   |  |  | A   |  |  |    |  |  |    |  |  |

| Minor Lane/Major Mvmt | NBT | EBLn1 | WBLn1 | SBT |
|-----------------------|-----|-------|-------|-----|
| Capacity (veh/h)      | -   | 895   | 895   | -   |
| HCM Lane V/C Ratio    | -   | 0.171 | 0.172 | -   |
| HCM Control Delay (s) | -   | 9.9   | 9.9   | -   |
| HCM Lane LOS          | -   | A     | A     | -   |
| HCM 95th %tile Q(veh) | -   | 0.6   | 0.6   | -   |

31: Brazos St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.9  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑    |      |      | ↑    | ↑    |      |
| Traffic Vol, veh/h       | 81   | 0    | 15   | 45   | 37   | 0    |
| Future Vol, veh/h        | 81   | 0    | 15   | 45   | 37   | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 1    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 58   | 58   | 58   | 58   | 58   | 58   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 140  | 0    | 26   | 78   | 64   | 0    |






| Major/Minor          | Major1 |   | Major2 |   | Minor1 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 0      | 0 | 141    | 0 | 270    | 141   |
| Stage 1              | -      | - | -      | - | 141    | -     |
| Stage 2              | -      | - | -      | - | 129    | -     |
| Critical Hdwy        | -      | - | 4.12   | - | 7.12   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 6.12   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 6.12   | -     |
| Follow-up Hdwy       | -      | - | 2.218  | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | -      | - | 1442   | - | 683    | 907   |
| Stage 1              | -      | - | -      | - | 862    | -     |
| Stage 2              | -      | - | -      | - | 875    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | -      | - | 1442   | - | 672    | 906   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 672    | -     |
| Stage 1              | -      | - | -      | - | 862    | -     |
| Stage 2              | -      | - | -      | - | 858    | -     |

| Approach             | EB |  | WB  |  | NB   |  |
|----------------------|----|--|-----|--|------|--|
| HCM Control Delay, s | 0  |  | 1.9 |  | 10.9 |  |
| HCM LOS              |    |  |     |  | B    |  |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 672   | -   | -   | 1442  | -   |
| HCM Lane V/C Ratio    | 0.095 | -   | -   | 0.018 | -   |
| HCM Control Delay (s) | 10.9  | -   | -   | 7.5   | 0   |
| HCM Lane LOS          | B     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 0.3   | -   | -   | 0.1   | -   |

32: San Jacinto Blvd & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection             |      |   |      |      |   |   |
|--------------------------|------|---|------|------|---|---|
| Int Delay, s/veh         | 0.9  |   |      |      |   |   |
| Movement                 | EBL  | EBR   | NBL  | NBT  | SBT   | SBR   |
| Lane Configurations      |      |  |      |      |    |  |
| Traffic Vol, veh/h       | 0    | 62  | 0    | 0    | 1277  | 31  |
| Future Vol, veh/h        | 0    | 62  | 0    | 0    | 1277  | 31  |
| Conflicting Peds, #/hr   | 0    | 0   | 0    | 0    | 0   | 15  |
| Sign Control             | Stop | Stop  | Free | Free | Free  | Free  |
| RT Channelized           | -    | None  | -    | None | -   | None  |
| Storage Length           | -    | 0   | -    | -    | -   | 50  |
| Veh in Median Storage, # | 0    | -   | -    | -    | 0   | -   |
| Grade, %                 | 0    | -   | -    | 0    | 0   | -   |
| Peak Hour Factor         | 89   | 89  | 89   | 89   | 89  | 89  |
| Heavy Vehicles, %        | 2    | 2   | 2    | 2    | 2   | 2   |
| Mvmt Flow                | 0    | 70  | 0    | 0    | 1435  | 35  |





| Major/Minor          | Minor2 | Major2 |
|----------------------|--------|--------|
| Conflicting Flow All | - 732  | - 0    |
| Stage 1              | - -    | - -    |
| Stage 2              | - -    | - -    |
| Critical Hdwy        | - 7.14 | - -    |
| Critical Hdwy Stg 1  | - -    | - -    |
| Critical Hdwy Stg 2  | - -    | - -    |
| Follow-up Hdwy       | - 3.92 | - -    |
| Pot Cap-1 Maneuver   | 0 312  | - -    |
| Stage 1              | 0 -    | - -    |
| Stage 2              | 0 -    | - -    |
| Platoon blocked, %   | - -    | - -    |
| Mov Cap-1 Maneuver   | - 308  | - -    |
| Mov Cap-2 Maneuver   | - -    | - -    |
| Stage 1              | - -    | - -    |
| Stage 2              | - -    | - -    |

| Approach             | EB   | SB |
|----------------------|------|----|
| HCM Control Delay, s | 20.1 | 0  |
| HCM LOS              | C    |    |

| Minor Lane/Major Mvmt | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-----|
| Capacity (veh/h)      | 308   | -   | -   |
| HCM Lane V/C Ratio    | 0.226 | -   | -   |
| HCM Control Delay (s) | 20.1  | -   | -   |
| HCM Lane LOS          | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.9   | -   | -   |

33: Colorado St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection             |   |      |   |      |      |   |
|--------------------------|---|------|---|------|------|---|
| Int Delay, s/veh         | 0   |      |   |      |      |   |
| Movement                 | WBL   | WBR  | NBT   | NBR  | SBL  | SBT   |
| Lane Configurations      |   |      |  |      |      |  |
| Traffic Vol, veh/h       | 0   | 0    | 68  | 0    | 0    | 399   |
| Future Vol, veh/h        | 0   | 0    | 68  | 0    | 0    | 399   |
| Conflicting Peds, #/hr   | 0   | 0    | 0   | 0    | 0    | 0   |
| Sign Control             | Stop  | Stop | Free  | Free | Free | Free  |
| RT Channelized           | -   | None | -   | None | -    | None  |
| Storage Length           | 0   | -    | -   | -    | -    | -   |
| Veh in Median Storage, # | 0   | -    | 0   | -    | -    | 0   |
| Grade, %                 | 0   | -    | 0   | -    | -    | 0   |
| Peak Hour Factor         | 92  | 92   | 92  | 92   | 92   | 92  |
| Heavy Vehicles, %        | 2   | 2    | 2   | 2    | 2    | 2   |
| Mvmt Flow                | 0   | 0    | 74  | 0    | 0    | 434   |




| Major/Minor          | Minor1      | Major1 | Major2  |
|----------------------|-------------|--------|---------|
| Conflicting Flow All | 508 74      | 0 0    | 74 0    |
| Stage 1              | 74 -        | - -    | - -     |
| Stage 2              | 434 -       | - -    | - -     |
| Critical Hdwy        | 6.42 6.22   | - -    | 4.12 -  |
| Critical Hdwy Stg 1  | 5.42 -      | - -    | - -     |
| Critical Hdwy Stg 2  | 5.42 -      | - -    | - -     |
| Follow-up Hdwy       | 3.518 3.318 | - -    | 2.218 - |
| Pot Cap-1 Maneuver   | 525 988     | - -    | 1526 -  |
| Stage 1              | 949 -       | - -    | - -     |
| Stage 2              | 653 -       | - -    | - -     |
| Platoon blocked, %   | - -         | - -    | - -     |
| Mov Cap-1 Maneuver   | 525 988     | - -    | 1526 -  |
| Mov Cap-2 Maneuver   | 525 -       | - -    | - -     |
| Stage 1              | 949 -       | - -    | - -     |
| Stage 2              | 653 -       | - -    | - -     |

| Approach             | WB | NB | SB |
|----------------------|----|----|----|
| HCM Control Delay, s | 0  | 0  | 0  |
| HCM LOS              | A  |    |    |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL  | SBT |
|-----------------------|-----|----------|------|-----|
| Capacity (veh/h)      | -   | -        | 1526 | -   |
| HCM Lane V/C Ratio    | -   | -        | -    | -   |
| HCM Control Delay (s) | -   | 0        | 0    | -   |
| HCM Lane LOS          | -   | A        | A    | -   |
| HCM 95th %tile Q(veh) | -   | -        | 0    | -   |

62: Colorado St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection             |   |      |      |   |   |      |
|--------------------------|---|------|------|---|---|------|
| Int Delay, s/veh         | 0   |      |      |   |   |      |
| Movement                 | EBL   | EBR  | NBL  | NBT   | SBT   | SBR  |
| Lane Configurations      |  |      |      |  |  |      |
| Traffic Vol, veh/h       | 0   | 0    | 0    | 68  | 399   | 0    |
| Future Vol, veh/h        | 0   | 0    | 0    | 68  | 399   | 0    |
| Conflicting Peds, #/hr   | 0   | 0    | 0    | 0   | 0   | 0    |
| Sign Control             | Stop  | Stop | Free | Free  | Free  | Free |
| RT Channelized           | -   | None | -    | None  | -   | None |
| Storage Length           | 0   | -    | -    | -   | -   | -    |
| Veh in Median Storage, # | 0   | -    | -    | 0   | 0   | -    |
| Grade, %                 | 0   | -    | -    | 0   | 0   | -    |
| Peak Hour Factor         | 92  | 92   | 92   | 92  | 92  | 92   |
| Heavy Vehicles, %        | 2   | 2    | 2    | 2   | 2   | 2    |
| Mvmt Flow                | 0   | 0    | 0    | 74  | 434   | 0    |




| Major/Minor          | Minor2 | Major1 |       | Major2 |     |
|----------------------|--------|--------|-------|--------|-----|
| Conflicting Flow All | 508    | 434    | 434   | 0      | - 0 |
| Stage 1              | 434    | -      | -     | -      | -   |
| Stage 2              | 74     | -      | -     | -      | -   |
| Critical Hdwy        | 6.42   | 6.22   | 4.12  | -      | -   |
| Critical Hdwy Stg 1  | 5.42   | -      | -     | -      | -   |
| Critical Hdwy Stg 2  | 5.42   | -      | -     | -      | -   |
| Follow-up Hdwy       | 3.518  | 3.318  | 2.218 | -      | -   |
| Pot Cap-1 Maneuver   | 525    | 622    | 1126  | -      | -   |
| Stage 1              | 653    | -      | -     | -      | -   |
| Stage 2              | 949    | -      | -     | -      | -   |
| Platoon blocked, %   | -      | -      | -     | -      | -   |
| Mov Cap-1 Maneuver   | 525    | 622    | 1126  | -      | -   |
| Mov Cap-2 Maneuver   | 525    | -      | -     | -      | -   |
| Stage 1              | 653    | -      | -     | -      | -   |
| Stage 2              | 949    | -      | -     | -      | -   |

| Approach             | EB | NB |  | SB |
|----------------------|----|----|--|----|
| HCM Control Delay, s | 0  | 0  |  | 0  |
| HCM LOS              | A  |    |  |    |

| Minor Lane/Major Mvmt | NBL  | NBT | EBLn1 | SBT | SBR |
|-----------------------|------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1126 | -   | -     | -   | -   |
| HCM Lane V/C Ratio    | -    | -   | -     | -   | -   |
| HCM Control Delay (s) | 0    | -   | 0     | -   | -   |
| HCM Lane LOS          | A    | -   | A     | -   | -   |
| HCM 95th %tile Q(veh) | 0    | -   | -     | -   | -   |

69: E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background  
Timing Plan: PM

| Intersection             |   |      |      |   |   |      |
|--------------------------|---|------|------|---|---|------|
| Int Delay, s/veh         | 0   |      |      |   |   |      |
| Movement                 | EBT   | EBR  | WBL  | WBT   | NBL   | NBR  |
| Lane Configurations      |  |      |      |  |  |      |
| Traffic Vol, veh/h       | 96  | 0    | 0    | 92  | 0   | 0    |
| Future Vol, veh/h        | 96  | 0    | 0    | 92  | 0   | 0    |
| Conflicting Peds, #/hr   | 0   | 0    | 0    | 0   | 0   | 0    |
| Sign Control             | Free  | Free | Free | Free  | Stop  | Stop |
| RT Channelized           | -   | None | -    | None  | -   | None |
| Storage Length           | -   | -    | -    | -   | 0   | -    |
| Veh in Median Storage, # | 0   | -    | -    | 0   | 0   | -    |
| Grade, %                 | 0   | -    | -    | 0   | 0   | -    |
| Peak Hour Factor         | 92  | 92   | 92   | 92  | 92  | 92   |
| Heavy Vehicles, %        | 2   | 2    | 2    | 2   | 2   | 2    |
| Mvmt Flow                | 104   | 0    | 0    | 100   | 0   | 0    |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 0      | 0 | 104    | 0 | 204    | 104   |
| Stage 1              | -      | - | -      | - | 104    | -     |
| Stage 2              | -      | - | -      | - | 100    | -     |
| Critical Hdwy        | -      | - | 4.12   | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | -      | - | 2.218  | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | -      | - | 1488   | - | 784    | 951   |
| Stage 1              | -      | - | -      | - | 920    | -     |
| Stage 2              | -      | - | -      | - | 924    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | -      | - | 1488   | - | 784    | 951   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 784    | -     |
| Stage 1              | -      | - | -      | - | 920    | -     |
| Stage 2              | -      | - | -      | - | 924    | -     |

| Approach             | EB | WB |  | NB |
|----------------------|----|----|--|----|
| HCM Control Delay, s | 0  | 0  |  | 0  |
| HCM LOS              |    |    |  | A  |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL  | WBT |
|-----------------------|-------|-----|-----|------|-----|
| Capacity (veh/h)      | -     | -   | -   | 1488 | -   |
| HCM Lane V/C Ratio    | -     | -   | -   | -    | -   |
| HCM Control Delay (s) | 0     | -   | -   | 0    | -   |
| HCM Lane LOS          | A     | -   | -   | A    | -   |
| HCM 95th %tile Q(veh) | -     | -   | -   | 0    | -   |

1: Martin Luther King Jr. Blvd & Guadalupe St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

|                         | ←     | →     | ↖    | ↗    | ←     | ↖     | ↗    | →    | ↖    | ↗     | →     | ↖     | ↗ |
|-------------------------|-------|-------|------|------|-------|-------|------|------|------|-------|-------|-------|---|
| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR   | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |   |
| Lane Configurations     | ↖     | ↖↗    |      |      | ↖↗    | ↖     |      |      |      | ↖     | ↖↗    | ↖     |   |
| Traffic Volume (vph)    | 67    | 793   | 406  | 0    | 553   | 329   | 0    | 0    | 0    | 289   | 724   | 132   |   |
| Future Volume (vph)     | 67    | 793   | 406  | 0    | 553   | 329   | 0    | 0    | 0    | 289   | 724   | 132   |   |
| Confl. Peds. (#/hr)     | 28    |       | 19   | 19   |       | 28    |      |      |      | 29    |       | 19    |   |
| Confl. Bikes (#/hr)     |       |       | 1    |      |       | 1     |      |      |      |       |       | 13    |   |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94 | 0.94 | 0.94  | 0.94  | 0.94 | 0.94 | 0.94 | 0.94  | 0.94  | 0.94  |   |
| Adj. Flow (vph)         | 71    | 844   | 432  | 0    | 588   | 350   | 0    | 0    | 0    | 307   | 770   | 140   |   |
| Shared Lane Traffic (%) |       |       |      |      |       |       |      |      |      |       |       |       |   |
| Lane Group Flow (vph)   | 71    | 1276  | 0    | 0    | 588   | 350   | 0    | 0    | 0    | 307   | 770   | 140   |   |
| Turn Type               | Prot  | NA    |      |      | NA    | pm+ov |      |      |      | pm+pt | NA    | Perm  |   |
| Protected Phases        | 5     | 2     |      |      | 6     | 7     |      |      |      | 7     | 4     |       |   |
| Permitted Phases        |       |       |      |      | 6     |       |      |      |      | 4     |       | 4     |   |
| Detector Phase          | 5     | 2     |      |      | 6     | 7     |      |      |      | 7     | 4     | 4     |   |
| Switch Phase            |       |       |      |      |       |       |      |      |      |       |       |       |   |
| Minimum Initial (s)     | 2.0   | 15.0  |      |      | 15.0  | 10.0  |      |      |      | 10.0  | 5.0   | 5.0   |   |
| Minimum Split (s)       | 7.0   | 27.0  |      |      | 34.0  | 15.0  |      |      |      | 15.0  | 32.0  | 32.0  |   |
| Total Split (s)         | 18.0  | 75.0  |      |      | 57.0  | 45.0  |      |      |      | 45.0  | 45.0  | 45.0  |   |
| Total Split (%)         | 15.0% | 62.5% |      |      | 47.5% | 37.5% |      |      |      | 37.5% | 37.5% | 37.5% |   |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   | 4.0   |      |      |      | 4.0   | 4.0   | 4.0   |   |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   | 1.0   |      |      |      | 1.0   | 1.0   | 1.0   |   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   | 0.0   |      |      |      | 0.0   | 0.0   | 0.0   |   |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   | 5.0   |      |      |      | 5.0   | 5.0   | 5.0   |   |
| Lead/Lag                | Lag   |       |      |      | Lead  |       |      |      |      |       |       |       |   |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |       |      |      |      |       |       |       |   |
| Recall Mode             | None  | C-Max |      |      | C-Max | None  |      |      |      | None  | Max   | Max   |   |
| Act Effect Green (s)    | 11.6  | 70.0  |      |      | 55.6  | 95.6  |      |      |      | 40.0  | 40.0  | 40.0  |   |
| Actuated g/C Ratio      | 0.10  | 0.58  |      |      | 0.46  | 0.80  |      |      |      | 0.33  | 0.33  | 0.33  |   |
| v/c Ratio               | 0.42  | 0.66  |      |      | 0.36  | 0.27  |      |      |      | 0.52  | 0.65  | 0.25  |   |
| Control Delay           | 57.9  | 18.2  |      |      | 24.1  | 1.4   |      |      |      | 36.1  | 37.2  | 12.6  |   |
| Queue Delay             | 0.0   | 0.0   |      |      | 0.0   | 0.1   |      |      |      | 0.0   | 0.0   | 0.0   |   |
| Total Delay             | 57.9  | 18.2  |      |      | 24.1  | 1.5   |      |      |      | 36.1  | 37.2  | 12.6  |   |
| LOS                     | E     | B     |      |      | C     | A     |      |      |      | D     | D     | B     |   |
| Approach Delay          |       | 20.3  |      |      | 15.6  |       |      |      |      |       | 34.1  |       |   |
| Approach LOS            |       | C     |      |      | B     |       |      |      |      |       | C     |       |   |
| Queue Length 50th (ft)  | 52    | 321   |      |      | 161   | 2     |      |      |      | 191   | 266   | 27    |   |
| Queue Length 95th (ft)  | 100   | 395   |      |      | 234   | 47    |      |      |      | 282   | 335   | 75    |   |
| Internal Link Dist (ft) |       | 228   |      |      | 45    |       | 159  |      |      |       | 210   |       |   |
| Turn Bay Length (ft)    | 160   |       |      |      |       |       |      |      |      | 130   |       | 120   |   |
| Base Capacity (vph)     | 191   | 1948  |      |      | 1639  | 1275  |      |      |      | 590   | 1179  | 564   |   |
| Starvation Cap Reductn  | 0     | 0     |      |      | 0     | 137   |      |      |      | 0     | 0     | 0     |   |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     | 0     |      |      |      | 0     | 0     | 0     |   |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     | 0     |      |      |      | 0     | 0     | 0     |   |
| Reduced v/c Ratio       | 0.37  | 0.66  |      |      | 0.36  | 0.31  |      |      |      | 0.52  | 0.65  | 0.25  |   |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green  
Natural Cycle: 75

MS

Synchro 9 Report  
Page 1

1: Martin Luther King Jr. Blvd & Guadalupe St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 23.9

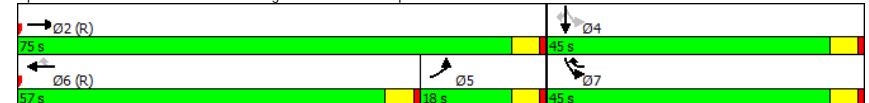
Intersection LOS: C

Intersection Capacity Utilization 66.4%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Martin Luther King Jr. Blvd & Guadalupe St



MS

Synchro 9 Report  
Page 2

3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

|                         | →     | ↖    | ↗    | ←     | ↖     | ↗     |
|-------------------------|-------|------|------|-------|-------|-------|
| Lane Group              | EBT   | EBR  | WBL  | WBT   | NBL   | NBR   |
| Lane Configurations     | ↑↑    |      |      | ↑↑    | ↖↗    | ↖     |
| Traffic Volume (vph)    | 1082  | 0    | 0    | 722   | 368   | 223   |
| Future Volume (vph)     | 1082  | 0    | 0    | 722   | 368   | 223   |
| Confl. Peds. (#/hr)     |       |      |      |       |       | 11    |
| Peak Hour Factor        | 0.86  | 0.86 | 0.86 | 0.86  | 0.86  | 0.86  |
| Adj. Flow (vph)         | 1258  | 0    | 0    | 840   | 428   | 259   |
| Shared Lane Traffic (%) |       |      |      |       |       |       |
| Lane Group Flow (vph)   | 1258  | 0    | 0    | 840   | 428   | 259   |
| Turn Type               | NA    |      |      | NA    | Prot  | Perm  |
| Protected Phases        | 2     |      |      | 6     | 8     |       |
| Permitted Phases        |       |      |      |       |       | 3     |
| Detector Phase          | 2     |      |      | 6     | 8     | 3     |
| Switch Phase            |       |      |      |       |       |       |
| Minimum Initial (s)     | 10.0  |      |      | 10.0  | 5.0   | 5.0   |
| Minimum Split (s)       | 30.0  |      |      | 15.0  | 10.0  | 29.0  |
| Total Split (s)         | 87.0  |      |      | 87.0  | 33.0  | 33.0  |
| Total Split (%)         | 72.5% |      |      | 72.5% | 27.5% | 27.5% |
| Yellow Time (s)         | 4.0   |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |       |      |      |       |       |       |
| Lead-Lag Optimize?      |       |      |      |       |       |       |
| Recall Mode             | C-Max |      |      | C-Max | Max   | Max   |
| Act Effct Green (s)     | 82.0  |      |      | 82.0  | 28.0  | 28.0  |
| Actuated g/C Ratio      | 0.68  |      |      | 0.68  | 0.23  | 0.23  |
| v/c Ratio               | 0.52  |      |      | 0.35  | 0.53  | 0.60  |
| Control Delay           | 8.5   |      |      | 5.8   | 60.7  | 50.4  |
| Queue Delay             | 0.4   |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             | 8.8   |      |      | 5.8   | 60.7  | 50.4  |
| LOS                     | A     |      |      | A     | E     | D     |
| Approach Delay          | 8.8   |      |      | 5.8   | 56.8  |       |
| Approach LOS            | A     |      |      | A     | E     |       |
| Queue Length 50th (ft)  | 156   |      |      | 60    | 179   | 149   |
| Queue Length 95th (ft)  | 168   |      |      | 67    | 213   | 163   |
| Internal Link Dist (ft) | 272   |      |      | 277   | 337   |       |
| Turn Bay Length (ft)    |       |      |      |       |       |       |
| Base Capacity (vph)     | 2418  |      |      | 2418  | 801   | 431   |
| Starvation Cap Reductn  | 552   |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   | 0     |      |      | 0     | 0     | 0     |
| Storage Cap Reductn     | 0     |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       | 0.67  |      |      | 0.35  | 0.53  | 0.60  |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green  
Natural Cycle: 60  
Control Type: Actuated-Coordinated

MS

Synchro 9 Report  
Page 3

3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 19.7

Intersection LOS: B

Intersection Capacity Utilization 58.2%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 3: Lavaca St & Martin Luther King Jr. Blvd

|          |      |
|----------|------|
| → Ø2 (R) | ↖ Ø3 |
| 87 s     | 33 s |
| ← Ø6 (R) | ↖ Ø8 |
| 87 s     | 33 s |

MS

Synchro 9 Report  
Page 4

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

|                         | →     | ↖    | ↗     | ←      | ↖    | ↗    |
|-------------------------|-------|------|-------|--------|------|------|
| Lane Group              | EBT   | EBR  | WBL   | WBT    | NBL  | NBR  |
| Lane Configurations     | ↑↑    |      | ↑     | ↑↑     |      |      |
| Traffic Volume (vph)    | 1118  | 0    | 8     | 1035   | 0    | 0    |
| Future Volume (vph)     | 1118  | 0    | 8     | 1035   | 0    | 0    |
| Confl. Peds. (#/hr)     |       | 6    | 6     |        | 1    |      |
| Confl. Bikes (#/hr)     |       | 1    |       |        |      |      |
| Peak Hour Factor        | 0.89  | 0.89 | 0.89  | 0.89   | 0.89 | 0.89 |
| Adj. Flow (vph)         | 1256  | 0    | 9     | 1163   | 0    | 0    |
| Shared Lane Traffic (%) |       |      |       |        |      |      |
| Lane Group Flow (vph)   | 1256  | 0    | 9     | 1163   | 0    | 0    |
| Turn Type               | NA    |      | pm+pt | NA     |      |      |
| Protected Phases        | 2     |      | 1     | 6      |      |      |
| Permitted Phases        |       |      | 6     |        |      |      |
| Detector Phase          | 2     |      | 1     | 6      |      |      |
| Switch Phase            |       |      |       |        |      |      |
| Minimum Initial (s)     | 15.0  |      | 1.0   | 5.0    |      |      |
| Minimum Split (s)       | 34.0  |      | 5.5   | 29.0   |      |      |
| Total Split (s)         | 107.0 |      | 13.0  | 120.0  |      |      |
| Total Split (%)         | 89.2% |      | 10.8% | 100.0% |      |      |
| Yellow Time (s)         | 4.0   |      | 3.5   | 4.0    |      |      |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0    |      |      |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0    |      |      |
| Total Lost Time (s)     | 5.0   |      | 4.5   | 5.0    |      |      |
| Lead/Lag                | Lead  |      | Lag   |        |      |      |
| Lead-Lag Optimize?      | Yes   |      | Yes   |        |      |      |
| Recall Mode             | C-Max |      | None  | C-Max  |      |      |
| Act Effect Green (s)    | 116.4 |      | 119.1 | 120.0  |      |      |
| Actuated g/C Ratio      | 0.97  |      | 0.99  | 1.00   |      |      |
| v/c Ratio               | 0.37  |      | 0.02  | 0.33   |      |      |
| Control Delay           | 0.5   |      | 0.0   | 0.2    |      |      |
| Queue Delay             | 0.0   |      | 0.0   | 0.0    |      |      |
| Total Delay             | 0.5   |      | 0.0   | 0.2    |      |      |
| LOS                     | A     |      | A     | A      |      |      |
| Approach Delay          | 0.5   |      |       | 0.2    |      |      |
| Approach LOS            | A     |      |       | A      |      |      |
| Queue Length 50th (ft)  | 0     |      | 0     | 0      |      |      |
| Queue Length 95th (ft)  | 46    |      | m0    | 0      |      |      |
| Internal Link Dist (ft) | 366   |      |       | 377    | 331  |      |
| Turn Bay Length (ft)    |       |      | 115   |        |      |      |
| Base Capacity (vph)     | 3433  |      | 488   | 3539   |      |      |
| Starvation Cap Reductn  | 0     |      | 0     | 0      |      |      |
| Spillback Cap Reductn   | 0     |      | 0     | 0      |      |      |
| Storage Cap Reductn     | 0     |      | 0     | 0      |      |      |
| Reduced v/c Ratio       | 0.37  |      | 0.02  | 0.33   |      |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 40

MS

Synchro 9 Report  
Page 5

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.37

Intersection Signal Delay: 0.4

Intersection LOS: A

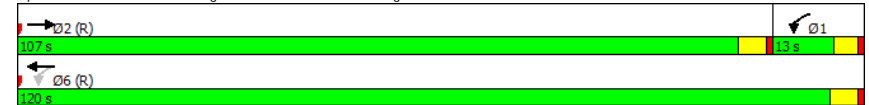
Intersection Capacity Utilization 35.1%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: N. Congress Ave & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 6

6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

|                         | ←     | →     | ↖    | ↗     | ←     | →     | ↖     | ↗     | ←     | →     | ↖     | ↗     |
|-------------------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL   | EBT   | EBR  | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     | ↖     | ↖     | ↖    | ↖     | ↖     | ↖     | ↖     | ↖     | ↖     | ↖     | ↖     | ↖     |
| Traffic Volume (vph)    | 140   | 757   | 228  | 290   | 1027  | 138   | 19    | 0     | 35    | 42    | 1     | 11    |
| Future Volume (vph)     | 140   | 757   | 228  | 290   | 1027  | 138   | 19    | 0     | 35    | 42    | 1     | 11    |
| Confl. Peds. (#/hr)     | 18    |       | 8    | 8     |       | 18    | 23    |       | 7     | 7     |       | 23    |
| Confl. Bikes (#/hr)     |       |       | 3    |       |       | 3     |       |       |       |       |       | 1     |
| Peak Hour Factor        | 0.84  | 0.84  | 0.84 | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  |
| Adj. Flow (vph)         | 167   | 901   | 271  | 345   | 1223  | 164   | 23    | 0     | 42    | 50    | 1     | 13    |
| Shared Lane Traffic (%) |       |       |      |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)   | 167   | 1172  | 0    | 345   | 1223  | 164   | 0     | 23    | 42    | 0     | 51    | 13    |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    | Perm  | Perm  | NA    | Perm  | Perm  | NA    | Perm  |
| Protected Phases        | 5     | 2     |      | 1     | 6     |       |       | 8     |       |       | 4     |       |
| Permitted Phases        | 2     |       |      | 6     |       | 6     | 8     |       | 8     | 4     |       | 4     |
| Detector Phase          | 5     | 2     |      | 1     | 6     | 6     | 8     | 8     | 8     | 4     | 4     | 4     |
| Switch Phase            |       |       |      |       |       |       |       |       |       |       |       |       |
| Minimum Initial (s)     | 1.0   | 10.0  |      | 1.0   | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  |
| Minimum Split (s)       | 5.5   | 22.0  |      | 5.5   | 28.0  | 28.0  | 22.0  | 22.0  | 22.0  | 28.0  | 28.0  | 28.0  |
| Total Split (s)         | 20.0  | 70.0  |      | 20.0  | 70.0  | 70.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  |
| Total Split (%)         | 16.7% | 58.3% |      | 16.7% | 58.3% | 58.3% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% |
| Yellow Time (s)         | 3.5   | 4.0   |      | 3.5   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Total Lost Time (s)     | 4.5   | 5.0   |      | 4.5   | 5.0   | 5.0   |       | 5.0   | 5.0   |       | 5.0   | 5.0   |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   | Lag   |       |       |       |       |       |       |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   | Yes   |       |       |       |       |       |       |
| Recall Mode             | None  | C-Max |      | None  | C-Max | C-Max | Max   | Max   | Max   | Max   | Max   | Max   |
| Act Effect Green (s)    | 75.4  | 65.5  |      | 85.1  | 71.1  | 71.1  |       | 25.0  | 25.0  |       | 25.0  | 25.0  |
| Actuated g/C Ratio      | 0.63  | 0.55  |      | 0.71  | 0.59  | 0.59  |       | 0.21  | 0.21  |       | 0.21  | 0.21  |
| v/c Ratio               | 0.53  | 0.63  |      | 0.91  | 0.58  | 0.18  |       | 0.08  | 0.11  |       | 0.18  | 0.04  |
| Control Delay           | 15.4  | 14.6  |      | 53.1  | 12.0  | 4.2   |       | 39.4  | 6.2   |       | 41.1  | 0.2   |
| Queue Delay             | 0.0   | 0.4   |      | 0.0   | 0.4   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Total Delay             | 15.4  | 15.0  |      | 53.1  | 12.5  | 4.2   |       | 39.4  | 6.2   |       | 41.1  | 0.2   |
| LOS                     | B     | B     |      | D     | B     | A     |       | D     | A     |       | D     | A     |
| Approach Delay          |       | 15.0  |      |       | 19.8  |       |       | 17.9  |       |       | 32.8  |       |
| Approach LOS            |       | B     |      |       | B     |       |       | B     |       |       | C     |       |
| Queue Length 50th (ft)  | 30    | 208   |      | 143   | 206   | 12    |       | 15    | 0     |       | 33    | 0     |
| Queue Length 95th (ft)  | 74    | 180   |      | #258  | 221   | 21    |       | 35    | 16    |       | 65    | 0     |
| Internal Link Dist (ft) |       | 377   |      |       | 273   |       |       | 135   |       |       | 212   |       |
| Turn Bay Length (ft)    | 160   |       |      | 100   |       | 100   |       |       | 100   |       |       |       |
| Base Capacity (vph)     | 403   | 1866  |      | 385   | 2096  | 908   |       | 271   | 367   |       | 284   | 360   |
| Starvation Cap Reductn  | 0     | 265   |      | 0     | 388   | 0     |       | 0     | 0     |       | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Reduced v/c Ratio       | 0.41  | 0.73  |      | 0.90  | 0.72  | 0.18  |       | 0.08  | 0.11  |       | 0.18  | 0.04  |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

MS

Synchro 9 Report  
Page 7

6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 18.0

Intersection LOS: B

Intersection Capacity Utilization 75.7%

ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: Brazos St & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 8

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

|                         | ←    | →     | ↙    | ↘     | ←     | ↙    | ↘    | →    | ↙    | ↘     | →     | ↙     | ↘ |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|---|
| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |   |
| Lane Configurations     |      | ↑↑    |      | ↑     | ↑↑    |      |      |      |      | ↓     | ↑↑    | ↓     |   |
| Traffic Volume (vph)    | 0    | 740   | 189  | 630   | 1473  | 0    | 0    | 0    | 0    | 36    | 51    | 55    |   |
| Future Volume (vph)     | 0    | 740   | 189  | 630   | 1473  | 0    | 0    | 0    | 0    | 36    | 51    | 55    |   |
| Confl. Peds. (#/hr)     |      |       | 53   | 53    |       |      |      |      |      | 7     |       |       |   |
| Confl. Bikes (#/hr)     |      |       | 2    |       |       |      |      |      |      |       |       |       |   |
| Peak Hour Factor        | 0.93 | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93 | 0.93 | 0.93 | 0.93  | 0.93  | 0.93  |   |
| Adj. Flow (vph)         | 0    | 796   | 203  | 677   | 1584  | 0    | 0    | 0    | 0    | 39    | 55    | 59    |   |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |   |
| Lane Group Flow (vph)   | 0    | 999   | 0    | 677   | 1584  | 0    | 0    | 0    | 0    | 39    | 55    | 59    |   |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |   |
| Protected Phases        |      | 2     |      | 1 9   | 6     |      |      |      |      |       | 4     |       |   |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |   |
| Detector Phase          |      | 2     |      | 1 9   | 6     |      |      |      |      | 4     | 4     | 4     |   |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |   |
| Minimum Initial (s)     |      | 5.0   |      |       | 10.0  |      |      |      |      | 10.0  | 10.0  | 10.0  |   |
| Minimum Split (s)       |      | 30.0  |      |       | 30.0  |      |      |      |      | 28.0  | 28.0  | 28.0  |   |
| Total Split (s)         |      | 62.0  |      |       | 92.0  |      |      |      |      | 28.0  | 28.0  | 28.0  |   |
| Total Split (%)         |      | 51.7% |      |       | 76.7% |      |      |      |      | 23.3% | 23.3% | 23.3% |   |
| Yellow Time (s)         |      | 4.0   |      |       | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |   |
| All-Red Time (s)        |      | 1.0   |      |       | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |   |
| Lost Time Adjust (s)    |      | 0.0   |      |       | 0.0   |      |      |      |      | 0.0   | 0.0   | 0.0   |   |
| Total Lost Time (s)     |      | 5.0   |      |       | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |   |
| Lead/Lag                |      | Lag   |      |       |       |      |      |      |      |       |       |       |   |
| Lead-Lag Optimize?      |      | Yes   |      |       |       |      |      |      |      |       |       |       |   |
| Recall Mode             |      | C-Max |      |       | C-Max |      |      |      |      | Max   | Max   | Max   |   |
| Act Effect Green (s)    |      | 57.0  |      | 87.5  | 87.0  |      |      |      |      | 23.0  | 23.0  | 23.0  |   |
| Actuated g/C Ratio      |      | 0.48  |      | 0.73  | 0.72  |      |      |      |      | 0.19  | 0.19  | 0.19  |   |
| v/c Ratio               |      | 0.62  |      | 1.38  | 0.62  |      |      |      |      | 0.12  | 0.08  | 0.17  |   |
| Control Delay           |      | 15.1  |      | 196.5 | 5.6   |      |      |      |      | 41.3  | 40.3  | 2.1   |   |
| Queue Delay             |      | 0.4   |      | 1.2   | 0.8   |      |      |      |      | 0.0   | 0.0   | 0.0   |   |
| Total Delay             |      | 15.5  |      | 197.7 | 6.4   |      |      |      |      | 41.3  | 40.3  | 2.1   |   |
| LOS                     |      | B     |      | F     | A     |      |      |      |      | D     | D     | A     |   |
| Approach Delay          |      | 15.5  |      |       | 63.7  |      |      |      |      |       | 25.8  |       |   |
| Approach LOS            |      | B     |      |       | E     |      |      |      |      |       | C     |       |   |
| Queue Length 50th (ft)  |      | 113   |      | ~333  | 125   |      |      |      |      | 25    | 18    | 0     |   |
| Queue Length 95th (ft)  |      | 123   |      | m#372 | m121  |      |      |      |      | 57    | 37    | 6     |   |
| Internal Link Dist (ft) |      | 273   |      |       | 321   |      |      | 343  |      |       | 244   |       |   |
| Turn Bay Length (ft)    |      |       |      | 120   |       |      |      |      |      | 100   |       | 100   |   |
| Base Capacity (vph)     |      | 1620  |      | 492   | 2565  |      |      |      |      | 335   | 678   | 353   |   |
| Starvation Cap Reductn  |      | 221   |      | 63    | 607   |      |      |      |      | 0     | 0     | 0     |   |
| Spillback Cap Reductn   |      | 0     |      | 0     | 22    |      |      |      |      | 0     | 0     | 13    |   |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |   |
| Reduced v/c Ratio       |      | 0.71  |      | 1.58  | 0.81  |      |      |      |      | 0.12  | 0.08  | 0.17  |   |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 110

MS

Synchro 9 Report  
Page 9

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Lane Group              | Ø1   | Ø9   |
|-------------------------|------|------|
| Lane Configurations     |      |      |
| Traffic Volume (vph)    |      |      |
| Future Volume (vph)     |      |      |
| Confl. Peds. (#/hr)     |      |      |
| Confl. Bikes (#/hr)     |      |      |
| Peak Hour Factor        |      |      |
| Adj. Flow (vph)         |      |      |
| Shared Lane Traffic (%) |      |      |
| Lane Group Flow (vph)   |      |      |
| Turn Type               |      |      |
| Protected Phases        | 1    | 9    |
| Permitted Phases        |      |      |
| Detector Phase          |      |      |
| Switch Phase            |      |      |
| Minimum Initial (s)     | 1.0  | 5.0  |
| Minimum Split (s)       | 5.5  | 9.5  |
| Total Split (s)         | 15.0 | 15.0 |
| Total Split (%)         | 13%  | 13%  |
| Yellow Time (s)         | 3.5  | 3.5  |
| All-Red Time (s)        | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |
| Total Lost Time (s)     |      |      |
| Lead/Lag                | Lead |      |
| Lead-Lag Optimize?      | Yes  |      |
| Recall Mode             | None | None |
| Act Effect Green (s)    |      |      |
| Actuated g/C Ratio      |      |      |
| v/c Ratio               |      |      |
| Control Delay           |      |      |
| Queue Delay             |      |      |
| Total Delay             |      |      |
| LOS                     |      |      |
| Approach Delay          |      |      |
| Approach LOS            |      |      |
| Queue Length 50th (ft)  |      |      |
| Queue Length 95th (ft)  |      |      |
| Internal Link Dist (ft) |      |      |
| Turn Bay Length (ft)    |      |      |
| Base Capacity (vph)     |      |      |
| Starvation Cap Reductn  |      |      |
| Spillback Cap Reductn   |      |      |
| Storage Cap Reductn     |      |      |
| Reduced v/c Ratio       |      |      |

Intersection Summary

MS

Synchro 9 Report  
Page 10

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.38

Intersection Signal Delay: 47.9

Intersection LOS: D

Intersection Capacity Utilization 94.4%

ICU Level of Service F

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

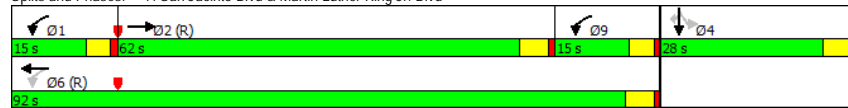
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: San Jacinto Blvd & Martin Luther King Jr. Blvd



8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↩     | ↩↩    |      |      | ↩↩    |      | ↩     | ↩     | ↩     |      |      |      |
| Traffic Volume (vph)    | 152   | 542   | 0    | 0    | 1985  | 58   | 67    | 84    | 125   | 0    | 0    | 0    |
| Future Volume (vph)     | 152   | 542   | 0    | 0    | 1985  | 58   | 67    | 84    | 125   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     |       |       | 35   |      |       | 58   | 34    |       | 28    |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       | 4    |       |       | 4     |      |      |      |
| Peak Hour Factor        | 0.89  | 0.89  | 0.89 | 0.89 | 0.89  | 0.89 | 0.89  | 0.89  | 0.89  | 0.89 | 0.89 | 0.89 |
| Adj. Flow (vph)         | 171   | 609   | 0    | 0    | 2230  | 65   | 75    | 94    | 140   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       | 10%  |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 171   | 609   | 0    | 0    | 2295  | 0    | 67    | 102   | 140   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 1.0   | 10.0  |      |      | 1.0   |      | 10.0  | 10.0  | 10.0  |      |      |      |
| Minimum Split (s)       | 5.5   | 26.0  |      |      | 5.5   |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (s)         | 15.0  | 94.0  |      |      | 79.0  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (%)         | 12.5% | 78.3% |      |      | 65.8% |      | 21.7% | 21.7% | 21.7% |      |      |      |
| Yellow Time (s)         | 3.5   | 4.0   |      |      | 3.5   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 4.5   | 5.0   |      |      | 4.5   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 89.5  | 89.0  |      |      | 75.0  |      | 21.0  | 21.0  | 21.0  |      |      |      |
| Actuated g/C Ratio      | 0.75  | 0.74  |      |      | 0.62  |      | 0.18  | 0.18  | 0.18  |      |      |      |
| v/c Ratio               | 0.82  | 0.23  |      |      | 1.04  |      | 0.24  | 0.33  | 0.37  |      |      |      |
| Control Delay           | 74.8  | 1.0   |      |      | 35.9  |      | 41.4  | 42.5  | 8.9   |      |      |      |
| Queue Delay             | 0.0   | 0.1   |      |      | 23.8  |      | 2.6   | 0.0   | 0.0   |      |      |      |
| Total Delay             | 74.8  | 1.1   |      |      | 59.7  |      | 44.0  | 42.5  | 8.9   |      |      |      |
| LOS                     | E     | A     |      |      | E     |      | D     | D     | A     |      |      |      |
| Approach Delay          |       | 17.3  |      |      | 59.7  |      |       | 27.6  |       |      |      |      |
| Approach LOS            |       | B     |      |      | E     |      |       | C     |       |      |      |      |
| Queue Length 50th (ft)  | 98    | 13    |      |      | -314  |      | 45    | 71    | 5     |      |      |      |
| Queue Length 95th (ft)  | #195  | 16    |      |      | m98   |      | m67   | m98   | m28   |      |      |      |
| Internal Link Dist (ft) |       | 321   |      |      | 675   |      |       | 350   |       |      | 106  |      |
| Turn Bay Length (ft)    | 120   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 217   | 2624  |      |      | 2201  |      | 277   | 306   | 374   |      |      |      |
| Starvation Cap Reductn  | 0     | 962   |      |      | 1     |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 239   |      | 133   | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.79  | 0.37  |      |      | 1.17  |      | 0.47  | 0.33  | 0.37  |      |      |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 130

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.04

Intersection Signal Delay: 47.0

Intersection LOS: D

Intersection Capacity Utilization 94.4%

ICU Level of Service F

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

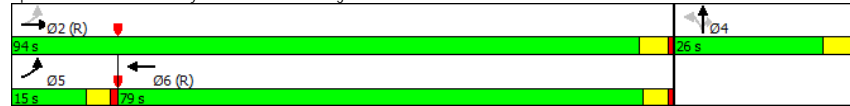
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Trinity St & Martin Luther King Jr. Blvd



18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

|  | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|--|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations  |      | ↑    | ↑    |      | ↑    |      |      |      |      |      | ↑    | ↑    |
| Traffic Volume (vph)                                       | 0    | 14   | 47   | 52   | 10   | 0    | 0    | 0    | 0    | 127  | 1177 | 18   |
| Future Volume (vph)  | 0    | 14   | 47   | 52   | 10   | 0    | 0    | 0    | 0    | 127  | 1177 | 18   |
| Confl. Peds. (#/hr)  |      |      | 18   |      |      |      |      |      |      | 45   |      |      |
| Peak Hour Factor   | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Parking (#/hr)   |      | 0    |      |      |      |      |      |      |      |      |      |      |
| Adj. Flow (vph)  | 0    | 15   | 51   | 57   | 11   | 0    | 0    | 0    | 0    | 138  | 1279 | 20   |
| Shared Lane Traffic (%)                                    |      |      |      |      |      |      |      |      |      |      |      |      |
| Lane Group Flow (vph)                                      | 0    | 15   | 51   | 0    | 68   | 0    | 0    | 0    | 0    | 0    | 1437 | 0    |
| Turn Type  |      | NA   | Perm | Perm | NA   |      |      |      |      | Perm | NA   |      |
| Protected Phases   |      | 4 12 |      |      | 4 12 |      |      |      |      |      | 2 10 |      |
| Permitted Phases   |      |      | 4 12 | 4 12 |      |      |      |      |      | 2 10 |      |      |
| Detector Phase   |      | 4 12 | 4 12 | 4 12 | 4 12 |      |      |      |      | 2 10 | 2 10 |      |
| Switch Phase   |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Initial (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Split (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (%)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Yellow Time (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| All-Red Time (s)   |      |      |      |      |      |      |      |      |      |      |      |      |
| Lost Time Adjust (s)                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Lost Time (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead/Lag   |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead-Lag Optimize?   |      |      |      |      |      |      |      |      |      |      |      |      |
| Recall Mode  |      |      |      |      |      |      |      |      |      |      |      |      |
| Act Effect Green (s)                                       |      | 21.8 | 21.8 |      | 21.8 |      |      |      |      |      | 82.9 |      |
| Actuated g/C Ratio   |      | 0.18 | 0.18 |      | 0.18 |      |      |      |      |      | 0.69 |      |
| v/c Ratio  |      | 0.05 | 0.16 |      | 0.27 |      |      |      |      |      | 0.60 |      |
| Control Delay  |      | 20.7 | 3.9  |      | 27.4 |      |      |      |      |      | 8.0  |      |
| Queue Delay  |      | 0.0  | 0.0  |      | 0.0  |      |      |      |      |      | 0.0  |      |
| Total Delay  |      | 20.7 | 3.9  |      | 27.4 |      |      |      |      |      | 8.0  |      |
| LOS  |      | C    | A    |      | C    |      |      |      |      |      | A    |      |
| Approach Delay   |      | 7.7  |      |      | 27.4 |      |      |      |      |      | 8.0  |      |
| Approach LOS   |      | A    |      |      | C    |      |      |      |      |      | A    |      |
| Queue Length 50th (ft)                                     |      | 5    | 0    |      | 37   |      |      |      |      |      | 188  |      |
| Queue Length 95th (ft)                                     |      | 16   | 13   |      | 51   |      |      |      |      |      | 228  |      |
| Internal Link Dist (ft)                                    |      | 177  |      |      | 244  |      |      | 271  |      |      | 262  |      |
| Turn Bay Length (ft)                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| Base Capacity (vph)  |      | 754  | 714  |      | 628  |      |      |      |      |      | 2392 |      |
| Starvation Cap Reductn                                     |      | 0    | 0    |      | 0    |      |      |      |      |      | 0    |      |
| Spillback Cap Reductn                                      |      | 0    | 0    |      | 0    |      |      |      |      |      | 0    |      |
| Storage Cap Reductn  |      | 0    | 0    |      | 0    |      |      |      |      |      | 0    |      |
| Reduced v/c Ratio  |      | 0.02 | 0.07 |      | 0.11 |      |      |      |      |      | 0.60 |      |
| <b>Intersection Summary</b>                                |      |      |      |      |      |      |      |      |      |      |      |      |
| Cycle Length: 120  |      |      |      |      |      |      |      |      |      |      |      |      |
| Actuated Cycle Length: 120                                 |      |      |      |      |      |      |      |      |      |      |      |      |
| Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green |      |      |      |      |      |      |      |      |      |      |      |      |
| Natural Cycle: 95  |      |      |      |      |      |      |      |      |      |      |      |      |

18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 23.0  | 23.0 | 22.5 | 22.5 |
| Total Split (s)         | 26.0  | 43.0 | 28.0 | 23.0 |
| Total Split (%)         | 22%   | 36%  | 23%  | 19%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effect Green (s)    |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 8.9

Intersection LOS: A

Intersection Capacity Utilization 77.5%

ICU Level of Service D



















Analysis Period (min) 15

Splits and Phases: 18: Guadalupe St & E. 17th St



19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

|  |  |  |  |  |  |  |  |    |  |  |  |  |
|--|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group   | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations  |   |  |   |   |  |   |   |    |  |   |   |   |
| Traffic Volume (vph)                                       | 4   | 121   | 0   | 0   | 27  | 26  | 88  | 800   | 131   | 0   | 0   | 0   |
| Future Volume (vph)  | 4   | 121   | 0   | 0   | 27  | 26  | 88  | 800   | 131   | 0   | 0   | 0   |
| Confl. Peds. (#/hr)  | 31  |   |   |   |   |   |   |   | 33  |   |   |   |
| Peak Hour Factor   | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  |
| Parking (#/hr)   |   | 0   |   |   |   |   |   |   |   |   |   |   |
| Adj. Flow (vph)  | 5   | 146   | 0   | 0   | 33  | 31  | 106   | 964   | 158   | 0   | 0   | 0   |
| Shared Lane Traffic (%)                                    |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)                                      | 0   | 151   | 0   | 0   | 64  | 0   | 0   | 1070  | 158   | 0   | 0   | 0   |
| Turn Type  | Perm  | NA  |   |   | NA  |   | Perm  | NA  | Perm  |   |   |   |
| Protected Phases   |   | 4 12  |   |   | 4 12  |   |   | 2 10  |   |   |   |   |
| Permitted Phases   | 4 12  |   |   |   |   |   | 2 10  |   | 2 10  |   |   |   |
| Detector Phase   | 4 12  | 4 12  |   |   | 4 12  |   | 2 10  | 2 10  | 2 10  |   |   |   |
| Switch Phase   |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (%)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Yellow Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| All-Red Time (s)   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lost Time Adjust (s)                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Lost Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead/Lag   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?   |   |   |   |   |   |   |   |   |   |   |   |   |
| Recall Mode  |   |   |   |   |   |   |   |   |   |   |   |   |
| Act Effect Green (s)                                       |   | 25.5  |   |   | 25.5  |   |   | 70.5  | 70.5  |   |   |   |
| Actuated g/C Ratio   |   | 0.21  |   |   | 0.21  |   |   | 0.59  | 0.59  |   |   |   |
| v/c Ratio  |   | 0.43  |   |   | 0.16  |   |   | 0.36  | 0.18  |   |   |   |
| Control Delay  |   | 27.4  |   |   | 12.7  |   |   | 11.0  | 6.3   |   |   |   |
| Queue Delay  |   | 0.0   |   |   | 0.0   |   |   | 0.0   | 0.0   |   |   |   |
| Total Delay  |   | 27.4  |   |   | 12.7  |   |   | 11.0  | 6.3   |   |   |   |
| LOS  |   | C   |   |   | B   |   |   | B   | A   |   |   |   |
| Approach Delay   |   | 27.4  |   |   | 12.7  |   |   | 10.4  |   |   |   |   |
| Approach LOS   |   | C   |   |   | B   |   |   | B   |   |   |   |   |
| Queue Length 50th (ft)                                     |   | 63  |   |   | 14  |   |   | 167   | 47  |   |   |   |
| Queue Length 95th (ft)                                     |   | 86  |   |   | 29  |   |   | 105   | 37  |   |   |   |
| Internal Link Dist (ft)                                    |   | 244   |   |   | 319   |   |   | 272   |   |   | 254   |   |
| Turn Bay Length (ft)                                       |   |   |   |   |   |   |   |   | 100   |   |   |   |
| Base Capacity (vph)  |   | 595   |   |   | 644   |   |   | 3142  | 909   |   |   |   |
| Starvation Cap Reductn                                     |   | 0   |   |   | 0   |   |   | 415   | 0   |   |   |   |
| Spillback Cap Reductn                                      |   | 0   |   |   | 0   |   |   | 0   | 0   |   |   |   |
| Storage Cap Reductn  |   | 0   |   |   | 0   |   |   | 0   | 0   |   |   |   |
| Reduced v/c Ratio  |   | 0.25  |   |   | 0.10  |   |   | 0.39  | 0.17  |   |   |   |
| Intersection Summary                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Cycle Length: 120  |   |   |   |   |   |   |   |   |   |   |   |   |
| Actuated Cycle Length: 120                                 |   |   |   |   |   |   |   |   |   |   |   |   |
| Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green |   |   |   |   |   |   |   |   |   |   |   |   |
| Natural Cycle: 100   |   |   |   |   |   |   |   |   |   |   |   |   |

MS

Synchro 9 Report  
Page 17

19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Lane Group                  | Ø2    | Ø4   | Ø10  | Ø12  |
|-----------------------------|-------|------|------|------|
| Lane Configurations         |       |      |      |      |
| Traffic Volume (vph)        |       |      |      |      |
| Future Volume (vph)         |       |      |      |      |
| Confl. Peds. (#/hr)         |       |      |      |      |
| Peak Hour Factor            |       |      |      |      |
| Parking (#/hr)              |       |      |      |      |
| Adj. Flow (vph)             |       |      |      |      |
| Shared Lane Traffic (%)     |       |      |      |      |
| Lane Group Flow (vph)       |       |      |      |      |
| Turn Type                   |       |      |      |      |
| Protected Phases            | 2     | 4    | 10   | 12   |
| Permitted Phases            |       |      |      |      |
| Detector Phase              |       |      |      |      |
| Switch Phase                |       |      |      |      |
| Minimum Initial (s)         | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)           | 26.0  | 28.0 | 22.5 | 22.5 |
| Total Split (s)             | 38.0  | 29.0 | 27.0 | 26.0 |
| Total Split (%)             | 32%   | 24%  | 23%  | 22%  |
| Yellow Time (s)             | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)            | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)        |       |      |      |      |
| Total Lost Time (s)         |       |      |      |      |
| Lead/Lag                    |       |      |      |      |
| Lead-Lag Optimize?          |       |      |      |      |
| Recall Mode                 | C-Max | None | None | None |
| Act Effect Green (s)        |       |      |      |      |
| Actuated g/C Ratio          |       |      |      |      |
| v/c Ratio                   |       |      |      |      |
| Control Delay               |       |      |      |      |
| Queue Delay                 |       |      |      |      |
| Total Delay                 |       |      |      |      |
| LOS                         |       |      |      |      |
| Approach Delay              |       |      |      |      |
| Approach LOS                |       |      |      |      |
| Queue Length 50th (ft)      |       |      |      |      |
| Queue Length 95th (ft)      |       |      |      |      |
| Internal Link Dist (ft)     |       |      |      |      |
| Turn Bay Length (ft)        |       |      |      |      |
| Base Capacity (vph)         |       |      |      |      |
| Starvation Cap Reductn      |       |      |      |      |
| Spillback Cap Reductn       |       |      |      |      |
| Storage Cap Reductn         |       |      |      |      |
| Reduced v/c Ratio           |       |      |      |      |
| <b>Intersection Summary</b> |       |      |      |      |

MS

Synchro 9 Report  
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19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.43

Intersection Signal Delay: 12.3

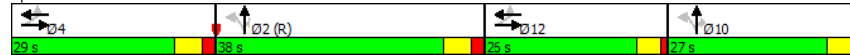
Intersection LOS: B

Intersection Capacity Utilization 39.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 19: Lavaca St & E. 17th St



28: Lavaca St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

|   | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|---|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations                                       |      | ↔    |      |      | ↔    |      |      | ↔    | ↔    |      |      |      |
| Traffic Volume (vph)                                      | 4    | 138  | 0    | 0    | 23   | 33   | 88   | 970  | 91   | 0    | 0    | 0    |
| Future Volume (vph)                                       | 4    | 138  | 0    | 0    | 23   | 33   | 88   | 970  | 91   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)                                       |      |      |      |      |      | 11   | 58   |      |      |      |      |      |
| Confl. Bikes (#/hr)                                       |      |      |      |      |      | 2    |      |      |      |      |      |      |
| Peak Hour Factor  | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 |
| Parking (#/hr)  |      |      |      |      | 0    |      |      |      |      |      |      |      |
| Adj. Flow (vph)   | 5    | 164  | 0    | 0    | 27   | 39   | 105  | 1155 | 108  | 0    | 0    | 0    |
| Shared Lane Traffic (%)                                   |      |      |      |      |      |      |      |      |      |      |      |      |
| Lane Group Flow (vph)                                     | 0    | 169  | 0    | 0    | 66   | 0    | 0    | 1260 | 108  | 0    | 0    | 0    |
| Turn Type   | Perm | NA   |      |      | NA   |      | Perm | NA   | Perm |      |      |      |
| Protected Phases  | 4 12 |      |      |      | 4 12 |      |      | 2 10 |      |      |      |      |
| Permitted Phases  | 4 12 |      |      |      |      |      | 2 10 |      | 2 10 |      |      |      |
| Detector Phase  | 4 12 | 4 12 |      |      | 4 12 |      | 2 10 | 2 10 | 2 10 |      |      |      |
| Switch Phase  |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Initial (s)                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Split (s)   |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (s)   |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (%)   |      |      |      |      |      |      |      |      |      |      |      |      |
| Yellow Time (s)   |      |      |      |      |      |      |      |      |      |      |      |      |
| All-Red Time (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Lost Time Adjust (s)                                      |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Lost Time (s)                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead/Lag  |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead-Lag Optimize?  |      |      |      |      |      |      |      |      |      |      |      |      |
| Recall Mode   |      |      |      |      |      |      |      |      |      |      |      |      |
| Act Effect Green (s)                                      | 22.6 |      |      |      | 22.6 |      |      | 73.4 | 73.4 |      |      |      |
| Actuated g/C Ratio  | 0.19 |      |      |      | 0.19 |      |      | 0.61 | 0.61 |      |      |      |
| v/c Ratio   | 0.49 |      |      |      | 0.21 |      |      | 0.41 | 0.11 |      |      |      |
| Control Delay   | 27.9 |      |      |      | 15.3 |      |      | 3.9  | 0.9  |      |      |      |
| Queue Delay   | 0.0  |      |      |      | 0.0  |      |      | 0.2  | 0.0  |      |      |      |
| Total Delay   | 27.9 |      |      |      | 15.3 |      |      | 4.1  | 0.9  |      |      |      |
| LOS   | C    |      |      |      | B    |      |      | A    | A    |      |      |      |
| Approach Delay  | 27.9 |      |      |      | 15.3 |      |      | 3.8  |      |      |      |      |
| Approach LOS  | C    |      |      |      | B    |      |      | A    |      |      |      |      |
| Queue Length 50th (ft)                                    | 67   |      |      |      | 17   |      |      | 41   | 2    |      |      |      |
| Queue Length 95th (ft)                                    | 93   |      |      |      | m34  |      |      | m47  | m7   |      |      |      |
| Internal Link Dist (ft)                                   | 233  |      |      |      | 60   |      |      | 281  |      |      | 272  |      |
| Turn Bay Length (ft)                                      |      |      |      |      |      |      |      |      | 100  |      |      |      |
| Base Capacity (vph)                                       | 693  |      |      |      | 585  |      |      | 3058 | 995  |      |      |      |
| Starvation Cap Reductn                                    | 0    |      |      |      | 0    |      |      | 877  | 0    |      |      |      |
| Spillback Cap Reductn                                     | 0    |      |      |      | 0    |      |      | 0    | 0    |      |      |      |
| Storage Cap Reductn                                       | 0    |      |      |      | 0    |      |      | 0    | 0    |      |      |      |
| Reduced v/c Ratio   | 0.24 |      |      |      | 0.11 |      |      | 0.58 | 0.11 |      |      |      |
| Intersection Summary                                      |      |      |      |      |      |      |      |      |      |      |      |      |
| Cycle Length: 120   |      |      |      |      |      |      |      |      |      |      |      |      |
| Actuated Cycle Length: 120                                |      |      |      |      |      |      |      |      |      |      |      |      |
| Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green |      |      |      |      |      |      |      |      |      |      |      |      |













| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Confl. Bikes (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 28.0  | 32.0 | 21.0 | 20.0 |
| Total Split (s)         | 42.0  | 32.0 | 21.0 | 25.0 |
| Total Split (%)         | 35%   | 27%  | 18%  | 21%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effct Green (s)     |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

Natural Cycle: 105  
Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 0.49  
Intersection Signal Delay: 6.8Intersection LOS: A  
Intersection Capacity Utilization 45.8%ICU Level of Service A  
Analysis Period (min) 15  
m Volume for 95th percentile queue is metered by upstream signal.



34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     |   | ↑↑↑   |   | ↑   | ↑↑↑   |   |   |   |   | ↑↑↑   | ↑   | ↑   |
| Traffic Volume (vph)    | 0   | 1762  | 324   | 201   | 974   | 0   | 0   | 0   | 0   | 103   | 684   | 78  |
| Future Volume (vph)     | 0   | 1762  | 324   | 201   | 974   | 0   | 0   | 0   | 0   | 103   | 684   | 78  |
| Confl. Peds. (#/hr)     |   |   | 32  | 32  |   |   |   |   |   | 30  |   | 37  |
| Confl. Bikes (#/hr)     |   |   |   |   |   | 1   |   |   |   |   |   | 20  |
| Peak Hour Factor        | 0.98  | 0.98  | 0.98  | 0.98  | 0.98  | 0.98  | 0.98  | 0.98  | 0.98  | 0.98  | 0.98  | 0.98  |
| Adj. Flow (vph)         | 0   | 1798  | 331   | 205   | 994   | 0   | 0   | 0   | 0   | 105   | 698   | 80  |
| Shared Lane Traffic (%) |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)   | 0   | 2129  | 0   | 205   | 994   | 0   | 0   | 0   | 0   | 0   | 803   | 80  |
| Turn Type               |   | NA  |   | pm+pt   | NA  |   |   |   |   | Perm  | NA  | Perm  |
| Protected Phases        |   | 2   |   | 1 3   | 6   |   |   |   |   |   | 4   |   |
| Permitted Phases        |   |   |   | 6   |   |   |   |   |   | 4   |   | 4   |
| Detector Phase          |   | 2   |   | 1 3   | 6   |   |   |   |   | 4   | 4   | 4   |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     |   | 10.0  |   |   | 5.0   |   |   |   |   | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       |   | 25.0  |   |   | 25.0  |   |   |   |   | 32.0  | 32.0  | 32.0  |
| Total Split (s)         |   | 56.0  |   |   | 84.0  |   |   |   |   | 36.0  | 36.0  | 36.0  |
| Total Split (%)         |   | 46.7%   |   |   | 70.0%   |   |   |   |   | 30.0%   | 30.0%   | 30.0%   |
| Yellow Time (s)         |   | 4.0   |   |   | 4.0   |   |   |   |   | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |   | 1.0   |   |   | 1.0   |   |   |   |   | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |   | 0.0   |   |   | 0.0   |   |   |   |   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |   | 5.0   |   |   | 5.0   |   |   |   |   | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |   | Lag   |   |   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?      |   | Yes   |   |   |   |   |   |   |   |   |   |   |
| Recall Mode             |   | C-Max   |   |   | C-Max   |   |   |   |   | Max   | Max   | Max   |
| Act Effect Green (s)    |   | 51.2  |   |   | 79.0  |   |   |   |   | 31.0  | 31.0  | 31.0  |
| Actuated g/C Ratio      |   | 0.43  |   |   | 0.66  |   |   |   |   | 0.26  | 0.26  | 0.26  |
| v/c Ratio               |   | 1.01  |   |   | 0.63  |   |   |   |   | 0.62  | 0.17  | 0.17  |
| Control Delay           |   | 54.7  |   |   | 38.9  |   |   |   |   | 36.0  | 5.0   | 5.0   |
| Queue Delay             |   | 4.2   |   |   | 13.4  |   |   |   |   | 0.4   | 0.0   | 0.0   |
| Total Delay             |   | 58.9  |   |   | 52.4  |   |   |   |   | 36.4  | 5.0   | 5.0   |
| LOS                     |   | E   |   |   | D   |   |   |   |   | D   | A   | A   |
| Approach Delay          |   | 58.9  |   |   | 12.0  |   |   |   |   | 33.6  |   |   |
| Approach LOS            |   | E   |   |   | B   |   |   |   |   | C   |   |   |
| Queue Length 50th (ft)  |   | -600  |   |   | 105   |   |   |   |   | 194   | 3   | 3   |
| Queue Length 95th (ft)  |   | #724  |   |   | 180   |   |   |   |   | 231   | m20   | m20   |
| Internal Link Dist (ft) |   | 262   |   |   | 240   |   |   |   | 197   | 285   |   |   |
| Turn Bay Length (ft)    |   |   |   |   | 50  |   |   |   |   |   |   | 100   |
| Base Capacity (vph)     |   | 2118  |   |   | 327   |   |   |   |   | 1298  | 458   | 458   |
| Starvation Cap Reductn  |   | 0   |   |   | 100   |   |   |   |   | 0   | 0   | 0   |
| Spillback Cap Reductn   |   | 30  |   |   | 0   |   |   |   |   | 144   | 0   | 0   |
| Storage Cap Reductn     |   | 0   |   |   | 0   |   |   |   |   | 0   | 0   | 0   |
| Reduced v/c Ratio       |   | 1.02  |   |   | 0.90  |   |   |   |   | 0.70  | 0.17  | 0.17  |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 100

MS

Synchro 9 Report  
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34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Lane Group              | Ø1   | Ø3   |
|-------------------------|------|------|
| Lane Configurations     |      |      |
| Traffic Volume (vph)    |      |      |
| Future Volume (vph)     |      |      |
| Confl. Peds. (#/hr)     |      |      |
| Confl. Bikes (#/hr)     |      |      |
| Peak Hour Factor        |      |      |
| Adj. Flow (vph)         |      |      |
| Shared Lane Traffic (%) |      |      |
| Lane Group Flow (vph)   |      |      |
| Turn Type               |      |      |
| Protected Phases        | 1    | 3    |
| Permitted Phases        |      |      |
| Detector Phase          |      |      |
| Switch Phase            |      |      |
| Minimum Initial (s)     | 8.0  | 5.0  |
| Minimum Split (s)       | 13.0 | 10.0 |
| Total Split (s)         | 14.0 | 14.0 |
| Total Split (%)         | 12%  | 12%  |
| Yellow Time (s)         | 4.0  | 4.0  |
| All-Red Time (s)        | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |
| Total Lost Time (s)     |      |      |
| Lead/Lag                | Lead |      |
| Lead-Lag Optimize?      | Yes  |      |
| Recall Mode             | Min  | None |
| Act Effect Green (s)    |      |      |
| Actuated g/C Ratio      |      |      |
| v/c Ratio               |      |      |
| Control Delay           |      |      |
| Queue Delay             |      |      |
| Total Delay             |      |      |
| LOS                     |      |      |
| Approach Delay          |      |      |
| Approach LOS            |      |      |
| Queue Length 50th (ft)  |      |      |
| Queue Length 95th (ft)  |      |      |
| Internal Link Dist (ft) |      |      |
| Turn Bay Length (ft)    |      |      |
| Base Capacity (vph)     |      |      |
| Starvation Cap Reductn  |      |      |
| Spillback Cap Reductn   |      |      |
| Storage Cap Reductn     |      |      |
| Reduced v/c Ratio       |      |      |

Intersection Summary

MS

Synchro 9 Report  
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34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 40.3

Intersection LOS: D

Intersection Capacity Utilization 87.8%

ICU Level of Service E

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

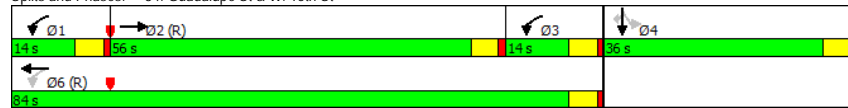
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 34: Guadalupe St & W. 15th St



35: Lavaca St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↖ ↗   | ↖ ↗   |      |      | ↖ ↗   |      |       | ↖ ↗   | ↖ ↗   |      |      |      |
| Traffic Volume (vph)    | 305   | 1485  | 0    | 0    | 1055  | 130  | 131   | 681   | 176   | 0    | 0    | 0    |
| Future Volume (vph)     | 305   | 1485  | 0    | 0    | 1055  | 130  | 131   | 681   | 176   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 37    |       |      |      |       | 37   | 17    |       | 47    |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       |      |       | 11    |       |      |      |      |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94 | 0.94 | 0.94  | 0.94 | 0.94  | 0.94  | 0.94  | 0.94 | 0.94 | 0.94 |
| Adj. Flow (vph)         | 324   | 1580  | 0    | 0    | 1122  | 138  | 139   | 724   | 187   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 324   | 1580  | 0    | 0    | 1260  | 0    | 0     | 863   | 187   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 28.0  |      |      | 28.0  |      | 33.0  | 33.0  | 33.0  |      |      |      |
| Total Split (s)         | 19.0  | 79.0  |      |      | 60.0  |      | 41.0  | 41.0  | 41.0  |      |      |      |
| Total Split (%)         | 15.8% | 65.8% |      |      | 50.0% |      | 34.2% | 34.2% | 34.2% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 2.0   | 2.0   | 2.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      |       | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      |       | 6.0   | 6.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effct Green (s)     | 74.0  | 74.0  |      |      | 55.0  |      |       | 35.0  | 35.0  |      |      |      |
| Actuated g/C Ratio      | 0.62  | 0.62  |      |      | 0.46  |      |       | 0.29  | 0.29  |      |      |      |
| v/c Ratio               | 0.99  | 0.50  |      |      | 0.55  |      |       | 0.59  | 0.40  |      |      |      |
| Control Delay           | 71.0  | 2.7   |      |      | 11.3  |      |       | 38.3  | 24.9  |      |      |      |
| Queue Delay             | 10.9  | 0.4   |      |      | 0.1   |      |       | 0.0   | 0.0   |      |      |      |
| Total Delay             | 81.9  | 3.1   |      |      | 11.4  |      |       | 38.3  | 24.9  |      |      |      |
| LOS                     | F     | A     |      |      | B     |      |       | D     | C     |      |      |      |
| Approach Delay          |       | 16.5  |      |      | 11.4  |      |       | 35.9  |       |      |      |      |
| Approach LOS            |       | B     |      |      | B     |      |       | D     |       |      |      |      |
| Queue Length 50th (ft)  | 187   | 47    |      |      | 76    |      |       | 209   | 74    |      |      |      |
| Queue Length 95th (ft)  | m#191 | m47   |      |      | 84    |      |       | 255   | 143   |      |      |      |
| Internal Link Dist (ft) |       | 240   |      |      | 335   |      |       | 116   |       |      | 281  |      |
| Turn Bay Length (ft)    | 50    |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 328   | 3135  |      |      | 2289  |      |       | 1465  | 469   |      |      |      |
| Starvation Cap Reductn  | 13    | 914   |      |      | 183   |      |       | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      |       | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      |       | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 1.03  | 0.71  |      |      | 0.60  |      |       | 0.59  | 0.40  |      |      |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 75

35: Lavaca St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.99

Intersection Signal Delay: 19.8

Intersection LOS: B

Intersection Capacity Utilization 87.8%

ICU Level of Service E

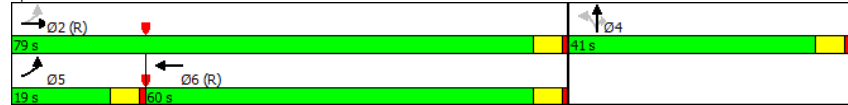
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 35: Lavaca St & W. 15th St



36: Colorado St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR    |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|--------|
| Lane Group              | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR    |
| Lane Configurations     | ↔↔↔   | ↔↔↔   | ↔    | ↔↔↔   | ↔↔↔   | ↔    | ↔     | ↔     | ↔    | ↔     | ↔     | ↔      |
| Traffic Volume (vph)    | 266   | 1379  | 52   | 71    | 1108  | 259  | 1     | 21    | 21   | 26    | 19    | 31     |
| Future Volume (vph)     | 266   | 1379  | 52   | 71    | 1108  | 259  | 1     | 21    | 21   | 26    | 19    | 31     |
| Confl. Peds. (#/hr)     | 6     |       | 82   | 82    |       | 6    | 4     |       | 34   | 34    |       | 4      |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94 | 0.94  | 0.94  | 0.94 | 0.94  | 0.94  | 0.94 | 0.94  | 0.94  | 0.94   |
| Adj. Flow (vph)         | 283   | 1467  | 55   | 76    | 1179  | 276  | 1     | 22    | 22   | 28    | 20    | 33     |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |      |       |       |        |
| Lane Group Flow (vph)   | 283   | 1522  | 0    | 76    | 1455  | 0    | 0     | 45    | 0    | 0     | 48    | 33     |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | Perm  | NA    |      | Perm  | NA    | custom |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |       | 4     |      |       | 8     |        |
| Permitted Phases        | 2     |       |      | 6     |       |      | 4     |       |      | 8     |       | 6      |
| Detector Phase          | 5     | 2     |      | 1     | 6     |      | 4     | 4     |      | 8     | 8     | 6      |
| Switch Phase            |       |       |      |       |       |      |       |       |      |       |       |        |
| Minimum Initial (s)     | 5.0   | 15.0  |      | 5.0   | 15.0  |      | 5.0   | 5.0   |      | 5.0   | 5.0   | 15.0   |
| Minimum Split (s)       | 10.0  | 22.0  |      | 10.0  | 30.0  |      | 32.0  | 32.0  |      | 32.0  | 32.0  | 30.0   |
| Total Split (s)         | 15.0  | 72.0  |      | 15.0  | 72.0  |      | 33.0  | 33.0  |      | 33.0  | 33.0  | 72.0   |
| Total Split (%)         | 12.5% | 60.0% |      | 12.5% | 60.0% |      | 27.5% | 27.5% |      | 27.5% | 27.5% | 60.0%  |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0    |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0    |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0    |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      | 5.0   | 5.0   |      | 5.0   | 5.0   | 5.0    |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   |      |       |       |      |       |       | Lag    |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |       |       |      |       |       | Yes    |
| Recall Mode             | None  | C-Max |      | None  | C-Max |      | Max   | Max   |      | Max   | Max   | C-Max  |
| Act Effct Green (s)     | 80.0  | 72.0  |      | 74.2  | 67.0  |      |       | 28.0  |      |       | 28.0  | 67.0   |
| Actuated g/C Ratio      | 0.67  | 0.60  |      | 0.62  | 0.56  |      |       | 0.23  |      |       | 0.23  | 0.56   |
| v/c Ratio               | 1.03  | 0.51  |      | 0.32  | 0.52  |      |       | 0.11  |      |       | 0.13  | 0.04   |
| Control Delay           | 94.6  | 4.6   |      | 10.4  | 9.0   |      |       | 22.8  |      |       | 37.7  | 0.7    |
| Queue Delay             | 0.0   | 0.1   |      | 0.0   | 0.1   |      |       | 0.0   |      |       | 0.0   | 0.0    |
| Total Delay             | 94.6  | 4.7   |      | 10.4  | 9.1   |      |       | 22.8  |      |       | 37.7  | 0.7    |
| LOS                     | F     | A     |      | B     | A     |      |       | C     |      |       | D     | A      |
| Approach Delay          |       | 18.8  |      |       | 9.2   |      |       | 22.8  |      |       | 22.6  |        |
| Approach LOS            |       | B     |      |       | A     |      |       | C     |      |       | C     |        |
| Queue Length 50th (ft)  | -147  | 83    |      | 10    | 182   |      |       | 14    |      |       | 30    | 0      |
| Queue Length 95th (ft)  | #303  | 96    |      | 24    | 236   |      |       | 46    |      |       | 63    | 4      |
| Internal Link Dist (ft) |       | 335   |      |       | 362   |      |       | 155   |      |       | 114   |        |
| Turn Bay Length (ft)    | 90    |       |      | 90    |       |      |       |       |      |       |       | 100    |
| Base Capacity (vph)     | 276   | 3004  |      | 280   | 2774  |      |       | 410   |      |       | 359   | 896    |
| Starvation Cap Reductn  | 0     | 358   |      | 0     | 217   |      |       | 0     |      |       | 0     | 0      |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 0     |      |       | 0     |      |       | 0     | 0      |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      |       | 0     |      |       | 0     | 0      |
| Reduced v/c Ratio       | 1.03  | 0.58  |      | 0.27  | 0.57  |      |       | 0.11  |      |       | 0.13  | 0.04   |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

36: Colorado St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

Maximum v/c Ratio: 1.03

Intersection Signal Delay: 14.7

Intersection LOS: B

Intersection Capacity Utilization 83.1%

ICU Level of Service E

Analysis Period (min) 15

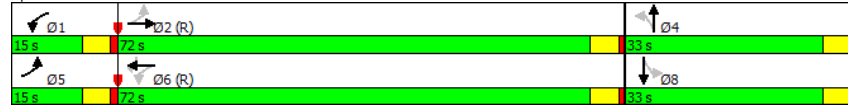
- Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 36: Colorado St & W. 15th St



37: N. Congress Ave & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

|                         | →     | ↖    | ↗     | ←     | ↖    | ↗     |
|-------------------------|-------|------|-------|-------|------|-------|
| Lane Group              | EBT   | EBR  | WBL   | WBT   | NBL  | NBR   |
| Lane Configurations     | ↑↑↑   | ↓    | ↖     | ↑↑↑   | ↓    | ↖     |
| Traffic Volume (vph)    | 1400  | 28   | 18    | 1527  | 0    | 1     |
| Future Volume (vph)     | 1400  | 28   | 18    | 1527  | 0    | 1     |
| Confl. Peds. (#/hr)     |       | 30   | 30    |       | 13   | 20    |
| Confl. Bikes (#/hr)     |       |      |       |       |      | 13    |
| Peak Hour Factor        | 0.98  | 0.98 | 0.98  | 0.98  | 0.98 | 0.98  |
| Adj. Flow (vph)         | 1429  | 29   | 18    | 1558  | 0    | 1     |
| Shared Lane Traffic (%) |       |      |       |       |      |       |
| Lane Group Flow (vph)   | 1458  | 0    | 18    | 1558  | 0    | 1     |
| Turn Type               | NA    |      | pm+pt | NA    |      | Perm  |
| Protected Phases        | 2     |      | 1     | 6     |      |       |
| Permitted Phases        |       |      | 6     |       |      | 4     |
| Detector Phase          | 2     |      | 1     | 6     |      | 4     |
| Switch Phase            |       |      |       |       |      |       |
| Minimum Initial (s)     | 5.0   |      | 5.0   | 5.0   |      | 5.0   |
| Minimum Split (s)       | 25.0  |      | 10.0  | 25.0  |      | 33.0  |
| Total Split (s)         | 72.0  |      | 15.0  | 87.0  |      | 33.0  |
| Total Split (%)         | 60.0% |      | 12.5% | 72.5% |      | 27.5% |
| Yellow Time (s)         | 4.0   |      | 4.0   | 4.0   |      | 4.0   |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0   |      | 1.0   |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0   |      | 0.0   |
| Total Lost Time (s)     | 5.0   |      | 5.0   | 5.0   |      | 5.0   |
| Lead/Lag                | Lag   |      | Lead  |       |      |       |
| Lead-Lag Optimize?      | Yes   |      | Yes   |       |      |       |
| Recall Mode             | C-Max |      | None  | C-Max |      | Max   |
| Act Effect Green (s)    | 77.5  |      | 82.0  | 82.0  |      | 28.0  |
| Actuated g/C Ratio      | 0.65  |      | 0.68  | 0.68  |      | 0.23  |
| v/c Ratio               | 0.45  |      | 0.08  | 0.45  |      | 0.00  |
| Control Delay           | 4.0   |      | 5.3   | 7.0   |      | 0.0   |
| Queue Delay             | 0.0   |      | 0.0   | 0.1   |      | 0.0   |
| Total Delay             | 4.0   |      | 5.3   | 7.1   |      | 0.0   |
| LOS                     | A     |      | A     | A     |      | A     |
| Approach Delay          | 4.0   |      |       | 7.1   |      |       |
| Approach LOS            | A     |      |       | A     |      |       |
| Queue Length 50th (ft)  | 46    |      | 3     | 175   |      | 0     |
| Queue Length 95th (ft)  | 53    |      | m5    | 70    |      | 0     |
| Internal Link Dist (ft) | 362   |      |       | 356   | 125  |       |
| Turn Bay Length (ft)    |       |      | 100   |       |      |       |
| Base Capacity (vph)     | 3270  |      | 291   | 3474  |      | 485   |
| Starvation Cap Reductn  | 169   |      | 0     | 542   |      | 0     |
| Spillback Cap Reductn   | 0     |      | 0     | 0     |      | 0     |
| Storage Cap Reductn     | 0     |      | 0     | 0     |      | 0     |
| Reduced v/c Ratio       | 0.47  |      | 0.06  | 0.53  |      | 0.00  |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 70

37: N. Congress Ave & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.45

Intersection Signal Delay: 5.6

Intersection LOS: A

Intersection Capacity Utilization 59.4%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 37: N. Congress Ave & W. 15th St



38: Brazos St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR   | SBL   | SBT   | SBR  |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|-------|-------|-------|------|
| Lane Configurations     | ↰ ↱   | ↰ ↱   | ↰ ↱  | ↰ ↱   | ↰ ↱   | ↰ ↱  | ↰ ↱   | ↰ ↱   | ↰ ↱   | ↰ ↱   | ↰ ↱   | ↰ ↱  |
| Traffic Volume (vph)    | 79    | 1131  | 48   | 27    | 1548  | 113  | 4     | 2     | 7     | 2     | 0     | 4    |
| Future Volume (vph)     | 79    | 1131  | 48   | 27    | 1548  | 113  | 4     | 2     | 7     | 2     | 0     | 4    |
| Confl. Peds. (#/hr)     | 1     |       | 10   | 10    |       | 1    | 10    |       | 4     | 4     |       | 10   |
| Confl. Bikes (#/hr)     |       |       |      |       |       | 1    |       |       |       |       |       | 17   |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97 |
| Adj. Flow (vph)         | 81    | 1166  | 49   | 28    | 1596  | 116  | 4     | 2     | 7     | 2     | 0     | 4    |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |       |       |       |      |
| Lane Group Flow (vph)   | 81    | 1215  | 0    | 28    | 1712  | 0    | 0     | 6     | 7     | 0     | 6     | 0    |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | Perm  | NA    | Perm  | Perm  | NA    |      |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |       | 4     |       |       | 8     |      |
| Permitted Phases        | 2     |       |      | 6     |       |      | 4     |       | 4     | 8     |       |      |
| Detector Phase          | 5     | 2     |      | 1     | 6     |      | 4     | 4     | 4     | 8     | 8     |      |
| Switch Phase            |       |       |      |       |       |      |       |       |       |       |       |      |
| Minimum Initial (s)     | 5.0   | 15.0  |      | 5.0   | 15.0  |      | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  |      |
| Minimum Split (s)       | 10.0  | 22.0  |      | 10.0  | 22.0  |      | 32.0  | 32.0  | 32.0  | 32.0  | 32.0  |      |
| Total Split (s)         | 15.0  | 78.0  |      | 10.0  | 73.0  |      | 32.0  | 32.0  | 32.0  | 32.0  | 32.0  |      |
| Total Split (%)         | 12.5% | 65.0% |      | 8.3%  | 60.8% |      | 26.7% | 26.7% | 26.7% | 26.7% | 26.7% |      |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |      |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      |       | 0.0   | 0.0   |       | 0.0   |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      |       | 5.0   | 5.0   |       | 5.0   |      |
| Lead/Lag                | Lead  | Lead  |      | Lag   | Lag   |      |       |       |       |       |       |      |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |       |       |       |       |       |      |
| Recall Mode             | None  | C-Max |      | None  | C-Max |      | None  | None  | None  | None  | None  |      |
| Act Effct Green (s)     | 103.0 | 105.0 |      | 99.5  | 100.5 |      |       | 10.0  | 10.0  |       | 10.0  |      |
| Actuated g/C Ratio      | 0.86  | 0.88  |      | 0.83  | 0.84  |      |       | 0.08  | 0.08  |       | 0.08  |      |
| v/c Ratio               | 0.31  | 0.28  |      | 0.07  | 0.41  |      |       | 0.05  | 0.03  |       | 0.03  |      |
| Control Delay           | 9.3   | 4.0   |      | 2.0   | 1.8   |      |       | 51.7  | 0.3   |       | 0.2   |      |
| Queue Delay             | 0.0   | 0.0   |      | 0.0   | 0.0   |      |       | 0.0   | 0.0   |       | 0.0   |      |
| Total Delay             | 9.3   | 4.1   |      | 2.0   | 1.8   |      |       | 51.7  | 0.3   |       | 0.2   |      |
| LOS                     | A     | A     |      | A     | A     |      |       | D     | A     |       | A     |      |
| Approach Delay          |       | 4.4   |      |       | 1.8   |      |       | 24.0  |       |       | 0.2   |      |
| Approach LOS            |       | A     |      |       | A     |      |       | C     |       |       | A     |      |
| Queue Length 50th (ft)  | 11    | 100   |      | 1     | 17    |      |       | 4     | 0     |       | 0     |      |
| Queue Length 95th (ft)  | 48    | 116   |      | 3     | 137   |      |       | 18    | 0     |       | 0     |      |
| Internal Link Dist (ft) |       | 356   |      |       | 297   |      |       | 199   |       |       | 273   |      |
| Turn Bay Length (ft)    | 100   |       |      | 40    |       |      |       |       | 50    |       |       |      |
| Base Capacity (vph)     | 307   | 4414  |      | 392   | 4210  |      |       | 346   | 434   |       | 412   |      |
| Starvation Cap Reductn  | 0     | 1051  |      | 0     | 555   |      |       | 0     | 0     |       | 0     |      |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 0     |      |       | 0     | 0     |       | 0     |      |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      |       | 0     | 0     |       | 0     |      |
| Reduced v/c Ratio       | 0.26  | 0.36  |      | 0.07  | 0.47  |      |       | 0.02  | 0.02  |       | 0.01  |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 70

38: Brazos St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.41

Intersection Signal Delay: 3.0

Intersection LOS: A

Intersection Capacity Utilization 61.7%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 38: Brazos St & W. 15th St



39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

|                         | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑↑   |      | ↓     | ↑↑↑   |      |      |      |      |       | ↑↑↑   | ↓     |
| Traffic Volume (vph)    | 0    | 864   | 350  | 160   | 1666  | 0    | 0    | 0    | 0    | 92    | 179   | 44    |
| Future Volume (vph)     | 0    | 864   | 350  | 160   | 1666  | 0    | 0    | 0    | 0    | 92    | 179   | 44    |
| Confl. Peds. (#/hr)     |      |       | 22   | 22    |       |      |      |      |      | 10    |       | 7     |
| Peak Hour Factor        | 0.99 | 0.99  | 0.99 | 0.99  | 0.99  | 0.99 | 0.99 | 0.99 | 0.99 | 0.99  | 0.99  | 0.99  |
| Adj. Flow (vph)         | 0    | 873   | 354  | 162   | 1683  | 0    | 0    | 0    | 0    | 93    | 181   | 44    |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 1227  | 0    | 162   | 1683  | 0    | 0    | 0    | 0    | 0     | 274   | 44    |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      |       |       | 4     |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      | 3.0   | 10.0  |      |      |      |      | 7.0   | 7.0   | 7.0   |
| Minimum Split (s)       |      | 28.0  |      | 8.0   | 28.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (s)         |      | 68.0  |      | 20.0  | 88.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (%)         |      | 56.7% |      | 16.7% | 73.3% |      |      |      |      | 26.7% | 26.7% | 26.7% |
| Yellow Time (s)         |      | 4.0   |      | 4.0   | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      | 1.0   | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      | 0.0   | 0.0   |      |      |      |      |       | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      | 5.0   | 5.0   |      |      |      |      |       | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      | Lead  |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      | Yes   |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      | None  | C-Max |      |      |      |      | None  | None  | None  |
| Act Effct Green (s)     |      | 85.1  |      | 97.9  | 97.9  |      |      |      |      |       | 12.1  | 12.1  |
| Actuated g/C Ratio      |      | 0.71  |      | 0.82  | 0.82  |      |      |      |      |       | 0.10  | 0.10  |
| v/c Ratio               |      | 0.36  |      | 0.43  | 0.41  |      |      |      |      |       | 0.55  | 0.21  |
| Control Delay           |      | 2.4   |      | 7.4   | 3.8   |      |      |      |      |       | 55.2  | 7.8   |
| Queue Delay             |      | 0.1   |      | 0.0   | 0.3   |      |      |      |      |       | 0.0   | 0.0   |
| Total Delay             |      | 2.5   |      | 7.4   | 4.1   |      |      |      |      |       | 55.2  | 7.8   |
| LOS                     |      | A     |      | A     | A     |      |      |      |      |       | E     | A     |
| Approach Delay          |      | 2.5   |      |       | 4.4   |      |      |      |      |       | 48.6  |       |
| Approach LOS            |      | A     |      |       | A     |      |      |      |      |       | D     |       |
| Queue Length 50th (ft)  |      | 0     |      | 23    | 101   |      |      |      |      |       | 75    | 0     |
| Queue Length 95th (ft)  |      | 0     |      | m28   | 112   |      |      |      |      |       | 103   | 21    |
| Internal Link Dist (ft) |      | 297   |      |       | 282   |      |      | 125  |      |       | 272   |       |
| Turn Bay Length (ft)    |      |       |      | 70    |       |      |      |      |      |       |       | 50    |
| Base Capacity (vph)     |      | 3441  |      | 462   | 4147  |      |      |      |      |       | 1119  | 398   |
| Starvation Cap Reductn  |      | 957   |      | 0     | 1607  |      |      |      |      |       | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      |       | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      |       | 0     | 0     |
| Reduced v/c Ratio       |      | 0.49  |      | 0.35  | 0.66  |      |      |      |      |       | 0.24  | 0.11  |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

Maximum v/c Ratio: 0.55

Intersection Signal Delay: 7.9

Intersection LOS: A

Intersection Capacity Utilization 91.7%

ICU Level of Service F

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 39: San Jacinto Blvd & W. 15th St

|          |          |      |
|----------|----------|------|
| ← Ø1     | → Ø2 (R) | ↓ Ø4 |
| 20 s     | 68 s     | 32 s |
| ← Ø6 (R) |          |      |
| 88 s     |          |      |

40: Trinity St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

|                         | ←     | →     | ↖    | ↗    | ←     | ↖    | ↗     | ←     | ↖     | ↗    | ←    | ↖    | ↗ |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|---|
| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |   |
| Lane Configurations     | ↖ ↗ ↘ | ↖ ↗ ↘ |      |      | ↖ ↗ ↘ |      |       | ↖ ↗ ↘ | ↖ ↗ ↘ |      |      |      |   |
| Traffic Volume (vph)    | 220   | 786   | 0    | 0    | 1775  | 644  | 59    | 167   | 12    | 0    | 0    | 0    |   |
| Future Volume (vph)     | 220   | 786   | 0    | 0    | 1775  | 644  | 59    | 167   | 12    | 0    | 0    | 0    |   |
| Confl. Peds. (#/hr)     | 1     |       |      |      |       | 1    | 3     |       | 6     |      |      |      |   |
| Confl. Bikes (#/hr)     |       |       |      |      |       |      |       |       | 2     |      |      |      |   |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97 | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97 | 0.97 | 0.97 |   |
| Adj. Flow (vph)         | 227   | 810   | 0    | 0    | 1830  | 664  | 61    | 172   | 12    | 0    | 0    | 0    |   |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       |       |      |      |      |   |
| Lane Group Flow (vph)   | 227   | 810   | 0    | 0    | 2494  | 0    | 0     | 233   | 12    | 0    | 0    | 0    |   |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |   |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |   |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |   |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |   |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |   |
| Minimum Initial (s)     | 1.0   | 10.0  |      |      | 1.0   |      | 10.0  | 10.0  | 10.0  |      |      |      |   |
| Minimum Split (s)       | 5.5   | 28.0  |      |      | 5.5   |      | 28.0  | 28.0  | 28.0  |      |      |      |   |
| Total Split (s)         | 20.0  | 92.0  |      |      | 72.0  |      | 28.0  | 28.0  | 28.0  |      |      |      |   |
| Total Split (%)         | 16.7% | 76.7% |      |      | 60.0% |      | 23.3% | 23.3% | 23.3% |      |      |      |   |
| Yellow Time (s)         | 3.5   | 4.0   |      |      | 3.5   |      | 4.0   | 4.0   | 4.0   |      |      |      |   |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      |       | 0.0   | 0.0   |      |      |      |   |
| Total Lost Time (s)     | 4.5   | 5.0   |      |      | 4.5   |      |       | 5.0   | 5.0   |      |      |      |   |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |   |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |   |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |   |
| Act Effct Green (s)     | 87.5  | 87.0  |      |      | 69.0  |      |       | 23.0  | 23.0  |      |      |      |   |
| Actuated g/C Ratio      | 0.73  | 0.72  |      |      | 0.58  |      |       | 0.19  | 0.19  |      |      |      |   |
| v/c Ratio               | 0.85  | 0.22  |      |      | 0.87  |      |       | 0.35  | 0.03  |      |      |      |   |
| Control Delay           | 63.6  | 3.6   |      |      | 10.3  |      |       | 43.7  | 0.2   |      |      |      |   |
| Queue Delay             | 0.0   | 0.1   |      |      | 0.2   |      |       | 0.0   | 0.0   |      |      |      |   |
| Total Delay             | 63.6  | 3.7   |      |      | 10.5  |      |       | 43.7  | 0.2   |      |      |      |   |
| LOS                     | E     | A     |      |      | B     |      |       | D     | A     |      |      |      |   |
| Approach Delay          |       | 16.8  |      |      | 10.5  |      |       | 41.6  |       |      |      |      |   |
| Approach LOS            |       | B     |      |      | B     |      |       | D     |       |      |      |      |   |
| Queue Length 50th (ft)  | 122   | 36    |      |      | 155   |      |       | 83    | 0     |      |      |      |   |
| Queue Length 95th (ft)  | #225  | 42    |      |      | m161  |      |       | 123   | 0     |      |      |      |   |
| Internal Link Dist (ft) |       | 282   |      |      | 657   |      |       | 149   |       |      | 621  |      |   |
| Turn Bay Length (ft)    | 100   |       |      |      |       |      |       |       |       |      |      |      |   |
| Base Capacity (vph)     | 289   | 3686  |      |      | 2852  |      |       | 668   | 344   |      |      |      |   |
| Starvation Cap Reductn  | 0     | 1622  |      |      | 51    |      |       | 0     | 0     |      |      |      |   |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      |       | 0     | 0     |      |      |      |   |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      |       | 0     | 0     |      |      |      |   |
| Reduced v/c Ratio       | 0.79  | 0.39  |      |      | 0.89  |      |       | 0.35  | 0.03  |      |      |      |   |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 90

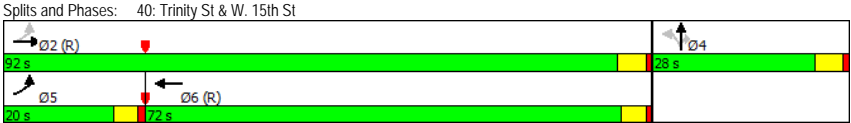
40: Trinity St & W. 15th St

2022 Background + Site

TIA for Texas Capitol Complex Master Plan 2018 Update

Timing Plan: AM

|   |                        |
|---|------------------------|
| Control Type: Actuated-Coordinated                                |                        |
| Maximum v/c Ratio: 0.87   |                        |
| Intersection Signal Delay: 14.3                                   | Intersection LOS: B    |
| Intersection Capacity Utilization 91.7%                           | ICU Level of Service F |
| Analysis Period (min) 15  |                        |
| # 95th percentile volume exceeds capacity, queue may be longer.   |                        |
| Queue shown is maximum after two cycles.                          |                        |
| m Volume for 95th percentile queue is metered by upstream signal. |                        |



11: Colorado St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 11.8 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | +    |      |      |      | +    |      |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 4    | 201  | 35   | 0    | 21   | 31   | 5    | 0    | 15   | 30   | 61   |
| Future Vol, veh/h   | 0    | 4    | 201  | 35   | 0    | 21   | 31   | 5    | 0    | 15   | 30   | 61   |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 5    | 228  | 40   | 0    | 24   | 35   | 6    | 0    | 17   | 34   | 69   |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB  | NB  |
|----------------------------|------|-----|-----|
| Opposing Approach          | WB   | EB  | SB  |
| Opposing Lanes             | 1    | 1   | 1   |
| Conflicting Approach Left  | SB   | NB  | EB  |
| Conflicting Lanes Left     | 1    | 1   | 1   |
| Conflicting Approach Right | NB   | SB  | WB  |
| Conflicting Lanes Right    | 1    | 1   | 1   |
| HCM Control Delay          | 11.6 | 9.4 | 9.2 |
| HCM LOS                    | B    | A   | A   |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 14%   | 2%    | 37%   | 1%    |
| Vol Thru, %            | 28%   | 84%   | 54%   | 94%   |
| Vol Right, %           | 58%   | 15%   | 9%    | 5%    |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 106   | 240   | 57    | 322   |
| LT Vol                 | 15    | 4     | 21    | 4     |
| Through Vol            | 30    | 201   | 31    | 302   |
| RT Vol                 | 61    | 35    | 5     | 16    |
| Lane Flow Rate         | 120   | 273   | 65    | 366   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.17  | 0.395 | 0.102 | 0.512 |
| Departure Headway (Hd) | 5.085 | 5.219 | 5.673 | 5.038 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 706   | 690   | 632   | 721   |
| Service Time           | 3.116 | 3.25  | 3.712 | 3.038 |
| HCM Lane V/C Ratio     | 0.17  | 0.396 | 0.103 | 0.508 |
| HCM Control Delay      | 9.2   | 11.6  | 9.4   | 13.2  |
| HCM Lane LOS           | A     | B     | A     | B     |
| HCM 95th-ile Q         | 0.6   | 1.9   | 0.3   | 2.9   |

11: Colorado St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 4    | 302  | 16   |
| Future Vol, veh/h   | 0    | 4    | 302  | 16   |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 5    | 343  | 18   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 13.2 |
| HCM LOS                    | B    |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection              |     |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 8.8 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | A   |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↶    |      |      |      | ↷    |      |      |      | ↶    |      |
| Traffic Vol, veh/h  | 0    | 0    | 269  | 0    | 0    | 0    | 55   | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h   | 0    | 0    | 269  | 0    | 0    | 0    | 55   | 0    | 0    | 0    | 0    | 0    |
| Peak Hour Factor    | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 309  | 0    | 0    | 0    | 63   | 0    | 0    | 0    | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB  | WB  | NB |
|----------------------------|-----|-----|----|
| Opposing Approach          | WB  | EB  | SB |
| Opposing Lanes             | 1   | 1   | 1  |
| Conflicting Approach Left  | SB  | NB  | EB |
| Conflicting Lanes Left     | 1   | 1   | 1  |
| Conflicting Approach Right | NB  | SB  | WB |
| Conflicting Lanes Right    | 1   | 1   | 1  |
| HCM Control Delay          | 9.1 | 7.6 | 0  |
| HCM LOS                    | A   | A   | -  |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 0%    | 0%    | 0%    | 0%    |
| Vol Thru, %            | 100%  | 100%  | 100%  | 0%    |
| Vol Right, %           | 0%    | 0%    | 0%    | 100%  |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 0     | 269   | 55    | 8     |
| LT Vol                 | 0     | 0     | 0     | 0     |
| Through Vol            | 0     | 269   | 55    | 0     |
| RT Vol                 | 0     | 0     | 0     | 8     |
| Lane Flow Rate         | 0     | 309   | 63    | 9     |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0     | 0.343 | 0.073 | 0.011 |
| Departure Headway (Hd) | 4.743 | 3.997 | 4.18  | 4.126 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 0     | 900   | 850   | 873   |
| Service Time           | 2.744 | 2.017 | 2.243 | 2.126 |
| HCM Lane V/C Ratio     | 0     | 0.343 | 0.074 | 0.01  |
| HCM Control Delay      | 7.7   | 9.1   | 7.6   | 7.2   |
| HCM Lane LOS           | N     | A     | A     | A     |
| HCM 95th-tile Q        | 0     | 1.5   | 0.2   | 0     |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      |      | ↶    |
| Traffic Vol, veh/h  | 0    | 0    | 0    | 8    |
| Future Vol, veh/h   | 0    | 0    | 0    | 8    |
| Peak Hour Factor    | 0.87 | 0.87 | 0.87 | 0.87 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 0    | 9    |
| Number of Lanes     | 0    | 0    | 0    | 1    |

| Approach                   | SB  |
|----------------------------|-----|
| Opposing Approach          | NB  |
| Opposing Lanes             | 1   |
| Conflicting Approach Left  | WB  |
| Conflicting Lanes Left     | 1   |
| Conflicting Approach Right | EB  |
| Conflicting Lanes Right    | 1   |
| HCM Control Delay          | 7.2 |
| HCM LOS                    | A   |

14: Brazos St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection              |    |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 13 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B  |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |      |      | ↕    |      |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 118  | 97   | 7    | 0    | 17   | 116  | 106  | 0    | 20   | 0    | 0    |
| Future Vol, veh/h   | 0    | 118  | 97   | 7    | 0    | 17   | 116  | 106  | 0    | 20   | 0    | 0    |
| Peak Hour Factor    | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 149  | 123  | 9    | 0    | 22   | 147  | 134  | 0    | 25   | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB   | NB  |
|----------------------------|------|------|-----|
| Opposing Approach          | WB   | EB   | SB  |
| Opposing Lanes             | 1    | 1    | 1   |
| Conflicting Approach Left  | SB   | NB   | EB  |
| Conflicting Lanes Left     | 1    | 1    | 1   |
| Conflicting Approach Right | NB   | SB   | WB  |
| Conflicting Lanes Right    | 1    | 1    | 1   |
| HCM Control Delay          | 12.8 | 12.2 | 9.7 |
| HCM LOS                    | B    | B    | A   |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 100%  | 53%   | 7%    | 5%    |
| Vol Thru, %            | 0%    | 44%   | 49%   | 86%   |
| Vol Right, %           | 0%    | 3%    | 44%   | 9%    |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 20    | 222   | 239   | 266   |
| LT Vol                 | 20    | 118   | 17    | 14    |
| Through Vol            | 0     | 97    | 116   | 228   |
| RT Vol                 | 0     | 7     | 106   | 24    |
| Lane Flow Rate         | 25    | 281   | 303   | 337   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.045 | 0.432 | 0.436 | 0.513 |
| Departure Headway (Hd) | 6.357 | 5.533 | 5.185 | 5.482 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 561   | 649   | 693   | 657   |
| Service Time           | 4.424 | 3.58  | 3.231 | 3.524 |
| HCM Lane V/C Ratio     | 0.045 | 0.433 | 0.437 | 0.513 |
| HCM Control Delay      | 9.7   | 12.8  | 12.2  | 14.2  |
| HCM Lane LOS           | A     | B     | B     | B     |
| HCM 95th-ile Q         | 0.1   | 2.2   | 2.2   | 2.9   |

14: Brazos St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 14   | 228  | 24   |
| Future Vol, veh/h   | 0    | 14   | 228  | 24   |
| Peak Hour Factor    | 0.79 | 0.79 | 0.79 | 0.79 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 18   | 289  | 30   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 14.2 |
| HCM LOS                    | B    |

16: San Jacinto Blvd & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 17.4 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | C    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↰    |      |      |      | ↱    |      |      |      |      |      |
| Traffic Vol, veh/h  | 0    | 0    | 30   | 97   | 0    | 72   | 172  | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h   | 0    | 0    | 30   | 97   | 0    | 72   | 172  | 0    | 0    | 0    | 0    | 0    |
| Peak Hour Factor    | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 32   | 103  | 0    | 77   | 183  | 0    | 0    | 0    | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    |

| Approach                   |  | EB   | WB   |
|----------------------------|--|------|------|
| Opposing Approach          |  | WB   | EB   |
| Opposing Lanes             |  | 1    | 1    |
| Conflicting Approach Left  |  | SB   |      |
| Conflicting Lanes Left     |  | 3    | 0    |
| Conflicting Approach Right |  |      | SB   |
| Conflicting Lanes Right    |  | 0    | 3    |
| HCM Control Delay          |  | 11.4 | 16.6 |
| HCM LOS                    |  | B    | C    |

| Lane                   | EBLn1 | WBLn1 | SBLn1 | SBLn2 | SBLn3 |
|------------------------|-------|-------|-------|-------|-------|
| Vol Left, %            | 0%    | 30%   | 0%    | 0%    | 0%    |
| Vol Thru, %            | 24%   | 70%   | 100%  | 100%  | 0%    |
| Vol Right, %           | 76%   | 0%    | 0%    | 0%    | 100%  |
| Sign Control           | Stop  | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 127   | 244   | 383   | 383   | 68    |
| LT Vol                 | 0     | 72    | 0     | 0     | 0     |
| Through Vol            | 30    | 172   | 383   | 383   | 0     |
| RT Vol                 | 97    | 0     | 0     | 0     | 68    |
| Lane Flow Rate         | 135   | 260   | 407   | 407   | 72    |
| Geometry Grp           | 7     | 7     | 7     | 7     | 7     |
| Degree of Util (X)     | 0.245 | 0.502 | 0.666 | 0.666 | 0.069 |
| Departure Headway (Hd) | 6.535 | 6.969 | 5.882 | 5.882 | 3.42  |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 549   | 517   | 615   | 615   | 1043  |
| Service Time           | 4.285 | 4.714 | 3.616 | 3.616 | 1.154 |
| HCM Lane V/C Ratio     | 0.246 | 0.503 | 0.662 | 0.662 | 0.069 |
| HCM Control Delay      | 11.4  | 16.6  | 19.6  | 19.6  | 6.4   |
| HCM Lane LOS           | B     | C     | C     | C     | A     |
| HCM 95th-tile Q        | 1     | 2.8   | 5     | 5     | 0.2   |

16: San Jacinto Blvd & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↰↱   | ↱    |
| Traffic Vol, veh/h  | 0    | 0    | 766  | 68   |
| Future Vol, veh/h   | 0    | 0    | 766  | 68   |
| Peak Hour Factor    | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 815  | 72   |
| Number of Lanes     | 0    | 0    | 2    | 1    |

| Approach                   |  | SB   |
|----------------------------|--|------|
| Opposing Approach          |  |      |
| Opposing Lanes             |  | 0    |
| Conflicting Approach Left  |  | WB   |
| Conflicting Lanes Left     |  | 1    |
| Conflicting Approach Right |  | EB   |
| Conflicting Lanes Right    |  | 1    |
| HCM Control Delay          |  | 18.5 |
| HCM LOS                    |  | C    |

20: Colorado St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 11.7 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | +    |      |      |      | +    |      |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 31   | 185  | 35   | 0    | 0    | 25   | 0    | 0    | 15   | 68   | 0    |
| Future Vol, veh/h   | 0    | 31   | 185  | 35   | 0    | 0    | 25   | 0    | 0    | 15   | 68   | 0    |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 35   | 210  | 40   | 0    | 0    | 28   | 0    | 0    | 17   | 77   | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB  | NB  |
|----------------------------|------|-----|-----|
| Opposing Approach          | WB   | EB  | SB  |
| Opposing Lanes             | 1    | 1   | 1   |
| Conflicting Approach Left  | SB   | NB  | EB  |
| Conflicting Lanes Left     | 1    | 1   | 1   |
| Conflicting Approach Right | NB   | SB  | WB  |
| Conflicting Lanes Right    | 1    | 1   | 1   |
| HCM Control Delay          | 11.5 | 8.9 | 9.2 |
| HCM LOS                    | B    | A   | A   |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 18%   | 12%   | 0%    | 0%    |
| Vol Thru, %            | 82%   | 74%   | 100%  | 91%   |
| Vol Right, %           | 0%    | 14%   | 0%    | 9%    |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 83    | 251   | 25    | 328   |
| LT Vol                 | 15    | 31    | 0     | 0     |
| Through Vol            | 68    | 185   | 25    | 300   |
| RT Vol                 | 0     | 35    | 0     | 28    |
| Lane Flow Rate         | 94    | 285   | 28    | 373   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.14  | 0.4   | 0.044 | 0.498 |
| Departure Headway (Hd) | 5.347 | 5.043 | 5.602 | 4.808 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 674   | 707   | 642   | 742   |
| Service Time           | 3.349 | 3.129 | 3.608 | 2.887 |
| HCM Lane V/C Ratio     | 0.139 | 0.403 | 0.044 | 0.503 |
| HCM Control Delay      | 9.2   | 11.5  | 8.9   | 12.6  |
| HCM Lane LOS           | A     | B     | A     | B     |
| HCM 95th-tile Q        | 0.5   | 1.9   | 0.1   | 2.8   |

20: Colorado St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 0    | 300  | 28   |
| Future Vol, veh/h   | 0    | 0    | 300  | 28   |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 341  | 32   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 12.6 |
| HCM LOS                    | B    |

24: E. 17th St & Brazos St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection              |     |
|---------------------------|-----|
| Intersection Delay, s/veh | 8.4 |
| Intersection LOS          | A   |

| Movement            | EBU  | EBL  | EBT  | WBU  | WBT  | WBR  | SBU  | SBL  | SBR  |
|---------------------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↰    |      | ↰    |      |      | ↰    |      |
| Traffic Vol, veh/h  | 0    | 0    | 28   | 0    | 206  | 16   | 0    | 38   | 0    |
| Future Vol, veh/h   | 0    | 0    | 28   | 0    | 206  | 16   | 0    | 38   | 0    |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 32   | 0    | 234  | 18   | 0    | 43   | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 1    | 0    | 0    | 1    | 0    |

| Approach                   | EB  | WB  | SB |
|----------------------------|-----|-----|----|
| Opposing Approach          | WB  | EB  |    |
| Opposing Lanes             | 1   | 1   | 0  |
| Conflicting Approach Left  | SB  |     | WB |
| Conflicting Lanes Left     | 1   | 0   | 1  |
| Conflicting Approach Right |     | SB  | EB |
| Conflicting Lanes Right    | 0   | 1   | 1  |
| HCM Control Delay          | 7.5 | 8.6 | 8  |
| HCM LOS                    | A   | A   | A  |

| Lane                   | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, %            | 0%    | 0%    | 100%  |
| Vol Thru, %            | 100%  | 93%   | 0%    |
| Vol Right, %           | 0%    | 7%    | 0%    |
| Sign Control           | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 28    | 222   | 38    |
| LT Vol                 | 0     | 0     | 38    |
| Through Vol            | 28    | 206   | 0     |
| RT Vol                 | 0     | 16    | 0     |
| Lane Flow Rate         | 32    | 252   | 43    |
| Geometry Grp           | 1     | 1     | 1     |
| Degree of Util (X)     | 0.037 | 0.28  | 0.057 |
| Departure Headway (Hd) | 4.199 | 3.989 | 4.747 |
| Convergence, Y/N       | Yes   | Yes   | Yes   |
| Cap                    | 840   | 896   | 759   |
| Service Time           | 2.286 | 2.035 | 2.747 |
| HCM Lane V/C Ratio     | 0.038 | 0.281 | 0.057 |
| HCM Control Delay      | 7.5   | 8.6   | 8     |
| HCM Lane LOS           | A     | A     | A     |
| HCM 95th-ile Q         | 0.1   | 1.2   | 0.2   |

4: Colorado St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.3  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑↑   |      | ↑↑   |      | ↑↑   |      |
| Traffic Vol, veh/h       | 1101 | 124  | 207  | 776  | 2    | 30   |
| Future Vol, veh/h        | 1101 | 124  | 207  | 776  | 2    | 30   |
| Conflicting Peds, #/hr   | 0    | 1    | 1    | 0    | 0    | 5    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | 40   | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 87   | 87   | 87   | 87   | 87   | 87   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 1266 | 143  | 238  | 892  | 2    | 34   |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |      |
|----------------------|--------|---|--------|---|--------|------|
| Conflicting Flow All | 0      | 0 | 1409   | 0 | 2260   | 710  |
| Stage 1              | -      | - | -      | - | 1338   | -    |
| Stage 2              | -      | - | -      | - | 922    | -    |
| Critical Hdwy        | -      | - | 4.14   | - | 6.84   | 6.94 |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.84   | -    |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.84   | -    |
| Follow-up Hdwy       | -      | - | 2.22   | - | 3.52   | 3.32 |
| Pot Cap-1 Maneuver   | -      | - | 480    | - | 35     | 376  |
| Stage 1              | -      | - | -      | - | 209    | -    |
| Stage 2              | -      | - | -      | - | 348    | -    |
| Platoon blocked, %   | -      | - | -      | - | -      | -    |
| Mov Cap-1 Maneuver   | -      | - | 478    | - | 18     | 374  |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 18     | -    |
| Stage 1              | -      | - | -      | - | 209    | -    |
| Stage 2              | -      | - | -      | - | 175    | -    |

| Approach             | EB |  | WB  |  | NB   |  |
|----------------------|----|--|-----|--|------|--|
| HCM Control Delay, s | 0  |  | 4.2 |  | 32.5 |  |
| HCM LOS              |    |  |     |  | D    |  |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 167   | -   | -   | 478   | -   |
| HCM Lane V/C Ratio    | 0.22  | -   | -   | 0.498 | -   |
| HCM Control Delay (s) | 32.5  | -   | -   | 19.8  | -   |
| HCM Lane LOS          | D     | -   | -   | C     | -   |
| HCM 95th %tile Q(veh) | 0.8   | -   | -   | 2.7   | -   |

9: Guadalupe St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.6  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    | ↑    |      | ↑    |      |      |      |      |      | ↑↑   |      |
| Traffic Vol, veh/h       | 0    | 13   | 47   | 60   | 10   | 0    | 0    | 0    | 0    | 75   | 1214 | 18   |
| Future Vol, veh/h        | 0    | 13   | 47   | 60   | 10   | 0    | 0    | 0    | 0    | 75   | 1214 | 18   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 13   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 37   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 0    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 14   | 49   | 63   | 11   | 0    | 0    | 0    | 0    | 79   | 1278 | 19   |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |      |
|----------------------|--------|------|--------|------|--------|------|
| Conflicting Flow All | -      | 1482 | 698    | 817  | 1492   | 0    |
| Stage 1              | -      | 1482 | -      | 0    | 0      | -    |
| Stage 2              | -      | 0    | -      | 817  | 1492   | -    |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | 4.14 |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | -    |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | -    |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | 2.22 |
| Pot Cap-1 Maneuver   | 0      | 124  | 383    | 268  | 122    | 0    |
| Stage 1              | 0      | 187  | -      | -    | -      | 0    |
| Stage 2              | 0      | -    | -      | 337  | 185    | 0    |
| Platoon blocked, %   | -      | -    | -      | -    | -      | -    |
| Mov Cap-1 Maneuver   | -      | 120  | 370    | 212  | 118    | -    |
| Mov Cap-2 Maneuver   | -      | 120  | -      | 212  | 118    | -    |
| Stage 1              | -      | 180  | -      | -    | -      | -    |
| Stage 2              | -      | -    | -      | 270  | 178    | -    |

| Approach             | EB   |  | WB   |  | SB |  |
|----------------------|------|--|------|--|----|--|
| HCM Control Delay, s | 21.1 |  | 35.5 |  |    |  |
| HCM LOS              | C    |  | E    |  |    |  |

| Minor Lane/Major Mvmt | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-------|-------|-----|-----|-----|
| Capacity (veh/h)      | 120   | 370   | 190   | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.114 | 0.134 | 0.388 | -   | -   | -   |
| HCM Control Delay (s) | 38.8  | 16.2  | 35.5  | -   | -   | -   |
| HCM Lane LOS          | E     | C     | E     | -   | -   | -   |
| HCM 95th %tile Q(veh) | 0.4   | 0.5   | 1.7   | -   | -   | -   |

10: Lavaca St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |       |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|-------|------|------|------|------|------|
| Int Delay, s/veh         | 4.1  |      |      |      |      |      |       |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL   | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      | ↕ ↕ ↕ |      |      |      |      |      |
| Traffic Vol, veh/h       | 4    | 69   | 0    | 0    | 34   | 19   | 88    | 560  | 172  | 0    | 0    | 0    |
| Future Vol, veh/h        | 4    | 69   | 0    | 0    | 34   | 19   | 88    | 560  | 172  | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 29   | 17    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free  | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -     | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 0     | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | -    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 94   | 94   | 94   | 94   | 94   | 94   | 94    | 94   | 94   | 94   | 94   | 94   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2     | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 4    | 73   | 0    | 0    | 36   | 20   | 94    | 596  | 183  | 0    | 0    | 0    |

| Major/Minor          | Minor2 |      | Minor1 |   | Major1 |      |          |
|----------------------|--------|------|--------|---|--------|------|----------|
| Conflicting Flow All | 490    | 983  | -      | - | 891    | 418  | 17 0 0   |
| Stage 1              | 17     | 17   | -      | - | 874    | -    | - - -    |
| Stage 2              | 473    | 966  | -      | - | 17     | -    | - - -    |
| Critical Hdwy        | 6.44   | 6.54 | -      | - | 6.54   | 7.14 | 5.34 - - |
| Critical Hdwy Stg 1  | -      | -    | -      | - | 5.54   | -    | - - -    |
| Critical Hdwy Stg 2  | 6.74   | 5.54 | -      | - | -      | -    | - - -    |
| Follow-up Hdwy       | 3.82   | 4.02 | -      | - | 4.02   | 3.92 | 3.12 - - |
| Pot Cap-1 Maneuver   | 503    | 247  | 0      | 0 | 280    | 499  | 1133 - - |
| Stage 1              | -      | -    | 0      | 0 | 365    | -    | - - -    |
| Stage 2              | 494    | 331  | 0      | 0 | -      | -    | - - -    |
| Platoon blocked, %   | -      | -    | -      | - | -      | -    | - - -    |
| Mov Cap-1 Maneuver   | 397    | 223  | -      | - | 253    | 499  | 1133 - - |
| Mov Cap-2 Maneuver   | 397    | 223  | -      | - | 253    | -    | - - -    |
| Stage 1              | -      | -    | -      | - | 335    | -    | - - -    |
| Stage 2              | 388    | 304  | -      | - | -      | -    | - - -    |

| Approach             | EB   |  | WB   |  | NB  |  |
|----------------------|------|--|------|--|-----|--|
| HCM Control Delay, s | 28.7 |  | 19.3 |  | 0.9 |  |
| HCM LOS              | D    |  | C    |  |     |  |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1 | WBLn1 |
|-----------------------|-------|-----|-----|-------|-------|
| Capacity (veh/h)      | 1133  | -   | -   | 228   | 307   |
| HCM Lane V/C Ratio    | 0.083 | -   | -   | 0.341 | 0.184 |
| HCM Control Delay (s) | 8.5   | -   | -   | 28.7  | 19.3  |
| HCM Lane LOS          | A     | -   | -   | D     | C     |
| HCM 95th %tile Q(veh) | 0.3   | -   | -   | 1.4   | 0.7   |

MS

Synchro 9 Report  
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13: W. 18th St & Parking Dr. 2  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.9  |      |      |      |      |      |
| Movement                 | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
| Lane Configurations      |      | ↕    |      | ↕    | ↕    | ↕    |
| Traffic Vol, veh/h       | 123  | 146  | 57   | 103  | 14   | 17   |
| Future Vol, veh/h        | 123  | 146  | 57   | 103  | 14   | 17   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | -    | 0    | 0    | -    | 0    | -    |
| Grade, %                 | -    | 0    | 0    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 134  | 159  | 62   | 112  | 15   | 18   |

| Major/Minor          | Major1 |   | Major2 |   | Minor2 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 174    | 0 | -      | 0 | 544    | 118   |
| Stage 1              | -      | - | -      | - | 118    | -     |
| Stage 2              | -      | - | -      | - | 426    | -     |
| Critical Hdwy        | 4.12   | - | -      | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | 2.218  | - | -      | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | 1403   | - | -      | - | 500    | 934   |
| Stage 1              | -      | - | -      | - | 907    | -     |
| Stage 2              | -      | - | -      | - | 659    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | 1403   | - | -      | - | 448    | 934   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 448    | -     |
| Stage 1              | -      | - | -      | - | 907    | -     |
| Stage 2              | -      | - | -      | - | 590    | -     |

| Approach             | EB  |  | WB |  | SB   |  |
|----------------------|-----|--|----|--|------|--|
| HCM Control Delay, s | 3.6 |  | 0  |  | 11.1 |  |
| HCM LOS              |     |  |    |  | B    |  |

| Minor Lane/Major Mvmt | EBL   | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h)      | 1403  | -   | -   | -   | 627   |
| HCM Lane V/C Ratio    | 0.095 | -   | -   | -   | 0.054 |
| HCM Control Delay (s) | 7.8   | 0   | -   | -   | 11.1  |
| HCM Lane LOS          | A     | A   | -   | -   | B     |
| HCM 95th %tile Q(veh) | 0.3   | -   | -   | -   | 0.2   |

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Synchro 9 Report  
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15: Brazos St & Parking Dr. 1  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 3    |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | ↱    |      |      | ↱    | ↱    |      |
| Traffic Vol, veh/h       | 35   | 21   | 154  | 70   | 262  | 257  |
| Future Vol, veh/h        | 35   | 21   | 154  | 70   | 262  | 257  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 38   | 23   | 167  | 76   | 285  | 279  |

| Major/Minor          | Minor2 | Major1 | Major2 |   |     |
|----------------------|--------|--------|--------|---|-----|
| Conflicting Flow All | 835    | 424    | 564    | 0 | - 0 |
| Stage 1              | 424    | -      | -      | - | -   |
| Stage 2              | 411    | -      | -      | - | -   |
| Critical Hdwy        | 6.42   | 6.22   | 4.12   | - | - - |
| Critical Hdwy Stg 1  | 5.42   | -      | -      | - | -   |
| Critical Hdwy Stg 2  | 5.42   | -      | -      | - | -   |
| Follow-up Hdwy       | 3.518  | 3.318  | 2.218  | - | - - |
| Pot Cap-1 Maneuver   | 338    | 630    | 1008   | - | - - |
| Stage 1              | 660    | -      | -      | - | -   |
| Stage 2              | 669    | -      | -      | - | -   |
| Platoon blocked, %   |        |        |        | - | -   |
| Mov Cap-1 Maneuver   | 280    | 630    | 1008   | - | - - |
| Mov Cap-2 Maneuver   | 280    | -      | -      | - | -   |
| Stage 1              | 660    | -      | -      | - | -   |
| Stage 2              | 553    | -      | -      | - | -   |

| Approach             | EB   | NB  | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 17.3 | 6.4 | 0  |
| HCM LOS              | C    |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1008  | -   | 354   | -   | -   |
| HCM Lane V/C Ratio    | 0.166 | -   | 0.172 | -   | -   |
| HCM Control Delay (s) | 9.3   | 0   | 17.3  | -   | -   |
| HCM Lane LOS          | A     | A   | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.6   | -   | 0.6   | -   | -   |

17: Trinity St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 6.1  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↱    |      |      | ↱    |      | ↱    | ↱    | ↱    |      |      |      |
| Traffic Vol, veh/h       | 44   | 0    | 0    | 0    | 0    | 0    | 344  | 223  | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 44   | 0    | 0    | 0    | 0    | 0    | 344  | 223  | 0    | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 5    | 0    | 0    | 0    | 6    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 115  | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | -    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 88   | 88   | 88   | 88   | 88   | 88   | 88   | 88   | 88   | 88   | 88   | 88   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 50   | 0    | 0    | 0    | 0    | 0    | 391  | 253  | 0    | 0    | 0    | 0    |

| Major/Minor          | Minor2 | Major2 | Major1 |       |           |
|----------------------|--------|--------|--------|-------|-----------|
| Conflicting Flow All | 890    | 1042   | -      | - - 0 | 7 0 -     |
| Stage 1              | 7      | 7      | -      | - - - | - - -     |
| Stage 2              | 883    | 1035   | -      | - - - | - - -     |
| Critical Hdwy        | 6.08   | 6.53   | -      | - - - | 4.13 - -  |
| Critical Hdwy Stg 1  | 5.43   | 5.53   | -      | - - - | - - -     |
| Critical Hdwy Stg 2  | 6.03   | 5.53   | -      | - - - | - - -     |
| Follow-up Hdwy       | 3.669  | 4.019  | -      | - - - | 2.219 - - |
| Pot Cap-1 Maneuver   | 332    | 229    | 0      | 0 - - | 1613 - 0  |
| Stage 1              | 974    | 890    | 0      | 0 - - | - - 0     |
| Stage 2              | 339    | 308    | 0      | 0 - - | - - 0     |
| Platoon blocked, %   |        |        |        | - - - | -         |
| Mov Cap-1 Maneuver   | 249    | 0      | -      | - - - | 1613 - -  |
| Mov Cap-2 Maneuver   | 249    | 0      | -      | - - - | - - -     |
| Stage 1              | 968    | 0      | -      | - - - | - - -     |
| Stage 2              | 255    | 0      | -      | - - - | - - -     |

| Approach             | EB   | WB | NB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 23.1 | 0  | 4.8 |
| HCM LOS              | C    |    |     |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | WBT | WBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1613  | -   | 249   | -   | -   |
| HCM Lane V/C Ratio    | 0.242 | -   | 0.201 | -   | -   |
| HCM Control Delay (s) | 7.9   | -   | 23.1  | -   | -   |
| HCM Lane LOS          | A     | -   | C     | -   | -   |
| HCM 95th %tile Q(veh) | 1     | -   | 0.7   | -   | -   |

25: San Jacinto Blvd & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 8.1  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    | ↑    |      | ↑    |      |      |      |      | ↑↑   | ↑    | ↑    |
| Traffic Vol, veh/h       | 0    | 20   | 59   | 71   | 121  | 0    | 0    | 0    | 0    | 47   | 669  | 103  |
| Future Vol, veh/h        | 0    | 20   | 59   | 71   | 121  | 0    | 0    | 0    | 0    | 47   | 669  | 103  |
| Conflicting Peds, #/hr   | 0    | 0    | 22   | 0    | 0    | 0    | 0    | 0    | 0    | 4    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 40   | -    | -    | -    | -    | -    | -    | -    | -    | 50   |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 22   | 64   | 77   | 132  | 0    | 0    | 0    | 0    | 51   | 727  | 112  |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |   |
|----------------------|--------|------|--------|------|--------|---|
| Conflicting Flow All | -      | 833  | 386    | 503  | 833    | - |
| Stage 1              | -      | 829  | -      | 4    | 4      | - |
| Stage 2              | -      | 4    | -      | 499  | 829    | - |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | - |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | - |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | - |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | - |
| Pot Cap-1 Maneuver   | 0      | 303  | 612    | 451  | 303    | 0 |
| Stage 1              | 0      | 383  | -      | -    | -      | 0 |
| Stage 2              | 0      | -    | -      | 522  | 383    | 0 |
| Platoon blocked, %   | -      | -    | -      | -    | -      | - |
| Mov Cap-1 Maneuver   | -      | 283  | 612    | 361  | 283    | - |
| Mov Cap-2 Maneuver   | -      | 283  | -      | 361  | 283    | - |
| Stage 1              | -      | 360  | -      | -    | -      | - |
| Stage 2              | -      | -    | -      | 412  | 360    | - |

| Approach             | EB   | WB   | SB  |
|----------------------|------|------|-----|
| HCM Control Delay, s | 13.4 | 38.1 | 0.5 |
| HCM LOS              | B    | E    |     |

| Minor Lane/Major Mvmt | EBLn1 | EBLn2 | WBLn1 | SBL   | SBT | SBR |
|-----------------------|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h)      | 283   | 612   | 308   | 1616  | -   | -   |
| HCM Lane V/C Ratio    | 0.077 | 0.105 | 0.678 | 0.032 | -   | -   |
| HCM Control Delay (s) | 18.8  | 11.6  | 38.1  | 7.3   | 0.1 | -   |
| HCM Lane LOS          | C     | B     | E     | A     | A   | -   |
| HCM 95th %tile Q(veh) | 0.2   | 0.3   | 4.6   | 0.1   | -   | -   |

MS

Synchro 9 Report  
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26: Trinity St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.6  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | ↓    |      | ↑↑↑  | ↑↑↑  |      |      |
| Traffic Vol, veh/h       | 35   | 0    | 103  | 534  | 0    | 0    |
| Future Vol, veh/h        | 35   | 0    | 103  | 534  | 0    | 0    |
| Conflicting Peds, #/hr   | 3    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | -    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 87   | 87   | 87   | 87   | 87   | 87   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 40   | 0    | 118  | 614  | 0    | 0    |

| Major/Minor          | Minor2 | Major1 |      |
|----------------------|--------|--------|------|
| Conflicting Flow All | 485    | -      | 0    |
| Stage 1              | 0      | -      | -    |
| Stage 2              | 485    | -      | -    |
| Critical Hdwy        | 5.74   | -      | 5.34 |
| Critical Hdwy Stg 1  | -      | -      | -    |
| Critical Hdwy Stg 2  | 6.04   | -      | -    |
| Follow-up Hdwy       | 3.82   | -      | 3.12 |
| Pot Cap-1 Maneuver   | 556    | 0      | -    |
| Stage 1              | -      | 0      | -    |
| Stage 2              | 534    | 0      | -    |
| Platoon blocked, %   | -      | -      | -    |
| Mov Cap-1 Maneuver   | 556    | -      | -    |
| Mov Cap-2 Maneuver   | 556    | -      | -    |
| Stage 1              | -      | -      | -    |
| Stage 2              | 534    | -      | -    |

| Approach             | EB | NB |
|----------------------|----|----|
| HCM Control Delay, s | 12 |    |
| HCM LOS              | B  |    |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 |
|-----------------------|-----|-----|-------|
| Capacity (veh/h)      | -   | -   | 556   |
| HCM Lane V/C Ratio    | -   | -   | 0.072 |
| HCM Control Delay (s) | -   | -   | 12    |
| HCM Lane LOS          | -   | -   | B     |
| HCM 95th %tile Q(veh) | -   | -   | 0.2   |

MS

Synchro 9 Report  
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27: Guadalupe St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.6  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      |      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 0    | 13   | 47   | 46   | 8    | 0    | 0    | 0    | 0    | 144  | 1108 | 18   |
| Future Vol, veh/h        | 0    | 13   | 47   | 46   | 8    | 0    | 0    | 0    | 0    | 144  | 1108 | 18   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 20   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 24   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 14   | 51   | 50   | 9    | 0    | 0    | 0    | 0    | 157  | 1204 | 20   |

| Major/Minor          | Minor2 |      |      | Minor1 |      |   | Major2 |   |   |
|----------------------|--------|------|------|--------|------|---|--------|---|---|
| Conflicting Flow All | -      | 1541 | 646  | 942    | 1541 | - | 0      | 0 | 0 |
| Stage 1              | -      | 1541 | -    | 0      | 0    | - | -      | - | - |
| Stage 2              | -      | 0    | -    | 942    | 1541 | - | -      | - | - |
| Critical Hdwy        | -      | 6.54 | 6.94 | 7.54   | 6.54 | - | 4.14   | - | - |
| Critical Hdwy Stg 1  | -      | 5.54 | -    | -      | -    | - | -      | - | - |
| Critical Hdwy Stg 2  | -      | -    | -    | 6.54   | 5.54 | - | -      | - | - |
| Follow-up Hdwy       | -      | 4.02 | 3.32 | 3.52   | 4.02 | - | 2.22   | - | - |
| Pot Cap-1 Maneuver   | 0      | 114  | 414  | 218    | 114  | 0 | -      | - | - |
| Stage 1              | 0      | 175  | -    | -      | -    | 0 | -      | - | - |
| Stage 2              | 0      | -    | -    | 283    | 175  | 0 | -      | - | - |
| Platoon blocked, %   | -      | -    | -    | -      | -    | - | -      | - | - |
| Mov Cap-1 Maneuver   | -      | 111  | 405  | 172    | 111  | - | -      | - | - |
| Mov Cap-2 Maneuver   | -      | 111  | -    | 172    | 111  | - | -      | - | - |
| Stage 1              | -      | 171  | -    | -      | -    | - | -      | - | - |
| Stage 2              | -      | -    | -    | 227    | 171  | - | -      | - | - |

| Approach             | EB   |  | WB   |  | SB |  |
|----------------------|------|--|------|--|----|--|
| HCM Control Delay, s | 23.7 |  | 40.3 |  |    |  |
| HCM LOS              | C    |  | E    |  |    |  |

| Minor Lane/Major Mvmt | EBLn1WBLn1  | SBL | SBT | SBR |
|-----------------------|-------------|-----|-----|-----|
| Capacity (veh/h)      | 257 159     | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.254 0.369 | -   | -   | -   |
| HCM Control Delay (s) | 23.7 40.3   | -   | -   | -   |
| HCM Lane LOS          | C E         | -   | -   | -   |
| HCM 95th %tile Q(veh) | 1 1.6       | -   | -   | -   |

29: Colorado St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 13.2 |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      |      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 8    | 25   | 81   | 112  | 56   | 5    | 45   | 307  | 8    | 2    | 119  | 34   |
| Future Vol, veh/h        | 8    | 25   | 81   | 112  | 56   | 5    | 45   | 307  | 8    | 2    | 119  | 34   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 15   | 3    | 0    | 0    | 0    | 0    | 3    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 10   | 32   | 103  | 142  | 71   | 6    | 57   | 389  | 10   | 3    | 151  | 43   |

| Major/Minor          | Minor2 |       |       | Minor1 |       |       | Major1 |   |   | Major2 |   |   |
|----------------------|--------|-------|-------|--------|-------|-------|--------|---|---|--------|---|---|
| Conflicting Flow All | 741    | 693   | 175   | 752    | 710   | 409   | 197    | 0 | 0 | 399    | 0 | 0 |
| Stage 1              | 180    | 180   | -     | 508    | 508   | -     | -      | - | - | -      | - | - |
| Stage 2              | 561    | 513   | -     | 244    | 202   | -     | -      | - | - | -      | - | - |
| Critical Hdwy        | 7.12   | 6.52  | 6.22  | 7.12   | 6.52  | 6.22  | 4.12   | - | - | 4.12   | - | - |
| Critical Hdwy Stg 1  | 6.12   | 5.52  | -     | 6.12   | 5.52  | -     | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | 6.12   | 5.52  | -     | 6.12   | 5.52  | -     | -      | - | - | -      | - | - |
| Follow-up Hdwy       | 3.518  | 4.018 | 3.318 | 3.518  | 4.018 | 3.318 | 2.218  | - | - | 2.218  | - | - |
| Pot Cap-1 Maneuver   | 332    | 367   | 868   | 327    | 359   | 642   | 1376   | - | - | 1160   | - | - |
| Stage 1              | 822    | 750   | -     | 547    | 539   | -     | -      | - | - | -      | - | - |
| Stage 2              | 512    | 536   | -     | 760    | 734   | -     | -      | - | - | -      | - | - |
| Platoon blocked, %   | -      | -     | -     | -      | -     | -     | -      | - | - | -      | - | - |
| Mov Cap-1 Maneuver   | 260    | 346   | 866   | 257    | 338   | 633   | 1376   | - | - | 1143   | - | - |
| Mov Cap-2 Maneuver   | 260    | 346   | -     | 257    | 338   | -     | -      | - | - | -      | - | - |
| Stage 1              | 776    | 746   | -     | 518    | 510   | -     | -      | - | - | -      | - | - |
| Stage 2              | 407    | 508   | -     | 640    | 730   | -     | -      | - | - | -      | - | - |

| Approach             | EB   |  | WB   |  | NB |  | SB  |  |
|----------------------|------|--|------|--|----|--|-----|--|
| HCM Control Delay, s | 13.3 |  | 50.1 |  | 1  |  | 0.1 |  |
| HCM LOS              | B    |  | F    |  |    |  |     |  |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1WBLn1        | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------------------|-----|-----|-----|
| Capacity (veh/h)      | 1376  | -   | -   | 580 284 1143      | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.041 | -   | -   | 0.249 0.771 0.002 | -   | -   | -   |
| HCM Control Delay (s) | 7.7   | 0   | -   | 13.3 50.1 8.2     | 0   | -   | -   |
| HCM Lane LOS          | A     | A   | -   | B F A A           | -   | -   | -   |
| HCM 95th %tile Q(veh) | 0.1   | -   | -   | 1 5.9 0           | -   | -   | -   |

30: N. Congress Ave  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 9.9  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    |      |      | ↑    |      |      | ↑    |      |      | ↑    |      |
| Traffic Vol, veh/h       | 0    | 36   | 0    | 0    | 169  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 0    | 36   | 0    | 0    | 169  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 11   | 0    | 11   | 12   | 0    | 0    | 0    | 0    | 12   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 39   | 0    | 0    | 184  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |

| Major/Minor          | Minor2 |       |   | Minor1 |       |   | Major1 |   |   | Major2 |   |   |
|----------------------|--------|-------|---|--------|-------|---|--------|---|---|--------|---|---|
| Conflicting Flow All | -      | 1     | - | -      | 1     | - | -      | 0 | - | -      | - | 0 |
| Stage 1              | -      | 1     | - | -      | 0     | - | -      | - | - | -      | - | - |
| Stage 2              | -      | 0     | - | -      | 1     | - | -      | - | - | -      | - | - |
| Critical Hdwy        | -      | 6.52  | - | -      | 6.52  | - | -      | - | - | -      | - | - |
| Critical Hdwy Stg 1  | -      | 5.52  | - | -      | 5.52  | - | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | -      | 5.52  | - | -      | 5.52  | - | -      | - | - | -      | - | - |
| Follow-up Hdwy       | -      | 4.018 | - | -      | 4.018 | - | -      | - | - | -      | - | - |
| Pot Cap-1 Maneuver   | 0      | 895   | 0 | 0      | 895   | 0 | 0      | - | 0 | 0      | - | 0 |
| Stage 1              | 0      | 895   | 0 | 0      | -     | 0 | 0      | - | 0 | 0      | - | 0 |
| Stage 2              | 0      | -     | 0 | 0      | 895   | 0 | 0      | - | 0 | -      | 0 | 0 |
| Platoon blocked, %   | -      | -     | - | -      | -     | - | -      | - | - | -      | - | - |
| Mov Cap-1 Maneuver   | -      | 895   | - | -      | 895   | - | -      | - | - | -      | - | - |
| Mov Cap-2 Maneuver   | -      | 895   | - | -      | 895   | - | -      | - | - | -      | - | - |
| Stage 1              | -      | 895   | - | -      | -     | - | -      | - | - | -      | - | - |
| Stage 2              | -      | -     | - | -      | 895   | - | -      | - | - | -      | - | - |

| Approach             | EB  |  |  | WB   |  |  | NB |  |  | SB |  |  |
|----------------------|-----|--|--|------|--|--|----|--|--|----|--|--|
| HCM Control Delay, s | 9.2 |  |  | 10.1 |  |  | 0  |  |  | 0  |  |  |
| HCM LOS              | A   |  |  | B    |  |  |    |  |  |    |  |  |

| Minor Lane/Major Mvmt | NBT | EBLn1 | WBLn1 | SBT |
|-----------------------|-----|-------|-------|-----|
| Capacity (veh/h)      | -   | 895   | 895   | -   |
| HCM Lane V/C Ratio    | -   | 0.044 | 0.205 | -   |
| HCM Control Delay (s) | -   | 9.2   | 10.1  | -   |
| HCM Lane LOS          | -   | A     | B     | -   |
| HCM 95th %tile Q(veh) | -   | 0.1   | 0.8   | -   |

31: Brazos St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.2  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑    |      |      | ↑    | ↑    |      |
| Traffic Vol, veh/h       | 35   | 0    | 3    | 133  | 44   | 0    |
| Future Vol, veh/h        | 35   | 0    | 3    | 133  | 44   | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 25   | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 83   | 83   | 83   | 83   | 83   | 83   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 42   | 0    | 4    | 160  | 53   | 0    |




| Major/Minor          | Major1 |   | Major2 |   | Minor1 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 0      | 0 | 67     | 0 | 234    | 67    |
| Stage 1              | -      | - | -      | - | 67     | -     |
| Stage 2              | -      | - | -      | - | 167    | -     |
| Critical Hdwy        | -      | - | 4.12   | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | -      | - | 2.218  | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | -      | - | 1535   | - | 754    | 997   |
| Stage 1              | -      | - | -      | - | 956    | -     |
| Stage 2              | -      | - | -      | - | 863    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | -      | - | 1535   | - | 734    | 973   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 734    | -     |
| Stage 1              | -      | - | -      | - | 933    | -     |
| Stage 2              | -      | - | -      | - | 860    | -     |

| Approach             | EB |  | WB  |  | NB   |  |
|----------------------|----|--|-----|--|------|--|
| HCM Control Delay, s | 0  |  | 0.2 |  | 10.3 |  |
| HCM LOS              |    |  |     |  | B    |  |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 734   | -   | -   | 1535  | -   |
| HCM Lane V/C Ratio    | 0.072 | -   | -   | 0.002 | -   |
| HCM Control Delay (s) | 10.3  | -   | -   | 7.4   | 0   |
| HCM Lane LOS          | B     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | 0     | -   |

32: San Jacinto Blvd & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection             |      |   |      |      |   |   |
|--------------------------|------|---|------|------|---|---|
| Int Delay, s/veh         | 1.1  |   |      |      |   |   |
| Movement                 | EBL  | EBR   | NBL  | NBT  | SBT   | SBR   |
| Lane Configurations      |      |  |      |      |  |  |
| Traffic Vol, veh/h       | 0    | 45  | 0    | 0    | 339   | 154   |
| Future Vol, veh/h        | 0    | 45  | 0    | 0    | 339   | 154   |
| Conflicting Peds, #/hr   | 0    | 0   | 0    | 0    | 0   | 122   |
| Sign Control             | Stop | Stop  | Free | Free | Free  | Free  |
| RT Channelized           | -    | None  | -    | None | -   | None  |
| Storage Length           | -    | 0   | -    | -    | -   | 50  |
| Veh in Median Storage, # | 0    | -   | -    | -    | 0   | -   |
| Grade, %                 | 0    | -   | -    | 0    | 0   | -   |
| Peak Hour Factor         | 83   | 83  | 83   | 83   | 83  | 83  |
| Heavy Vehicles, %        | 2    | 2   | 2    | 2    | 2   | 2   |
| Mvmt Flow                | 0    | 54  | 0    | 0    | 408   | 186   |




| Major/Minor          | Minor2 | Major2 |
|----------------------|--------|--------|
| Conflicting Flow All | - 326  | - 0    |
| Stage 1              | - -    | - -    |
| Stage 2              | - -    | - -    |
| Critical Hdwy        | - 7.14 | - -    |
| Critical Hdwy Stg 1  | - -    | - -    |
| Critical Hdwy Stg 2  | - -    | - -    |
| Follow-up Hdwy       | - 3.92 | - -    |
| Pot Cap-1 Maneuver   | 0 572  | - -    |
| Stage 1              | 0 -    | - -    |
| Stage 2              | 0 -    | - -    |
| Platoon blocked, %   | - -    | - -    |
| Mov Cap-1 Maneuver   | - 506  | - -    |
| Mov Cap-2 Maneuver   | - -    | - -    |
| Stage 1              | - -    | - -    |
| Stage 2              | - -    | - -    |

| Approach             | EB | SB |
|----------------------|----|----|
| HCM Control Delay, s | 13 | 0  |
| HCM LOS              | B  |    |

| Minor Lane/Major Mvmt | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-----|
| Capacity (veh/h)      | 506   | -   | -   |
| HCM Lane V/C Ratio    | 0.107 | -   | -   |
| HCM Control Delay (s) | 13    | -   | -   |
| HCM Lane LOS          | B     | -   | -   |
| HCM 95th %tile Q(veh) | 0.4   | -   | -   |

33: Colorado St & Parking Dr. 3  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection             |   |      |   |      |      |   |
|--------------------------|---|------|---|------|------|---|
| Int Delay, s/veh         | 1.6   |      |   |      |      |   |
| Movement                 | WBL   | WBR  | NBT   | NBR  | SBL  | SBT   |
| Lane Configurations      |  |      |  |      |      |  |
| Traffic Vol, veh/h       | 14  | 15   | 457   | 90   | 120  | 348   |
| Future Vol, veh/h        | 14  | 15   | 457   | 90   | 120  | 348   |
| Conflicting Peds, #/hr   | 0   | 0    | 0   | 0    | 0    | 0   |
| Sign Control             | Stop  | Stop | Free  | Free | Free | Free  |
| RT Channelized           | -   | None | -   | None | -    | None  |
| Storage Length           | 0   | -    | -   | -    | -    | -   |
| Veh in Median Storage, # | 0   | -    | 0   | -    | -    | 0   |
| Grade, %                 | 0   | -    | 0   | -    | -    | 0   |
| Peak Hour Factor         | 92  | 92   | 92  | 92   | 92   | 92  |
| Heavy Vehicles, %        | 2   | 2    | 2   | 2    | 2    | 2   |
| Mvmt Flow                | 15  | 16   | 497   | 98   | 130  | 378   |




| Major/Minor          | Minor1      | Major1 | Major2  |
|----------------------|-------------|--------|---------|
| Conflicting Flow All | 1185 546    | 0 0    | 595 0   |
| Stage 1              | 546 -       | - -    | - -     |
| Stage 2              | 639 -       | - -    | - -     |
| Critical Hdwy        | 6.42 6.22   | - -    | 4.12 -  |
| Critical Hdwy Stg 1  | 5.42 -      | - -    | - -     |
| Critical Hdwy Stg 2  | 5.42 -      | - -    | - -     |
| Follow-up Hdwy       | 3.518 3.318 | - -    | 2.218 - |
| Pot Cap-1 Maneuver   | 209 538     | - -    | 981 -   |
| Stage 1              | 580 -       | - -    | - -     |
| Stage 2              | 526 -       | - -    | - -     |
| Platoon blocked, %   | - -         | - -    | - -     |
| Mov Cap-1 Maneuver   | 174 538     | - -    | 981 -   |
| Mov Cap-2 Maneuver   | 174 -       | - -    | - -     |
| Stage 1              | 580 -       | - -    | - -     |
| Stage 2              | 438 -       | - -    | - -     |

| Approach             | WB   | NB | SB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 20.2 | 0  | 2.4 |
| HCM LOS              | C    |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1    | SBL | SBT |
|-----------------------|-----|-------------|-----|-----|
| Capacity (veh/h)      | - - | 268 981     | -   | -   |
| HCM Lane V/C Ratio    | - - | 0.118 0.133 | -   | -   |
| HCM Control Delay (s) | - - | 20.2 9.2    | 0   | -   |
| HCM Lane LOS          | - - | C A         | A   | -   |
| HCM 95th %tile Q(veh) | - - | 0.4 0.5     | -   | -   |

62: Colorado St & Parking Dr. 4  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection             |   |      |      |   |   |      |
|--------------------------|---|------|------|---|---|------|
| Int Delay, s/veh         | 1.2   |      |      |   |   |      |
| Movement                 | EBL   | EBR  | NBL  | NBT   | SBT   | SBR  |
| Lane Configurations      |  |      |      |  |  |      |
| Traffic Vol, veh/h       | 12  | 12   | 84   | 387   | 456   | 96   |
| Future Vol, veh/h        | 12  | 12   | 84   | 387   | 456   | 96   |
| Conflicting Peds, #/hr   | 0   | 0    | 0    | 0   | 0   | 0    |
| Sign Control             | Stop  | Stop | Free | Free  | Free  | Free |
| RT Channelized           | -   | None | -    | None  | -   | None |
| Storage Length           | 0   | -    | -    | -   | -   | -    |
| Veh in Median Storage, # | 0   | -    | -    | 0   | 0   | -    |
| Grade, %                 | 0   | -    | -    | 0   | 0   | -    |
| Peak Hour Factor         | 92  | 92   | 92   | 92  | 92  | 92   |
| Heavy Vehicles, %        | 2   | 2    | 2    | 2   | 2   | 2    |
| Mvmt Flow                | 13  | 13   | 91   | 421   | 496   | 104  |




| Major/Minor          | Minor2 | Major1 |       | Major2 |     |
|----------------------|--------|--------|-------|--------|-----|
| Conflicting Flow All | 1151   | 548    | 600   | 0      | - 0 |
| Stage 1              | 548    | -      | -     | -      | -   |
| Stage 2              | 603    | -      | -     | -      | -   |
| Critical Hdwy        | 6.42   | 6.22   | 4.12  | -      | -   |
| Critical Hdwy Stg 1  | 5.42   | -      | -     | -      | -   |
| Critical Hdwy Stg 2  | 5.42   | -      | -     | -      | -   |
| Follow-up Hdwy       | 3.518  | 3.318  | 2.218 | -      | -   |
| Pot Cap-1 Maneuver   | 219    | 536    | 977   | -      | -   |
| Stage 1              | 579    | -      | -     | -      | -   |
| Stage 2              | 546    | -      | -     | -      | -   |
| Platoon blocked, %   | -      | -      | -     | -      | -   |
| Mov Cap-1 Maneuver   | 192    | 536    | 977   | -      | -   |
| Mov Cap-2 Maneuver   | 192    | -      | -     | -      | -   |
| Stage 1              | 579    | -      | -     | -      | -   |
| Stage 2              | 479    | -      | -     | -      | -   |

| Approach             | EB | NB  | SB |
|----------------------|----|-----|----|
| HCM Control Delay, s | 19 | 1.6 | 0  |
| HCM LOS              | C  |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 977   | -   | 283   | -   | -   |
| HCM Lane V/C Ratio    | 0.093 | -   | 0.092 | -   | -   |
| HCM Control Delay (s) | 9.1   | 0   | 19    | -   | -   |
| HCM Lane LOS          | A     | A   | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.3   | -   | 0.3   | -   | -   |

69: Parking Dr. 5 & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: AM

| Intersection             |   |      |      |   |   |      |
|--------------------------|---|------|------|---|---|------|
| Int Delay, s/veh         | 2.6   |      |      |   |   |      |
| Movement                 | EBT   | EBR  | WBL  | WBT   | NBL   | NBR  |
| Lane Configurations      |  |      |      |  |  |      |
| Traffic Vol, veh/h       | 109   | 120  | 90   | 44  | 19  | 10   |
| Future Vol, veh/h        | 109   | 120  | 90   | 44  | 19  | 10   |
| Conflicting Peds, #/hr   | 0   | 0    | 0    | 0   | 0   | 0    |
| Sign Control             | Free  | Free | Free | Free  | Stop  | Stop |
| RT Channelized           | -   | None | -    | None  | -   | None |
| Storage Length           | -   | -    | -    | -   | 0   | -    |
| Veh in Median Storage, # | 0   | -    | -    | 0   | 0   | -    |
| Grade, %                 | 0   | -    | -    | 0   | 0   | -    |
| Peak Hour Factor         | 92  | 92   | 92   | 92  | 92  | 92   |
| Heavy Vehicles, %        | 2   | 2    | 2    | 2   | 2   | 2    |
| Mvmt Flow                | 118   | 130  | 98   | 48  | 21  | 11   |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 0      | 0 | 249    | 0 | 427    | 184   |
| Stage 1              | -      | - | -      | - | 184    | -     |
| Stage 2              | -      | - | -      | - | 243    | -     |
| Critical Hdwy        | -      | - | 4.12   | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | -      | - | 2.218  | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | -      | - | 1317   | - | 584    | 858   |
| Stage 1              | -      | - | -      | - | 848    | -     |
| Stage 2              | -      | - | -      | - | 797    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | -      | - | 1317   | - | 540    | 858   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 540    | -     |
| Stage 1              | -      | - | -      | - | 848    | -     |
| Stage 2              | -      | - | -      | - | 736    | -     |

| Approach             | EB | WB  | NB   |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0  | 5.3 | 11.1 |
| HCM LOS              |    |     | B    |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 619   | -   | -   | 1317  | -   |
| HCM Lane V/C Ratio    | 0.051 | -   | -   | 0.074 | -   |
| HCM Control Delay (s) | 11.1  | -   | -   | 8     | 0   |
| HCM Lane LOS          | B     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | 0.2   | -   |

1: Martin Luther King Jr. Blvd & Guadalupe St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR   | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|------|------|-------|-------|------|------|------|-------|-------|-------|
| Lane Configurations     | ↰     | ↰↱    | ↱    |      | ↰↱    | ↱     |      |      |      | ↰     | ↰↱    | ↱     |
| Traffic Volume (vph)    | 152   | 374   | 147  | 0    | 1288  | 707   | 0    | 0    | 0    | 190   | 637   | 232   |
| Future Volume (vph)     | 152   | 374   | 147  | 0    | 1288  | 707   | 0    | 0    | 0    | 190   | 637   | 232   |
| Confl. Peds. (#/hr)     | 30    |       | 69   | 69   |       | 30    |      |      |      | 41    |       | 69    |
| Confl. Bikes (#/hr)     |       |       | 1    |      |       | 6     |      |      |      |       |       | 3     |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94 | 0.94 | 0.94  | 0.94  | 0.94 | 0.94 | 0.94 | 0.94  | 0.94  | 0.94  |
| Adj. Flow (vph)         | 162   | 398   | 156  | 0    | 1370  | 752   | 0    | 0    | 0    | 202   | 678   | 247   |
| Shared Lane Traffic (%) |       |       |      |      |       |       |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 162   | 554   | 0    | 0    | 1370  | 752   | 0    | 0    | 0    | 202   | 678   | 247   |
| Turn Type               | Prot  | NA    |      |      | NA    | pm+ov |      |      |      | pm+pt | NA    | Perm  |
| Protected Phases        | 5     | 2     |      |      | 6     | 7     |      |      |      | 7     | 4     |       |
| Permitted Phases        |       |       |      |      |       | 6     |      |      |      | 4     |       | 4     |
| Detector Phase          | 5     | 2     |      |      | 6     | 7     |      |      |      | 7     | 4     | 4     |
| Switch Phase            |       |       |      |      |       |       |      |      |      |       |       |       |
| Minimum Initial (s)     | 2.0   | 15.0  |      |      | 15.0  | 10.0  |      |      |      | 10.0  | 5.0   | 5.0   |
| Minimum Split (s)       | 7.0   | 27.0  |      |      | 34.0  | 15.0  |      |      |      | 15.0  | 32.0  | 32.0  |
| Total Split (s)         | 25.0  | 92.0  |      |      | 67.0  | 43.0  |      |      |      | 43.0  | 43.0  | 43.0  |
| Total Split (%)         | 18.5% | 68.1% |      |      | 49.6% | 31.9% |      |      |      | 31.9% | 31.9% | 31.9% |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   | 4.0   |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   | 1.0   |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   | 0.0   |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   | 5.0   |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                | Lag   |       |      |      | Lead  |       |      |      |      |       |       |       |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |       |      |      |      |       |       |       |
| Recall Mode             | None  | C-Max |      |      | C-Max | None  |      |      |      | None  | Max   | Max   |
| Act Effect Green (s)    | 20.0  | 87.0  |      |      | 62.0  | 100.0 |      |      |      | 38.0  | 38.0  | 38.0  |
| Actuated g/C Ratio      | 0.15  | 0.64  |      |      | 0.46  | 0.74  |      |      |      | 0.28  | 0.28  | 0.28  |
| v/c Ratio               | 0.62  | 0.26  |      |      | 0.84  | 0.64  |      |      |      | 0.41  | 0.68  | 0.49  |
| Control Delay           | 65.1  | 10.2  |      |      | 28.6  | 2.4   |      |      |      | 42.3  | 47.2  | 19.3  |
| Queue Delay             | 0.0   | 0.0   |      |      | 47.6  | 0.3   |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             | 65.1  | 10.2  |      |      | 76.2  | 2.7   |      |      |      | 42.3  | 47.2  | 19.3  |
| LOS                     | E     | B     |      |      | E     | A     |      |      |      | D     | D     | B     |
| Approach Delay          |       | 22.6  |      |      | 50.2  |       |      |      |      |       | 40.2  |       |
| Approach LOS            |       | C     |      |      | D     |       |      |      |      |       | D     |       |
| Queue Length 50th (ft)  | 135   | 97    |      |      | 517   | 21    |      |      |      | 144   | 278   | 68    |
| Queue Length 95th (ft)  | 213   | 126   |      |      | m575  | m42   |      |      |      | 220   | 348   | 154   |
| Internal Link Dist (ft) |       | 228   |      |      | 45    |       | 159  |      |      |       | 210   |       |
| Turn Bay Length (ft)    | 160   |       |      |      |       |       |      |      |      | 130   |       | 120   |
| Base Capacity (vph)     | 262   | 2108  |      |      | 1625  | 1174  |      |      |      | 498   | 996   | 501   |
| Starvation Cap Reductn  | 0     | 0     |      |      | 381   | 85    |      |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     | 0     |      |      |      | 0     | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     | 0     |      |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       | 0.62  | 0.26  |      |      | 1.10  | 0.69  |      |      |      | 0.41  | 0.68  | 0.49  |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 80

Ms

Synchro 9 Report  
Page 1

1: Martin Luther King Jr. Blvd & Guadalupe St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 42.4

Intersection LOS: D

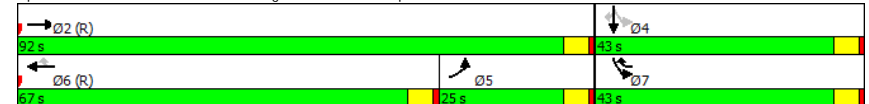
Intersection Capacity Utilization 79.0%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Martin Luther King Jr. Blvd & Guadalupe St



Ms

Synchro 9 Report  
Page 2

3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

|   | →     | ↖    | ↗    | ←     | ↖     | ↗     |
|---|-------|------|------|-------|-------|-------|
| Lane Group  | EBT   | EBR  | WBL  | WBT   | NBL   | NBR   |
| Lane Configurations   | ↑↑    |      |      | ↑↑    | ↖↗    | ↖↗    |
| Traffic Volume (vph)  | 543   | 0    | 0    | 1331  | 992   | 243   |
| Future Volume (vph)   | 543   | 0    | 0    | 1331  | 992   | 243   |
| Confl. Peds. (#/hr)   |       |      |      |       |       | 81    |
| Peak Hour Factor  | 0.91  | 0.91 | 0.91 | 0.91  | 0.91  | 0.91  |
| Adj. Flow (vph)   | 597   | 0    | 0    | 1463  | 1090  | 267   |
| Shared Lane Traffic (%)   |       |      |      |       |       |       |
| Lane Group Flow (vph)   | 597   | 0    | 0    | 1463  | 1090  | 267   |
| Turn Type   | NA    |      |      | NA    | Prot  | Perm  |
| Protected Phases  | 2     |      |      | 6     | 8     |       |
| Permitted Phases  |       |      |      |       |       | 3     |
| Detector Phase  | 2     |      |      | 6     | 8     | 3     |
| Switch Phase  |       |      |      |       |       |       |
| Minimum Initial (s)   | 10.0  |      |      | 10.0  | 5.0   | 5.0   |
| Minimum Split (s)   | 30.0  |      |      | 15.0  | 10.0  | 10.0  |
| Total Split (s)   | 86.0  |      |      | 86.0  | 49.0  | 49.0  |
| Total Split (%)   | 63.7% |      |      | 63.7% | 36.3% | 36.3% |
| Yellow Time (s)   | 4.0   |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)  | 1.0   |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)  | 0.0   |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)   | 5.0   |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag  |       |      |      |       |       |       |
| Lead-Lag Optimize?  |       |      |      |       |       |       |
| Recall Mode   | C-Max |      |      | C-Max | Max   | Max   |
| Act Effect Green (s)  | 81.0  |      |      | 81.0  | 44.0  | 44.0  |
| Actuated g/C Ratio  | 0.60  |      |      | 0.60  | 0.33  | 0.33  |
| v/c Ratio   | 0.28  |      |      | 0.69  | 0.97  | 0.44  |
| Control Delay   | 13.8  |      |      | 14.1  | 76.2  | 24.2  |
| Queue Delay   | 0.3   |      |      | 0.6   | 5.9   | 0.0   |
| Total Delay   | 14.1  |      |      | 14.7  | 82.1  | 24.2  |
| LOS   | B     |      |      | B     | F     | C     |
| Approach Delay  | 14.1  |      |      | 14.7  | 70.7  |       |
| Approach LOS  | B     |      |      | B     | E     |       |
| Queue Length 50th (ft)  | 124   |      |      | 260   | 509   | 86    |
| Queue Length 95th (ft)  | 152   |      |      | 318   | #641  | 170   |
| Internal Link Dist (ft)   | 272   |      |      | 277   | 337   |       |
| Turn Bay Length (ft)  |       |      |      |       |       |       |
| Base Capacity (vph)   | 2123  |      |      | 2123  | 1118  | 611   |
| Starvation Cap Reductn  | 873   |      |      | 135   | 0     | 0     |
| Spillback Cap Reductn   | 0     |      |      | 294   | 32    | 0     |
| Storage Cap Reductn   | 0     |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio   | 0.48  |      |      | 0.80  | 1.00  | 0.44  |
| <b>Intersection Summary</b>   |       |      |      |       |       |       |
| Cycle Length: 135   |       |      |      |       |       |       |
| Actuated Cycle Length: 135  |       |      |      |       |       |       |
| Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green |       |      |      |       |       |       |
| Natural Cycle: 60   |       |      |      |       |       |       |
| Control Type: Actuated-Coordinated                                  |       |      |      |       |       |       |

Ms

Synchro 9 Report  
Page 3

3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

Maximum v/c Ratio: 0.97

Intersection Signal Delay: 36.8

Intersection LOS: D

Intersection Capacity Utilization 92.4%

ICU Level of Service F

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Lavaca St & Martin Luther King Jr. Blvd



Ms

Synchro 9 Report  
Page 4

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

|                         | →     | ↖    | ↗     | ←      | ↖    | ↗    |
|-------------------------|-------|------|-------|--------|------|------|
| Lane Group              | EBT   | EBR  | WBL   | WBT    | NBL  | NBR  |
| Lane Configurations     | ↖↗    |      | ↖     | ↖↗     |      |      |
| Traffic Volume (vph)    | 805   | 0    | 13    | 1276   | 0    | 0    |
| Future Volume (vph)     | 805   | 0    | 13    | 1276   | 0    | 0    |
| Confl. Peds. (#/hr)     |       | 33   | 33    |        | 35   |      |
| Confl. Bikes (#/hr)     |       | 4    |       |        |      |      |
| Peak Hour Factor        | 0.94  | 0.94 | 0.94  | 0.94   | 0.94 | 0.94 |
| Adj. Flow (vph)         | 856   | 0    | 14    | 1357   | 0    | 0    |
| Shared Lane Traffic (%) |       |      |       |        |      |      |
| Lane Group Flow (vph)   | 856   | 0    | 14    | 1357   | 0    | 0    |
| Turn Type               | NA    |      | pm+pt | NA     |      |      |
| Protected Phases        | 2     |      | 1     | 6      |      |      |
| Permitted Phases        |       |      | 6     |        |      |      |
| Detector Phase          | 2     |      | 1     | 6      |      |      |
| Switch Phase            |       |      |       |        |      |      |
| Minimum Initial (s)     | 15.0  |      | 3.0   | 15.0   |      |      |
| Minimum Split (s)       | 34.0  |      | 8.0   | 20.0   |      |      |
| Total Split (s)         | 121.0 |      | 14.0  | 135.0  |      |      |
| Total Split (%)         | 89.6% |      | 10.4% | 100.0% |      |      |
| Yellow Time (s)         | 4.0   |      | 4.0   | 4.0    |      |      |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0    |      |      |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0    |      |      |
| Total Lost Time (s)     | 5.0   |      | 5.0   | 5.0    |      |      |
| Lead/Lag                | Lead  |      | Lag   |        |      |      |
| Lead-Lag Optimize?      | Yes   |      | Yes   |        |      |      |
| Recall Mode             | C-Max |      | None  | C-Max  |      |      |
| Act Effect Green (s)    | 127.4 |      | 133.0 | 135.0  |      |      |
| Actuated g/C Ratio      | 0.94  |      | 0.99  | 1.00   |      |      |
| v/c Ratio               | 0.26  |      | 0.02  | 0.38   |      |      |
| Control Delay           | 0.6   |      | 0.1   | 0.3    |      |      |
| Queue Delay             | 0.0   |      | 0.0   | 0.0    |      |      |
| Total Delay             | 0.6   |      | 0.1   | 0.3    |      |      |
| LOS                     | A     |      | A     | A      |      |      |
| Approach Delay          | 0.6   |      |       | 0.3    |      |      |
| Approach LOS            | A     |      |       | A      |      |      |
| Queue Length 50th (ft)  | 0     |      | 0     | 3      |      |      |
| Queue Length 95th (ft)  | 38    |      | m0    | 0      |      |      |
| Internal Link Dist (ft) | 366   |      |       | 377    | 331  |      |
| Turn Bay Length (ft)    |       |      | 115   |        |      |      |
| Base Capacity (vph)     | 3339  |      | 657   | 3539   |      |      |
| Starvation Cap Reductn  | 0     |      | 0     | 0      |      |      |
| Spillback Cap Reductn   | 0     |      | 0     | 0      |      |      |
| Storage Cap Reductn     | 0     |      | 0     | 0      |      |      |
| Reduced v/c Ratio       | 0.26  |      | 0.02  | 0.38   |      |      |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 45

Ms

Synchro 9 Report  
Page 5

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.38

Intersection Signal Delay: 0.5

Intersection LOS: A

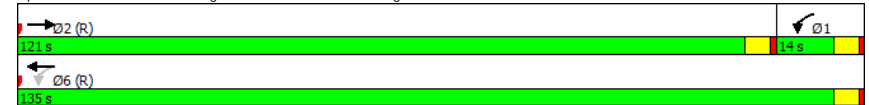
Intersection Capacity Utilization 39.4%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: N. Congress Ave & Martin Luther King Jr. Blvd



Ms

Synchro 9 Report  
Page 6

6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

|                         | ↖     | →     | ↘    | ↙     | ←     | ↖     | ↙     | ↘     | ↗     | ↘     | ↗     | ↖     |
|-------------------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL   | EBT   | EBR  | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     | ↖     | ↖↗    |      | ↖     | ↖↗    | ↖     |       | ↖     | ↖↗    |       | ↖     | ↖↗    |
| Traffic Volume (vph)    | 89    | 798   | 31   | 45    | 898   | 134   | 124   | 23    | 303   | 98    | 25    | 248   |
| Future Volume (vph)     | 89    | 798   | 31   | 45    | 898   | 134   | 124   | 23    | 303   | 98    | 25    | 248   |
| Confl. Peds. (#/hr)     | 44    |       | 7    | 7     |       | 44    | 22    |       | 23    | 23    |       | 22    |
| Confl. Bikes (#/hr)     |       |       | 4    |       |       | 3     |       |       |       |       |       |       |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  |
| Adj. Flow (vph)         | 92    | 823   | 32   | 46    | 926   | 138   | 128   | 24    | 312   | 101   | 26    | 256   |
| Shared Lane Traffic (%) |       |       |      |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)   | 92    | 855   | 0    | 46    | 926   | 138   | 0     | 152   | 312   | 0     | 127   | 256   |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    | Perm  | Perm  | NA    | Perm  | Perm  | NA    | Perm  |
| Protected Phases        | 5     | 2     |      | 1     | 6     |       |       | 8     |       |       | 4     |       |
| Permitted Phases        | 2     |       |      | 6     |       | 6     | 8     |       | 8     | 4     |       | 4     |
| Detector Phase          | 5     | 2     |      | 1     | 6     | 6     | 8     | 8     | 8     | 4     | 4     | 4     |
| Switch Phase            |       |       |      |       |       |       |       |       |       |       |       |       |
| Minimum Initial (s)     | 3.0   | 10.0  |      | 3.0   | 10.0  | 10.0  | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       | 8.0   | 22.0  |      | 8.0   | 28.0  | 28.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  |
| Total Split (s)         | 15.0  | 89.0  |      | 15.0  | 89.0  | 89.0  | 31.0  | 31.0  | 31.0  | 31.0  | 31.0  | 31.0  |
| Total Split (%)         | 11.1% | 65.9% |      | 11.1% | 65.9% | 65.9% | 23.0% | 23.0% | 23.0% | 23.0% | 23.0% | 23.0% |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   | 5.0   |       | 5.0   | 5.0   |       | 5.0   | 5.0   |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   | Lag   |       |       |       |       |       |       |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   | Yes   |       |       |       |       |       |       |
| Recall Mode             | None  | C-Max |      | None  | C-Max | C-Max | Max   | Max   | Max   | Max   | Max   | Max   |
| Act Effect Green (s)    | 95.9  | 89.7  |      | 93.0  | 86.6  | 86.6  |       | 26.0  | 26.0  |       | 26.0  | 26.0  |
| Actuated g/C Ratio      | 0.71  | 0.66  |      | 0.69  | 0.64  | 0.64  |       | 0.19  | 0.19  |       | 0.19  | 0.19  |
| v/c Ratio               | 0.23  | 0.37  |      | 0.10  | 0.41  | 0.15  |       | 0.74  | 0.60  |       | 0.67  | 0.54  |
| Control Delay           | 5.2   | 7.6   |      | 2.2   | 5.5   | 1.9   |       | 73.1  | 12.9  |       | 69.2  | 12.9  |
| Queue Delay             | 0.0   | 0.3   |      | 0.0   | 0.3   | 0.0   |       | 0.0   | 0.3   |       | 0.0   | 0.0   |
| Total Delay             | 5.2   | 7.9   |      | 2.2   | 5.8   | 1.9   |       | 73.1  | 13.2  |       | 69.2  | 12.9  |
| LOS                     | A     | A     |      | A     | A     | A     |       | E     | B     |       | E     | B     |
| Approach Delay          |       | 7.6   |      |       | 5.1   |       |       | 32.9  |       |       | 31.6  |       |
| Approach LOS            |       | A     |      |       | A     |       |       | C     |       |       | C     |       |
| Queue Length 50th (ft)  | 15    | 112   |      | 2     | 117   | 9     |       | 127   | 21    |       | 104   | 20    |
| Queue Length 95th (ft)  | 25    | 127   |      | 6     | 156   | 27    |       | #233  | 115   |       | #193  | 103   |
| Internal Link Dist (ft) |       | 377   |      |       | 273   |       |       | 135   |       |       | 212   |       |
| Turn Bay Length (ft)    | 160   |       |      | 100   |       | 100   |       |       | 100   |       |       |       |
| Base Capacity (vph)     | 433   | 2334  |      | 486   | 2269  | 901   |       | 206   | 518   |       | 189   | 475   |
| Starvation Cap Reductn  | 0     | 750   |      | 0     | 634   | 0     |       | 0     | 0     |       | 0     | 0     |
| Spillback Cap Reductn   | 0     | 306   |      | 0     | 0     | 0     |       | 0     | 24    |       | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Reduced v/c Ratio       | 0.21  | 0.54  |      | 0.09  | 0.57  | 0.15  |       | 0.74  | 0.63  |       | 0.67  | 0.54  |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 70

Ms

Synchro 9 Report  
Page 7

6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 13.9

Intersection LOS: B

Intersection Capacity Utilization 79.0%

ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: Brazos St & Martin Luther King Jr. Blvd



Ms

Synchro 9 Report  
Page 8

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑    |      | ↓     | ↑↑    |      |      |      |      | ↓     | ↑↑    | ↑     |
| Traffic Volume (vph)    | 0    | 1137  | 29   | 363   | 1132  | 0    | 0    | 0    | 0    | 38    | 200   | 141   |
| Future Volume (vph)     | 0    | 1137  | 29   | 363   | 1132  | 0    | 0    | 0    | 0    | 38    | 200   | 141   |
| Confl. Peds. (#/hr)     |      |       | 37   | 37    |       |      |      |      |      | 72    |       | 17    |
| Confl. Bikes (#/hr)     |      |       | 7    |       |       |      |      |      |      |       |       | 14    |
| Peak Hour Factor        | 0.93 | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93 | 0.93 | 0.93 | 0.93  | 0.93  | 0.93  |
| Adj. Flow (vph)         | 0    | 1223  | 31   | 390   | 1217  | 0    | 0    | 0    | 0    | 41    | 215   | 152   |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 1254  | 0    | 390   | 1217  | 0    | 0    | 0    | 0    | 41    | 215   | 152   |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      | 3.0   | 10.0  |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       |      | 32.0  |      | 8.0   | 30.0  |      |      |      |      | 30.0  | 30.0  | 30.0  |
| Total Split (s)         |      | 78.0  |      | 25.0  | 103.0 |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (%)         |      | 57.8% |      | 18.5% | 76.3% |      |      |      |      | 23.7% | 23.7% | 23.7% |
| Yellow Time (s)         |      | 4.0   |      | 4.0   | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      | 1.0   | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      | 0.0   | 0.0   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      | 5.0   | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      | Lead  |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      | Yes   |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      | None  | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effect Green (s)    |      | 73.0  |      | 98.0  | 98.0  |      |      |      |      | 27.0  | 27.0  | 27.0  |
| Actuated g/C Ratio      |      | 0.54  |      | 0.73  | 0.73  |      |      |      |      | 0.20  | 0.20  | 0.20  |
| v/c Ratio               |      | 0.66  |      | 1.00  | 0.47  |      |      |      |      | 0.13  | 0.30  | 0.39  |
| Control Delay           |      | 17.3  |      | 84.8  | 4.2   |      |      |      |      | 45.8  | 47.4  | 15.8  |
| Queue Delay             |      | 0.6   |      | 7.1   | 0.3   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             |      | 17.9  |      | 91.9  | 4.5   |      |      |      |      | 45.8  | 47.4  | 15.8  |
| LOS                     |      | B     |      | F     | A     |      |      |      |      | D     | D     | B     |
| Approach Delay          |      | 17.9  |      |       | 25.7  |      |      |      |      |       | 35.5  |       |
| Approach LOS            |      | B     |      |       | C     |      |      |      |      |       | D     |       |
| Queue Length 50th (ft)  |      | 340   |      | 259   | 121   |      |      |      |      | 30    | 85    | 24    |
| Queue Length 95th (ft)  |      | 413   |      | m#448 | m126  |      |      |      |      | 65    | 124   | 88    |
| Internal Link Dist (ft) |      | 273   |      |       | 321   |      |      | 343  |      |       | 244   |       |
| Turn Bay Length (ft)    |      |       |      | 120   |       |      |      |      |      | 100   |       | 100   |
| Base Capacity (vph)     |      | 1904  |      | 391   | 2569  |      |      |      |      | 312   | 707   | 394   |
| Starvation Cap Reductn  |      | 277   |      | 10    | 639   |      |      |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       |      | 0.77  |      | 1.02  | 0.63  |      |      |      |      | 0.13  | 0.30  | 0.39  |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 90

Ms

Synchro 9 Report  
Page 9

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 23.9

Intersection LOS: C

Intersection Capacity Utilization 85.9%

ICU Level of Service E

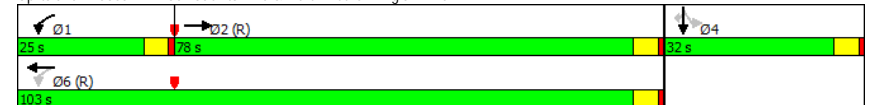
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: San Jacinto Blvd & Martin Luther King Jr. Blvd



Ms

Synchro 9 Report  
Page 10

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↩     | ↩↩    |      |      | ↩↩    |      | ↩     | ↩     | ↩     |      | ↓    | ↩    |
| Traffic Volume (vph)    | 85    | 1169  | 0    | 0    | 1230  | 52   | 215   | 321   | 591   | 0    | 0    | 0    |
| Future Volume (vph)     | 85    | 1169  | 0    | 0    | 1230  | 52   | 215   | 321   | 591   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     |       |       | 34   |      |       | 89   | 17    |       | 151   |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       | 4    |       |       | 13    |      |      |      |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97 | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph)         | 88    | 1205  | 0    | 0    | 1268  | 54   | 222   | 331   | 609   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       | 10%  |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 88    | 1205  | 0    | 0    | 1322  | 0    | 200   | 353   | 609   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    | Perm | NA    | Perm  |       |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      | 4     |       | 4     |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 26.0  |      |      | 26.0  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (s)         | 15.0  | 104.0 |      |      | 89.0  |      | 31.0  | 31.0  | 31.0  |      |      |      |
| Total Split (%)         | 11.1% | 77.0% |      |      | 65.9% |      | 23.0% | 23.0% | 23.0% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 99.0  | 99.0  |      |      | 86.6  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Actuated g/C Ratio      | 0.73  | 0.73  |      |      | 0.64  |      | 0.19  | 0.19  | 0.19  |      |      |      |
| v/c Ratio               | 0.32  | 0.46  |      |      | 0.59  |      | 0.64  | 1.04  | 2.03  |      |      |      |
| Control Delay           | 6.4   | 1.4   |      |      | 7.3   |      | 69.1  | 119.4 | 500.4 |      |      |      |
| Queue Delay             | 0.0   | 0.1   |      |      | 0.8   |      | 3.4   | 22.4  | 0.0   |      |      |      |
| Total Delay             | 6.4   | 1.5   |      |      | 8.1   |      | 72.5  | 141.8 | 500.4 |      |      |      |
| LOS                     | A     | A     |      |      | A     |      | E     | F     | F     |      |      |      |
| Approach Delay          |       | 1.8   |      |      | 8.1   |      |       | 317.8 |       |      |      |      |
| Approach LOS            |       | A     |      |      | A     |      |       | F     |       |      |      |      |
| Queue Length 50th (ft)  | 3     | 22    |      |      | 113   |      | 178   | -354  | -766  |      |      |      |
| Queue Length 95th (ft)  | m12   | 25    |      |      | 128   |      | 270   | #567  | #1002 |      |      |      |
| Internal Link Dist (ft) |       | 321   |      |      | 699   |      |       | 350   |       |      | 106  |      |
| Turn Bay Length (ft)    | 120   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 300   | 2595  |      |      | 2232  |      | 313   | 339   | 300   |      |      |      |
| Starvation Cap Reductn  | 0     | 215   |      |      | 533   |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 41    |      | 52    | 56    | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.29  | 0.51  |      |      | 0.78  |      | 0.77  | 1.25  | 2.03  |      |      |      |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green  
Natural Cycle: 75

Ms

Synchro 9 Report  
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8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.03

Intersection Signal Delay: 101.2

Intersection LOS: F

Intersection Capacity Utilization 85.9%

ICU Level of Service E

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

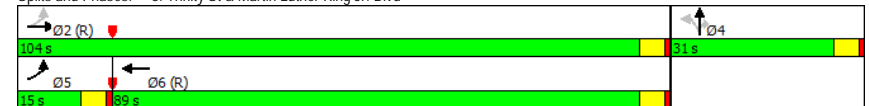
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Trinity St & Martin Luther King Jr. Blvd





















Ms

Synchro 9 Report  
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18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

|  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group   | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations  |   |  |  |   |  |  |   |   |   |   |  |  |
| Traffic Volume (vph)                                       | 0   | 20  | 12  | 164   | 96  | 0   | 0   | 0   | 0   | 47  | 1178  | 22  |
| Future Volume (vph)  | 0   | 20  | 12  | 164   | 96  | 0   | 0   | 0   | 0   | 47  | 1178  | 22  |
| Confl. Peds. (#/hr)  |   |   | 68  |   |   |   |   |   |   |   | 44  |   |
| Confl. Bikes (#/hr)  |   |   |   |   |   |   |   |   | 2   |   |   |   |
| Peak Hour Factor   | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  |
| Parking (#/hr)   |   | 0   |   |   |   |   |   |   |   |   |   |   |
| Adj. Flow (vph)  | 0   | 21  | 13  | 171   | 100   | 0   | 0   | 0   | 0   | 49  | 1227  | 23  |
| Shared Lane Traffic (%)                                    |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)                                      | 0   | 21  | 13  | 0   | 271   | 0   | 0   | 0   | 0   | 0   | 1299  | 0   |
| Turn Type  | NA  | Perm  | Perm  | NA  |   |   |   |   |   | Perm  | NA  |   |
| Protected Phases   | 4 12  |   |   | 4 12  |   |   |   |   |   |   | 2 10  |   |
| Permitted Phases   |   |   | 4 12  | 4 12  |   |   |   |   |   | 2 10  |   |   |
| Detector Phase   |   | 4 12  | 4 12  | 4 12  | 4 12  |   |   |   |   | 2 10  | 2 10  |   |
| Switch Phase   |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (%)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Yellow Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| All-Red Time (s)   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lost Time Adjust (s)                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Lost Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead/Lag   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?   |   |   |   |   |   |   |   |   |   |   |   |   |
| Recall Mode  |   |   |   |   |   |   |   |   |   |   |   |   |
| Act Effct Green (s)  |   | 31.5  | 31.5  |   | 31.5  |   |   |   |   |   | 79.5  |   |
| Actuated g/C Ratio   |   | 0.23  | 0.23  |   | 0.23  |   |   |   |   |   | 0.59  |   |
| v/c Ratio  |   | 0.05  | 0.03  |   | 0.79  |   |   |   |   |   | 0.63  |   |
| Control Delay  |   | 21.9  | 0.2   |   | 34.9  |   |   |   |   |   | 12.7  |   |
| Queue Delay  |   | 0.0   | 0.0   |   | 0.0   |   |   |   |   |   | 0.0   |   |
| Total Delay  |   | 21.9  | 0.2   |   | 35.0  |   |   |   |   |   | 12.7  |   |
| LOS  |   | C   | A   |   | C   |   |   |   |   |   | B   |   |
| Approach Delay   |   | 13.6  |   |   | 35.0  |   |   |   |   |   | 12.7  |   |
| Approach LOS   |   | B   |   |   | C   |   |   |   |   |   | B   |   |
| Queue Length 50th (ft)                                     |   | 10  | 0   |   | 84  |   |   |   |   |   | 206   |   |
| Queue Length 95th (ft)                                     |   | 24  | 0   |   | 131   |   |   |   |   |   | 270   |   |
| Internal Link Dist (ft)                                    |   | 177   |   |   | 244   |   |   | 271   |   |   | 262   |   |
| Turn Bay Length (ft)                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Base Capacity (vph)  |   | 533   | 509   |   | 472   |   |   |   |   |   | 2071  |   |
| Starvation Cap Reductn                                     |   | 0   | 0   |   | 1   |   |   |   |   |   | 0   |   |
| Spillback Cap Reductn                                      |   | 0   | 0   |   | 0   |   |   |   |   |   | 0   |   |
| Storage Cap Reductn  |   | 0   | 0   |   | 0   |   |   |   |   |   | 0   |   |
| Reduced v/c Ratio  |   | 0.04  | 0.03  |   | 0.58  |   |   |   |   |   | 0.63  |   |
| <b>Intersection Summary</b>                                |   |   |   |   |   |   |   |   |   |   |   |   |
| Cycle Length: 135  |   |   |   |   |   |   |   |   |   |   |   |   |
| Actuated Cycle Length: 135                                 |   |   |   |   |   |   |   |   |   |   |   |   |
| Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green |   |   |   |   |   |   |   |   |   |   |   |   |

Ms

Synchro 9 Report  
Page 13

18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Lane Group                  | Ø2    | Ø4   | Ø10  | Ø12  |
|-----------------------------|-------|------|------|------|
| Lane Configurations         |       |      |      |      |
| Traffic Volume (vph)        |       |      |      |      |
| Future Volume (vph)         |       |      |      |      |
| Confl. Peds. (#/hr)         |       |      |      |      |
| Confl. Bikes (#/hr)         |       |      |      |      |
| Peak Hour Factor            |       |      |      |      |
| Parking (#/hr)              |       |      |      |      |
| Adj. Flow (vph)             |       |      |      |      |
| Shared Lane Traffic (%)     |       |      |      |      |
| Lane Group Flow (vph)       |       |      |      |      |
| Turn Type                   |       |      |      |      |
| Protected Phases            | 2     | 4    | 10   | 12   |
| Permitted Phases            |       |      |      |      |
| Detector Phase              |       |      |      |      |
| Switch Phase                |       |      |      |      |
| Minimum Initial (s)         | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)           | 21.0  | 21.0 | 22.5 | 22.5 |
| Total Split (s)             | 56.0  | 29.0 | 24.0 | 26.0 |
| Total Split (%)             | 41%   | 21%  | 18%  | 19%  |
| Yellow Time (s)             | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)            | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)        |       |      |      |      |
| Total Lost Time (s)         |       |      |      |      |
| Lead/Lag                    |       |      |      |      |
| Lead-Lag Optimize?          |       |      |      |      |
| Recall Mode                 | C-Max | None | None | None |
| Act Effct Green (s)         |       |      |      |      |
| Actuated g/C Ratio          |       |      |      |      |
| v/c Ratio                   |       |      |      |      |
| Control Delay               |       |      |      |      |
| Queue Delay                 |       |      |      |      |
| Total Delay                 |       |      |      |      |
| LOS                         |       |      |      |      |
| Approach Delay              |       |      |      |      |
| Approach LOS                |       |      |      |      |
| Queue Length 50th (ft)      |       |      |      |      |
| Queue Length 95th (ft)      |       |      |      |      |
| Internal Link Dist (ft)     |       |      |      |      |
| Turn Bay Length (ft)        |       |      |      |      |
| Base Capacity (vph)         |       |      |      |      |
| Starvation Cap Reductn      |       |      |      |      |
| Spillback Cap Reductn       |       |      |      |      |
| Storage Cap Reductn         |       |      |      |      |
| Reduced v/c Ratio           |       |      |      |      |
| <b>Intersection Summary</b> |       |      |      |      |

Ms

Synchro 9 Report  
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18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 16.5

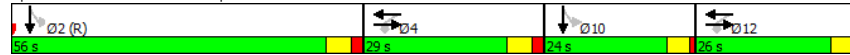
Intersection LOS: B

Intersection Capacity Utilization 76.3%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 18: Guadalupe St & E. 17th St



Ms

Synchro 9 Report  
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19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

|                         | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations     |      | ↔    |      |      | ↔    |      |      | ↔↔↔  | ↔    |      |      |      |
| Traffic Volume (vph)    | 11   | 64   | 0    | 0    | 133  | 123  | 65   | 1161 | 69   | 0    | 0    | 0    |
| Future Volume (vph)     | 11   | 64   | 0    | 0    | 133  | 123  | 65   | 1161 | 69   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 34   |      |      |      |      |      |      |      | 47   |      |      |      |
| Peak Hour Factor        | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Parking (#/hr)          | 0    |      |      |      |      |      |      |      |      |      |      |      |
| Adj. Flow (vph)         | 12   | 70   | 0    | 0    | 145  | 134  | 71   | 1262 | 75   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |      |      |      |      |      |      |      |      |      |      |      |      |
| Lane Group Flow (vph)   | 0    | 82   | 0    | 0    | 279  | 0    | 0    | 1333 | 75   | 0    | 0    | 0    |
| Turn Type               | Perm | NA   |      |      | NA   |      | Perm | NA   | Perm |      |      |      |
| Protected Phases        |      | 4 12 |      |      | 4 12 |      |      | 2 10 |      |      |      |      |
| Permitted Phases        | 4 12 |      |      |      |      |      | 2 10 |      | 2 10 |      |      |      |
| Detector Phase          | 4 12 | 4 12 |      |      | 4 12 |      | 2 10 | 2 10 | 2 10 |      |      |      |
| Switch Phase            |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Initial (s)     |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Split (s)       |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (s)         |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (%)         |      |      |      |      |      |      |      |      |      |      |      |      |
| Yellow Time (s)         |      |      |      |      |      |      |      |      |      |      |      |      |
| All-Red Time (s)        |      |      |      |      |      |      |      |      |      |      |      |      |
| Lost Time Adjust (s)    |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Lost Time (s)     |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead/Lag                |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead-Lag Optimize?      |      |      |      |      |      |      |      |      |      |      |      |      |
| Recall Mode             |      |      |      |      |      |      |      |      |      |      |      |      |
| Act Effct Green (s)     | 31.4 |      |      |      | 31.4 |      |      | 79.6 | 79.6 |      |      |      |
| Actuated g/C Ratio      | 0.23 |      |      |      | 0.23 |      |      | 0.59 | 0.59 |      |      |      |
| v/c Ratio               | 0.23 |      |      |      | 0.66 |      |      | 0.45 | 0.09 |      |      |      |
| Control Delay           | 21.8 |      |      |      | 31.4 |      |      | 10.2 | 4.3  |      |      |      |
| Queue Delay             | 0.0  |      |      |      | 0.0  |      |      | 0.0  | 0.0  |      |      |      |
| Total Delay             | 21.8 |      |      |      | 31.4 |      |      | 10.2 | 4.3  |      |      |      |
| LOS                     | C    |      |      |      | C    |      |      | B    | A    |      |      |      |
| Approach Delay          | 21.8 |      |      |      | 31.4 |      |      | 9.9  |      |      |      |      |
| Approach LOS            | C    |      |      |      | C    |      |      | A    |      |      |      |      |
| Queue Length 50th (ft)  | 32   |      |      |      | 128  |      |      | 147  | 11   |      |      |      |
| Queue Length 95th (ft)  | m62  |      |      |      | 189  |      |      | 152  | m18  |      |      |      |
| Internal Link Dist (ft) | 244  |      |      |      | 319  |      |      | 272  |      | 254  |      |      |
| Turn Bay Length (ft)    |      |      |      |      |      |      |      |      | 100  |      |      |      |
| Base Capacity (vph)     | 508  |      |      |      | 585  |      |      | 3009 | 800  |      |      |      |
| Starvation Cap Reductn  | 0    |      |      |      | 0    |      |      | 273  | 0    |      |      |      |
| Spillback Cap Reductn   | 0    |      |      |      | 7    |      |      | 0    | 0    |      |      |      |
| Storage Cap Reductn     | 0    |      |      |      | 0    |      |      | 0    | 0    |      |      |      |
| Reduced v/c Ratio       | 0.16 |      |      |      | 0.48 |      |      | 0.49 | 0.09 |      |      |      |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green

Natural Cycle: 100

Ms

Synchro 9 Report  
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19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 26.0  | 28.0 | 22.5 | 22.5 |
| Total Split (s)         | 54.0  | 28.0 | 25.0 | 28.0 |
| Total Split (%)         | 40%   | 21%  | 19%  | 21%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effect Green (s)    |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

Ms

Synchro 9 Report  
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19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 13.8

Intersection LOS: B

Intersection Capacity Utilization 48.3%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 19: Lavaca St & E. 17th St



Ms



















Synchro 9 Report  
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## 28: Lavaca St &amp; E. 16th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2022 Background + Site

Timing Plan: PM

|                         |  |  |  |  |  |  |  |    |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     |   |  |   |   |  |   |   |    |  |   |   |   |
| Traffic Volume (vph)    | 11  | 65  | 0   | 0   | 92  | 148   | 64  | 1123  | 60  | 0   | 0   | 0   |
| Future Volume (vph)     | 11  | 65  | 0   | 0   | 92  | 148   | 64  | 1123  | 60  | 0   | 0   | 0   |
| Confl. Peds. (#/hr)     |   |   |   |   |   | 167   | 87  |   |   |   |   |   |
| Confl. Bikes (#/hr)     |   |   |   |   |   | 2   |   |   |   |   |   |   |
| Peak Hour Factor        | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  |
| Parking (#/hr)          |   |   |   |   | 0   |   |   |   |   |   |   |   |
| Adj. Flow (vph)         | 12  | 68  | 0   | 0   | 97  | 156   | 67  | 1182  | 63  | 0   | 0   | 0   |
| Shared Lane Traffic (%) |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)   | 0   | 80  | 0   | 0   | 253   | 0   | 0   | 1249  | 63  | 0   | 0   | 0   |
| Turn Type               | Perm  | NA  |   |   | NA  |   | Perm  | NA  | Perm  |   |   |   |
| Protected Phases        |   | 4 12  |   |   | 4 12  |   |   | 2 10  |   |   |   |   |
| Permitted Phases        | 4 12  |   |   |   |   |   | 2 10  |   | 2 10  |   |   |   |
| Detector Phase          | 4 12  | 4 12  |   |   | 4 12  |   | 2 10  | 2 10  | 2 10  |   |   |   |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Split (s)       |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (s)         |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (%)         |   |   |   |   |   |   |   |   |   |   |   |   |
| Yellow Time (s)         |   |   |   |   |   |   |   |   |   |   |   |   |
| All-Red Time (s)        |   |   |   |   |   |   |   |   |   |   |   |   |
| Lost Time Adjust (s)    |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Lost Time (s)     |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead/Lag                |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?      |   |   |   |   |   |   |   |   |   |   |   |   |
| Recall Mode             |   |   |   |   |   |   |   |   |   |   |   |   |
| Act Effct Green (s)     |   | 31.2  |   |   | 31.2  |   |   | 79.8  | 79.8  |   |   |   |
| Actuated g/C Ratio      |   | 0.23  |   |   | 0.23  |   |   | 0.59  | 0.59  |   |   |   |
| v/c Ratio               |   | 0.20  |   |   | 0.77  |   |   | 0.42  | 0.07  |   |   |   |
| Control Delay           |   | 22.9  |   |   | 37.6  |   |   | 11.1  | 3.4   |   |   |   |
| Queue Delay             |   | 0.0   |   |   | 0.0   |   |   | 0.4   | 0.0   |   |   |   |
| Total Delay             |   | 22.9  |   |   | 37.6  |   |   | 11.5  | 3.4   |   |   |   |
| LOS                     |   | C   |   |   | D   |   |   | B   | A   |   |   |   |
| Approach Delay          |   | 22.9  |   |   | 37.6  |   |   | 11.1  |   |   |   |   |
| Approach LOS            |   | C   |   |   | D   |   |   | B   |   |   |   |   |
| Queue Length 50th (ft)  |   | 36  |   |   | 112   |   |   | 106   | 1   |   |   |   |
| Queue Length 95th (ft)  |   | m67   |   |   | 167   |   |   | m245  | m7  |   |   |   |
| Internal Link Dist (ft) |   | 233   |   |   | 60  |   |   | 281   |   |   | 272   |   |
| Turn Bay Length (ft)    |   |   |   |   |   |   |   |   | 100   |   |   |   |
| Base Capacity (vph)     |   | 568   |   |   | 448   |   |   | 2969  | 965   |   |   |   |
| Starvation Cap Reductn  |   | 0   |   |   | 0   |   |   | 1051  | 0   |   |   |   |
| Spillback Cap Reductn   |   | 0   |   |   | 0   |   |   | 0   | 0   |   |   |   |
| Storage Cap Reductn     |   | 0   |   |   | 0   |   |   | 0   | 0   |   |   |   |
| Reduced v/c Ratio       |   | 0.14  |   |   | 0.56  |   |   | 0.65  | 0.07  |   |   |   |

## Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green

Ms

Synchro 9 Report  
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## 28: Lavaca St &amp; E. 16th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2022 Background + Site

Timing Plan: PM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Confl. Bikes (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 28.0  | 32.0 | 21.0 | 20.0 |
| Total Split (s)         | 55.0  | 32.0 | 24.0 | 24.0 |
| Total Split (%)         | 41%   | 24%  | 18%  | 18%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effct Green (s)     |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |

## Intersection Summary

Ms

Synchro 9 Report  
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28: Lavaca St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 15.7

Intersection LOS: B

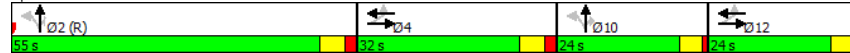
Intersection Capacity Utilization 54.7%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 28: Lavaca St & E. 16th St



34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

|                         | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑↑   |      | ↑     | ↑↑↑   |      |      |      |      |       | ↑↑↑   | ↑     |
| Traffic Volume (vph)    | 0    | 934   | 97   | 232   | 1793  | 0    | 0    | 0    | 0    | 152   | 917   | 444   |
| Future Volume (vph)     | 0    | 934   | 97   | 232   | 1793  | 0    | 0    | 0    | 0    | 152   | 917   | 444   |
| Confl. Peds. (#/hr)     |      |       | 18   | 18    |       |      |      |      |      | 20    |       | 28    |
| Confl. Bikes (#/hr)     |      |       |      |       |       |      |      |      |      |       |       | 28    |
| Peak Hour Factor        | 0.86 | 0.86  | 0.86 | 0.86  | 0.86  | 0.86 | 0.86 | 0.86 | 0.86 | 0.86  | 0.86  | 0.86  |
| Adj. Flow (vph)         | 0    | 1086  | 113  | 270   | 2085  | 0    | 0    | 0    | 0    | 177   | 1066  | 516   |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 1199  | 0    | 270   | 2085  | 0    | 0    | 0    | 0    | 0     | 1243  | 516   |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1 3   | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1 3   | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      |       | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       |      | 25.0  |      |       | 25.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (s)         |      | 58.0  |      |       | 88.0  |      |      |      |      | 47.0  | 47.0  | 47.0  |
| Total Split (%)         |      | 43.0% |      |       | 65.2% |      |      |      |      | 34.8% | 34.8% | 34.8% |
| Yellow Time (s)         |      | 4.0   |      |       | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      |       | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      |       | 0.0   |      |      |      |      |       | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      |       | 5.0   |      |      |      |      |       | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      |       |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      |       |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      |       | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effect Green (s)    |      | 53.0  |      | 83.0  | 83.0  |      |      |      |      |       | 42.0  | 42.0  |
| Actuated g/C Ratio      |      | 0.39  |      | 0.61  | 0.61  |      |      |      |      |       | 0.31  | 0.31  |
| v/c Ratio               |      | 0.61  |      | 0.72  | 0.67  |      |      |      |      |       | 0.79  | 0.98  |
| Control Delay           |      | 33.9  |      | 30.8  | 7.0   |      |      |      |      |       | 44.9  | 69.4  |
| Queue Delay             |      | 0.0   |      | 17.1  | 0.3   |      |      |      |      |       | 0.0   | 0.0   |
| Total Delay             |      | 33.9  |      | 47.9  | 7.3   |      |      |      |      |       | 44.9  | 69.4  |
| LOS                     |      | C     |      | D     | A     |      |      |      |      |       | D     | E     |
| Approach Delay          |      | 33.9  |      |       | 12.0  |      |      |      |      |       | 52.1  |       |
| Approach LOS            |      | C     |      |       | B     |      |      |      |      |       | D     |       |
| Queue Length 50th (ft)  |      | 300   |      | 106   | 136   |      |      |      |      |       | 322   | 308   |
| Queue Length 95th (ft)  |      | 330   |      | m150  | 139   |      |      |      |      |       | 369   | #562  |
| Internal Link Dist (ft) |      | 262   |      |       | 240   |      |      | 197  |      |       | 285   |       |
| Turn Bay Length (ft)    |      |       |      | 50    |       |      |      |      |      |       |       | 100   |
| Base Capacity (vph)     |      | 1968  |      | 374   | 3126  |      |      |      |      |       | 1564  | 524   |
| Starvation Cap Reductn  |      | 0     |      | 92    | 415   |      |      |      |      |       | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      |       | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      |       | 0     | 0     |
| Reduced v/c Ratio       |      | 0.61  |      | 0.96  | 0.77  |      |      |      |      |       | 0.79  | 0.98  |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 80

34: Guadalupe St & W. 15th St

TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site

Timing Plan: PM

| Lane Group              | Ø1   | Ø3   |
|-------------------------|------|------|
| Lane Configurations     |      |      |
| Traffic Volume (vph)    |      |      |
| Future Volume (vph)     |      |      |
| Confl. Peds. (#/hr)     |      |      |
| Confl. Bikes (#/hr)     |      |      |
| Peak Hour Factor        |      |      |
| Adj. Flow (vph)         |      |      |
| Shared Lane Traffic (%) |      |      |
| Lane Group Flow (vph)   |      |      |
| Turn Type               |      |      |
| Protected Phases        | 1    | 3    |
| Permitted Phases        |      |      |
| Detector Phase          |      |      |
| Switch Phase            |      |      |
| Minimum Initial (s)     | 5.0  | 8.0  |
| Minimum Split (s)       | 10.0 | 13.0 |
| Total Split (s)         | 15.0 | 15.0 |
| Total Split (%)         | 11%  | 11%  |
| Yellow Time (s)         | 4.0  | 4.0  |
| All-Red Time (s)        | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |
| Total Lost Time (s)     |      |      |
| Lead/Lag                | Lead |      |
| Lead-Lag Optimize?      | Yes  |      |
| Recall Mode             | Min  | None |
| Act Effect Green (s)    |      |      |
| Actuated g/C Ratio      |      |      |
| v/c Ratio               |      |      |
| Control Delay           |      |      |
| Queue Delay             |      |      |
| Total Delay             |      |      |
| LOS                     |      |      |
| Approach Delay          |      |      |
| Approach LOS            |      |      |
| Queue Length 50th (ft)  |      |      |
| Queue Length 95th (ft)  |      |      |
| Internal Link Dist (ft) |      |      |
| Turn Bay Length (ft)    |      |      |
| Base Capacity (vph)     |      |      |
| Starvation Cap Reductn  |      |      |
| Spillback Cap Reductn   |      |      |
| Storage Cap Reductn     |      |      |
| Reduced v/c Ratio       |      |      |
| Intersection Summary    |      |      |

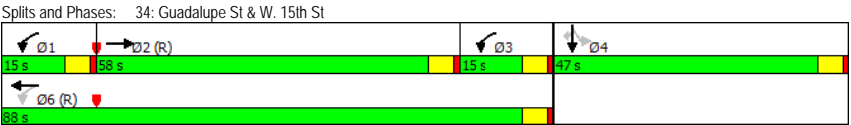
34: Guadalupe St & W. 15th St

TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site

Timing Plan: PM

|   |                        |
|---|------------------------|
| Control Type: Actuated-Coordinated                                |                        |
| Maximum v/c Ratio: 0.98   |                        |
| Intersection Signal Delay: 30.2                                   | Intersection LOS: C    |
| Intersection Capacity Utilization 80.1%                           | ICU Level of Service D |
| Analysis Period (min) 15  |                        |
| # 95th percentile volume exceeds capacity, queue may be longer.   |                        |
| Queue shown is maximum after two cycles.                          |                        |
| m Volume for 95th percentile queue is metered by upstream signal. |                        |























## 35: Lavaca St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2022 Background + Site

Timing Plan: PM

|                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |   |   |   |
| Lane Configurations     |  |  |   |   |  |   |   |  |  |   |   |   |   |   |   |
| Traffic Volume (vph)    | 125   | 929   | 0   | 0   | 1706  | 67  | 393   | 891   | 163   | 0   | 0   | 0   |   |   |   |
| Future Volume (vph)     | 125   | 929   | 0   | 0   | 1706  | 67  | 393   | 891   | 163   | 0   | 0   | 0   |   |   |   |
| Confl. Peds. (#/hr)     | 48  |   |   |   |   | 48  | 31  |   | 18  |   |   |   |   |   |   |
| Confl. Bikes (#/hr)     |   |   | 2   |   |   |   |   |   | 28  |   |   |   |   |   |   |
| Peak Hour Factor        | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  |   |   |   |
| Adj. Flow (vph)         | 139   | 1032  | 0   | 0   | 1896  | 74  | 437   | 990   | 181   | 0   | 0   | 0   |   |   |   |
| Shared Lane Traffic (%) |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)   | 139   | 1032  | 0   | 0   | 1970  | 0   | 0   | 1427  | 181   | 0   | 0   | 0   |   |   |   |
| Turn Type               | pm+pt   | NA  |   |   | NA  |   | Perm  | NA  | Perm  |   |   |   |   |   |   |
| Protected Phases        | 5   | 2   |   |   | 6   |   |   | 4   |   |   |   |   |   |   |   |
| Permitted Phases        | 2   |   |   |   |   |   | 4   |   | 4   |   |   |   |   |   |   |
| Detector Phase          | 5   | 2   |   |   | 6   |   | 4   | 4   | 4   |   |   |   |   |   |   |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     | 3.0   | 10.0  |   |   | 10.0  |   | 5.0   | 5.0   | 5.0   |   |   |   |   |   |   |
| Minimum Split (s)       | 8.0   | 28.0  |   |   | 28.0  |   | 33.0  | 33.0  | 33.0  |   |   |   |   |   |   |
| Total Split (s)         | 20.0  | 86.0  |   |   | 66.0  |   | 49.0  | 49.0  | 49.0  |   |   |   |   |   |   |
| Total Split (%)         | 14.8%   | 63.7%   |   |   | 48.9%   |   | 36.3%   | 36.3%   | 36.3%   |   |   |   |   |   |   |
| Yellow Time (s)         | 4.0   | 4.0   |   |   | 4.0   |   | 4.0   | 4.0   | 4.0   |   |   |   |   |   |   |
| All-Red Time (s)        | 1.0   | 1.0   |   |   | 1.0   |   | 2.0   | 2.0   | 2.0   |   |   |   |   |   |   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |   |   | 0.0   |   | 0.0   | 0.0   | 0.0   |   |   |   |   |   |   |
| Total Lost Time (s)     | 5.0   | 5.0   |   |   | 5.0   |   | 6.0   | 6.0   | 6.0   |   |   |   |   |   |   |
| Lead/Lag                | Lead  |   |   |   | Lag   |   |   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?      | Yes   |   |   |   | Yes   |   |   |   |   |   |   |   |   |   |   |
| Recall Mode             | None  | C-Max   |   |   | C-Max   |   | Max   | Max   | Max   |   |   |   |   |   |   |
| Act Effect Green (s)    | 81.0  | 81.0  |   |   | 64.8  |   | 43.0  | 43.0  | 43.0  |   |   |   |   |   |   |
| Actuated g/C Ratio      | 0.60  | 0.60  |   |   | 0.48  |   | 0.32  | 0.32  | 0.32  |   |   |   |   |   |   |
| v/c Ratio               | 0.69  | 0.34  |   |   | 0.81  |   | 0.91  | 0.33  | 0.33  |   |   |   |   |   |   |
| Control Delay           | 71.6  | 3.2   |   |   | 14.5  |   | 53.5  | 15.4  | 15.4  |   |   |   |   |   |   |
| Queue Delay             | 0.3   | 0.1   |   |   | 0.0   |   | 2.6   | 0.0   | 0.0   |   |   |   |   |   |   |
| Total Delay             | 71.9  | 3.3   |   |   | 14.5  |   | 56.1  | 15.4  | 15.4  |   |   |   |   |   |   |
| LOS                     | E   | A   |   |   | B   |   | E   | B   | B   |   |   |   |   |   |   |
| Approach Delay          |   | 11.4  |   |   | 14.5  |   | 51.5  |   |   |   |   |   |   |   |   |
| Approach LOS            |   | B   |   |   | B   |   | D   |   |   |   |   |   |   |   |   |
| Queue Length 50th (ft)  | 88  | 44  |   |   | 135   |   | 439   | 43  | 43  |   |   |   |   |   |   |
| Queue Length 95th (ft)  | m156  | 49  |   |   | 132   |   | #505  | 106   | 106   |   |   |   |   |   |   |
| Internal Link Dist (ft) |   | 240   |   |   | 335   |   | 116   |   |   |   | 281   |   |   |   |   |
| Turn Bay Length (ft)    | 50  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Base Capacity (vph)     | 248   | 3051  |   |   | 2419  |   | 1572  | 551   | 551   |   |   |   |   |   |   |
| Starvation Cap Reductn  | 8   | 873   |   |   | 0   |   | 0   | 0   | 0   |   |   |   |   |   |   |
| Spillback Cap Reductn   | 0   | 0   |   |   | 0   |   | 75  | 0   | 0   |   |   |   |   |   |   |
| Storage Cap Reductn     | 0   | 0   |   |   | 0   |   | 0   | 0   | 0   |   |   |   |   |   |   |
| Reduced v/c Ratio       | 0.58  | 0.47  |   |   | 0.81  |   | 0.95  | 0.33  | 0.33  |   |   |   |   |   |   |

## Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 80

Ms

Synchro 9 Report  
Page 25

## 35: Lavaca St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2022 Background + Site

Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 26.3

Intersection LOS: C

Intersection Capacity Utilization 80.1%

ICU Level of Service D

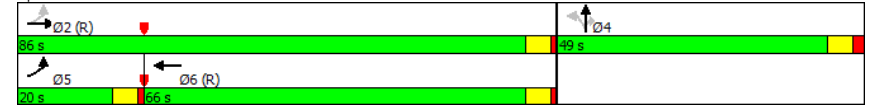
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 35: Lavaca St &amp; W. 15th St



Ms

Synchro 9 Report  
Page 26

36: Colorado St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

|                         | ↖     | →     | ↗    | ↖     | ←     | ↖    | ↗     | ↖     | ↗    | ↖     | ↗     | ↖      | ↗ |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|--------|---|
| Lane Group              | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR    |   |
| Lane Configurations     | ↖     | ↖↖↖   |      | ↖     | ↖↖↖   |      | ↖     | ↖↖    |      | ↖     | ↖     | ↖      |   |
| Traffic Volume (vph)    | 42    | 1082  | 21   | 22    | 1401  | 35   | 8     | 27    | 110  | 261   | 6     | 341    |   |
| Future Volume (vph)     | 42    | 1082  | 21   | 22    | 1401  | 35   | 8     | 27    | 110  | 261   | 6     | 341    |   |
| Confl. Peds. (#/hr)     | 33    |       | 35   | 35    |       | 33   | 98    |       | 6    | 6     |       | 98     |   |
| Confl. Bikes (#/hr)     |       |       | 1    |       |       | 2    |       |       | 2    |       |       | 1      |   |
| Peak Hour Factor        | 0.87  | 0.87  | 0.87 | 0.87  | 0.87  | 0.87 | 0.87  | 0.87  | 0.87 | 0.87  | 0.87  | 0.87   |   |
| Adj. Flow (vph)         | 48    | 1244  | 24   | 25    | 1610  | 40   | 9     | 31    | 126  | 300   | 7     | 392    |   |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |      |       |       |        |   |
| Lane Group Flow (vph)   | 48    | 1268  | 0    | 25    | 1650  | 0    | 0     | 166   | 0    | 0     | 307   | 392    |   |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | Perm  | NA    |      | Perm  | NA    | custom |   |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |       | 4     |      |       | 8     |        |   |
| Permitted Phases        | 2     |       |      | 6     |       |      | 4     |       |      | 8     |       | 6      |   |
| Detector Phase          | 5     | 2     |      | 1     | 6     |      | 4     | 4     |      | 8     | 8     | 6      |   |
| Switch Phase            |       |       |      |       |       |      |       |       |      |       |       |        |   |
| Minimum Initial (s)     | 5.0   | 15.0  |      | 5.0   | 15.0  |      | 5.0   | 5.0   |      | 5.0   | 5.0   | 15.0   |   |
| Minimum Split (s)       | 10.0  | 20.0  |      | 10.0  | 22.0  |      | 36.0  | 36.0  |      | 10.0  | 10.0  | 22.0   |   |
| Total Split (s)         | 10.0  | 79.0  |      | 10.0  | 79.0  |      | 46.0  | 46.0  |      | 46.0  | 46.0  | 79.0   |   |
| Total Split (%)         | 7.4%  | 58.5% |      | 7.4%  | 58.5% |      | 34.1% | 34.1% |      | 34.1% | 34.1% | 58.5%  |   |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0    |   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0    |   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      |       | 0.0   |      |       | 0.0   | 0.0    |   |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      |       | 5.0   |      |       | 5.0   | 5.0    |   |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   |      |       |       |      |       |       | Lag    |   |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |       |       |      |       |       | Yes    |   |
| Recall Mode             | None  | C-Max |      | None  | C-Max |      | Max   | Max   |      | Max   | Max   | C-Max  |   |
| Act Effect Green (s)    | 81.0  | 78.0  |      | 80.0  | 76.0  |      |       | 41.0  |      |       | 41.0  | 76.0   |   |
| Actuated g/C Ratio      | 0.60  | 0.58  |      | 0.59  | 0.56  |      |       | 0.30  |      |       | 0.30  | 0.56   |   |
| v/c Ratio               | 0.30  | 0.43  |      | 0.11  | 0.58  |      |       | 0.29  |      |       | 1.01  | 0.47   |   |
| Control Delay           | 11.0  | 6.6   |      | 5.2   | 9.7   |      |       | 14.4  |      |       | 100.8 | 3.7    |   |
| Queue Delay             | 0.0   | 0.2   |      | 0.0   | 0.1   |      |       | 0.0   |      |       | 0.0   | 0.0    |   |
| Total Delay             | 11.0  | 6.8   |      | 5.2   | 9.9   |      |       | 14.4  |      |       | 100.8 | 3.8    |   |
| LOS                     | B     | A     |      | A     | A     |      |       | B     |      |       | F     | A      |   |
| Approach Delay          |       | 6.9   |      |       | 9.8   |      |       | 14.4  |      |       | 46.4  |        |   |
| Approach LOS            |       | A     |      |       | A     |      |       | B     |      |       | D     |        |   |
| Queue Length 50th (ft)  | 0     | 105   |      | 3     | 359   |      |       | 35    |      |       | -274  | 6      |   |
| Queue Length 95th (ft)  | 12    | 120   |      | 6     | 160   |      |       | 87    |      |       | #446  | 46     |   |
| Internal Link Dist (ft) |       | 335   |      |       | 362   |      |       | 155   |      |       | 114   |        |   |
| Turn Bay Length (ft)    | 90    |       |      | 90    |       |      |       |       |      |       |       | 100    |   |
| Base Capacity (vph)     | 159   | 2927  |      | 235   | 2843  |      |       | 563   |      |       | 304   | 841    |   |
| Starvation Cap Reductn  | 0     | 667   |      | 0     | 294   |      |       | 0     |      |       | 0     | 0      |   |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 99    |      |       | 0     |      |       | 0     | 23     |   |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      |       | 0     |      |       | 0     | 0      |   |
| Reduced v/c Ratio       | 0.30  | 0.56  |      | 0.11  | 0.65  |      |       | 0.29  |      |       | 1.01  | 0.48   |   |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
Natural Cycle: 75

Ms

Synchro 9 Report  
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36: Colorado St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 15.7

Intersection LOS: B

Intersection Capacity Utilization 93.3%

ICU Level of Service F

Analysis Period (min) 15

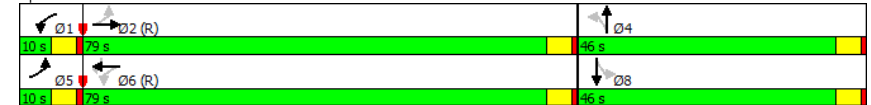
Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 36: Colorado St & W. 15th St



Ms

Synchro 9 Report  
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37: N. Congress Ave & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

|                         | →     | ↖    | ↗     | ←     | ↖    | ↗     |
|-------------------------|-------|------|-------|-------|------|-------|
| Lane Group              | EBT   | EBR  | WBL   | WBT   | NBL  | NBR   |
| Lane Configurations     | ↑↑↑   |      | ↖     | ↑↑↑   |      | ↗     |
| Traffic Volume (vph)    | 1511  | 0    | 0     | 1220  | 0    | 1     |
| Future Volume (vph)     | 1511  | 0    | 0     | 1220  | 0    | 1     |
| Confl. Peds. (#/hr)     |       | 49   | 49    |       | 40   | 14    |
| Confl. Bikes (#/hr)     |       |      |       |       |      | 4     |
| Peak Hour Factor        | 0.86  | 0.86 | 0.86  | 0.86  | 0.86 | 0.86  |
| Adj. Flow (vph)         | 1757  | 0    | 0     | 1419  | 0    | 1     |
| Shared Lane Traffic (%) |       |      |       |       |      |       |
| Lane Group Flow (vph)   | 1757  | 0    | 0     | 1419  | 0    | 1     |
| Turn Type               | NA    |      | pm+pt | NA    |      | Perm  |
| Protected Phases        | 2     |      | 1     | 6     |      |       |
| Permitted Phases        |       |      | 6     |       |      | 4     |
| Detector Phase          | 2     |      | 1     | 6     |      | 4     |
| Switch Phase            |       |      |       |       |      |       |
| Minimum Initial (s)     | 5.0   |      | 5.0   | 5.0   |      | 5.0   |
| Minimum Split (s)       | 25.0  |      | 10.0  | 25.0  |      | 33.0  |
| Total Split (s)         | 92.0  |      | 10.0  | 102.0 |      | 33.0  |
| Total Split (%)         | 68.1% |      | 7.4%  | 75.6% |      | 24.4% |
| Yellow Time (s)         | 4.0   |      | 4.0   | 4.0   |      | 4.0   |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0   |      | 1.0   |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0   |      | 0.0   |
| Total Lost Time (s)     | 5.0   |      | 5.0   | 5.0   |      | 5.0   |
| Lead/Lag                | Lag   |      | Lead  |       |      |       |
| Lead-Lag Optimize?      | Yes   |      | Yes   |       |      |       |
| Recall Mode             | C-Max |      | None  | C-Max |      | Max   |
| Act Effect Green (s)    | 97.0  |      |       | 97.0  |      | 28.0  |
| Actuated g/C Ratio      | 0.72  |      |       | 0.72  |      | 0.21  |
| v/c Ratio               | 0.48  |      |       | 0.39  |      | 0.00  |
| Control Delay           | 6.0   |      |       | 7.8   |      | 0.0   |
| Queue Delay             | 0.1   |      |       | 0.1   |      | 0.0   |
| Total Delay             | 6.1   |      |       | 8.0   |      | 0.0   |
| LOS                     | A     |      |       | A     |      | A     |
| Approach Delay          | 6.1   |      |       | 8.0   |      |       |
| Approach LOS            | A     |      |       | A     |      |       |
| Queue Length 50th (ft)  | 136   |      |       | 178   |      | 0     |
| Queue Length 95th (ft)  | m147  |      |       | 79    |      | 0     |
| Internal Link Dist (ft) | 362   |      |       | 356   | 125  |       |
| Turn Bay Length (ft)    |       |      |       |       |      |       |
| Base Capacity (vph)     | 3653  |      |       | 3653  |      | 385   |
| Starvation Cap Reductn  | 369   |      |       | 991   |      | 0     |
| Spillback Cap Reductn   | 0     |      |       | 293   |      | 0     |
| Storage Cap Reductn     | 0     |      |       | 0     |      | 0     |
| Reduced v/c Ratio       | 0.54  |      |       | 0.53  |      | 0.00  |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 75

Ms

Synchro 9 Report  
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37: N. Congress Ave & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.48

Intersection Signal Delay: 6.9

Intersection LOS: A

Intersection Capacity Utilization 60.9%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 37: N. Congress Ave & W. 15th St



Ms

Synchro 9 Report  
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## 38: Brazos St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2022 Background + Site

Timing Plan: PM

|                         | ←     | →     | ↖    | ↗     | ←     | ↖    | ↗     | →     | ↖     | ↗     | →     | ↖    | ↗ |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|-------|-------|-------|------|---|
| Lane Group              | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR   | SBL   | SBT   | SBR  |   |
| Lane Configurations     | ↖ ↗   | ↖ ↗   |      | ↖ ↗   | ↖ ↗   |      |       | ↖ ↗   | ↖ ↗   |       | ↖ ↗   |      |   |
| Traffic Volume (vph)    | 5     | 1500  | 38   | 10    | 1077  | 11   | 133   | 3     | 117   | 65    | 3     | 87   |   |
| Future Volume (vph)     | 5     | 1500  | 38   | 10    | 1077  | 11   | 133   | 3     | 117   | 65    | 3     | 87   |   |
| Confl. Peds. (#/hr)     | 8     |       | 10   | 10    |       | 8    | 5     |       | 19    | 19    |       | 5    |   |
| Confl. Bikes (#/hr)     |       |       |      |       |       | 1    |       |       |       |       |       | 1    |   |
| Peak Hour Factor        | 0.93  | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93 |   |
| Adj. Flow (vph)         | 5     | 1613  | 41   | 11    | 1158  | 12   | 143   | 3     | 126   | 70    | 3     | 94   |   |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |       |       |       |      |   |
| Lane Group Flow (vph)   | 5     | 1654  | 0    | 11    | 1170  | 0    | 0     | 146   | 126   | 0     | 167   | 0    |   |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | Perm  | NA    | Perm  | Perm  | NA    |      |   |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |       | 4     |       |       | 8     |      |   |
| Permitted Phases        | 2     |       |      | 6     |       |      | 4     |       | 4     | 8     |       |      |   |
| Detector Phase          | 5     | 2     |      | 1     | 6     |      | 4     | 4     | 4     | 8     | 8     |      |   |
| Switch Phase            |       |       |      |       |       |      |       |       |       |       |       |      |   |
| Minimum Initial (s)     | 5.0   | 15.0  |      | 5.0   | 15.0  |      | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  |      |   |
| Minimum Split (s)       | 10.0  | 22.0  |      | 10.0  | 22.0  |      | 32.0  | 32.0  | 32.0  | 32.0  | 32.0  |      |   |
| Total Split (s)         | 12.0  | 77.0  |      | 12.0  | 77.0  |      | 46.0  | 46.0  | 46.0  | 46.0  | 46.0  |      |   |
| Total Split (%)         | 8.9%  | 57.0% |      | 8.9%  | 57.0% |      | 34.1% | 34.1% | 34.1% | 34.1% | 34.1% |      |   |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |      |   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |      |   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      |       | 0.0   | 0.0   |       | 0.0   |      |   |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      |       | 5.0   | 5.0   |       | 5.0   |      |   |
| Lead/Lag                | Lead  | Lead  |      | Lead  | Lag   |      |       |       |       |       |       |      |   |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |       |       |       |       |       |      |   |
| Recall Mode             | None  | C-Max |      | None  | C-Max |      | None  | None  | None  | None  | None  |      |   |
| Act Effect Green (s)    | 96.6  | 96.6  |      | 99.1  | 99.1  |      | 23.6  | 23.6  |       |       | 23.6  |      |   |
| Actuated g/C Ratio      | 0.72  | 0.72  |      | 0.73  | 0.73  |      | 0.17  | 0.17  |       |       | 0.17  |      |   |
| v/c Ratio               | 0.02  | 0.46  |      | 0.05  | 0.31  |      | 0.85  | 0.36  |       |       | 0.74  |      |   |
| Control Delay           | 6.0   | 4.4   |      | 6.3   | 5.0   |      | 90.1  | 15.5  |       |       | 54.6  |      |   |
| Queue Delay             | 0.0   | 0.0   |      | 0.0   | 0.1   |      | 0.0   | 0.0   |       |       | 0.0   |      |   |
| Total Delay             | 6.0   | 4.4   |      | 6.3   | 5.1   |      | 90.1  | 15.5  |       |       | 54.6  |      |   |
| LOS                     | A     | A     |      | A     | A     |      | F     | B     |       |       | D     |      |   |
| Approach Delay          |       | 4.4   |      |       | 5.1   |      | 55.6  |       |       |       | 54.6  |      |   |
| Approach LOS            |       | A     |      |       | A     |      | E     |       |       |       | D     |      |   |
| Queue Length 50th (ft)  | 0     | 42    |      | 2     | 83    |      | 125   | 20    |       |       | 100   |      |   |
| Queue Length 95th (ft)  | m2    | 101   |      | m8    | 215   |      | 192   | 71    |       |       | 170   |      |   |
| Internal Link Dist (ft) |       | 356   |      |       | 297   |      | 199   |       |       |       | 273   |      |   |
| Turn Bay Length (ft)    | 100   |       |      | 40    |       |      |       | 50    |       |       |       |      |   |
| Base Capacity (vph)     | 336   | 3618  |      | 246   | 3725  |      | 300   | 530   |       |       | 358   |      |   |
| Starvation Cap Reductn  | 0     | 214   |      | 0     | 1268  |      | 0     | 0     |       |       | 0     |      |   |
| Spillback Cap Reductn   | 0     | 255   |      | 0     | 0     |      | 0     | 4     |       |       | 2     |      |   |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      | 0     | 0     |       |       | 0     |      |   |
| Reduced v/c Ratio       | 0.01  | 0.49  |      | 0.04  | 0.48  |      | 0.49  | 0.24  |       |       | 0.47  |      |   |

## Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 70

Ms

Synchro 9 Report  
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## 38: Brazos St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2022 Background + Site

Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 11.5

Intersection LOS: B

Intersection Capacity Utilization 69.1%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 38: Brazos St &amp; W. 15th St



Ms

Synchro 9 Report  
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39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

|                         | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL    | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|--------|-------|-------|
| Lane Configurations     |      | ↑↑↑   |      | ↓     | ↑↑↑   |      |      |      |      |        | ↓↑↑   | ↑     |
| Traffic Volume (vph)    | 0    | 1798  | 115  | 66    | 885   | 0    | 0    | 0    | 0    | 516    | 636   | 310   |
| Future Volume (vph)     | 0    | 1798  | 115  | 66    | 885   | 0    | 0    | 0    | 0    | 516    | 636   | 310   |
| Confl. Peds. (#/hr)     |      |       | 12   | 12    |       |      |      |      |      | 32     |       | 5     |
| Confl. Bikes (#/hr)     |      |       |      |       |       |      |      |      |      |        |       | 2     |
| Peak Hour Factor        | 0.93 | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93 | 0.93 | 0.93 | 0.93   | 0.93  | 0.93  |
| Adj. Flow (vph)         | 0    | 1933  | 124  | 71    | 952   | 0    | 0    | 0    | 0    | 555    | 684   | 333   |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |        |       |       |
| Lane Group Flow (vph)   | 0    | 2057  | 0    | 71    | 952   | 0    | 0    | 0    | 0    | 0      | 1239  | 333   |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm   | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |        | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4      |       | 4     |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4      | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |        |       |       |
| Minimum Initial (s)     |      | 10.0  |      | 3.0   | 10.0  |      |      |      |      | 7.0    | 7.0   | 7.0   |
| Minimum Split (s)       |      | 28.0  |      | 8.0   | 28.0  |      |      |      |      | 32.0   | 32.0  | 32.0  |
| Total Split (s)         |      | 80.0  |      | 15.0  | 95.0  |      |      |      |      | 40.0   | 40.0  | 40.0  |
| Total Split (%)         |      | 59.3% |      | 11.1% | 70.4% |      |      |      |      | 29.6%  | 29.6% | 29.6% |
| Yellow Time (s)         |      | 4.0   |      | 4.0   | 4.0   |      |      |      |      | 4.0    | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      | 1.0   | 1.0   |      |      |      |      | 1.0    | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      | 0.0   | 0.0   |      |      |      |      | 0.0    | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      | 5.0   | 5.0   |      |      |      |      | 5.0    | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      | Lead  |       |      |      |      |      |        |       |       |
| Lead-Lag Optimize?      |      | Yes   |      | Yes   |       |      |      |      |      |        |       |       |
| Recall Mode             |      | C-Max |      | None  | C-Max |      |      |      |      | None   | None  | None  |
| Act Effect Green (s)    |      | 79.6  |      | 90.0  | 90.0  |      |      |      |      | 35.0   | 35.0  | 35.0  |
| Actuated g/C Ratio      |      | 0.59  |      | 0.67  | 0.67  |      |      |      |      | 0.26   | 0.26  | 0.26  |
| v/c Ratio               |      | 0.69  |      | 0.46  | 0.28  |      |      |      |      | 1.24dl | 0.72  | 0.72  |
| Control Delay           |      | 9.7   |      | 41.5  | 6.1   |      |      |      |      | 71.0   | 44.6  | 44.6  |
| Queue Delay             |      | 0.1   |      | 0.0   | 0.2   |      |      |      |      | 0.0    | 0.0   | 0.0   |
| Total Delay             |      | 9.9   |      | 41.5  | 6.3   |      |      |      |      | 71.0   | 44.6  | 44.6  |
| LOS                     |      | A     |      | D     | A     |      |      |      |      | E      | D     | D     |
| Approach Delay          |      | 9.9   |      |       | 8.7   |      |      |      |      | 65.4   |       |       |
| Approach LOS            |      | A     |      |       | A     |      |      |      |      | E      |       |       |
| Queue Length 50th (ft)  |      | 147   |      | 23    | 84    |      |      |      |      | 397    | 207   | 207   |
| Queue Length 95th (ft)  |      | 346   |      | m72   | 97    |      |      |      |      | #502   | 323   | 323   |
| Internal Link Dist (ft) |      | 297   |      |       | 282   |      |      | 125  |      | 272    |       |       |
| Turn Bay Length (ft)    |      |       |      | 70    |       |      |      |      |      |        |       | 50    |
| Base Capacity (vph)     |      | 2970  |      | 183   | 3390  |      |      |      |      | 1261   | 460   | 460   |
| Starvation Cap Reductn  |      | 193   |      | 0     | 1322  |      |      |      |      | 0      | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      | 0      | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      | 0      | 0     | 0     |
| Reduced v/c Ratio       |      | 0.74  |      | 0.39  | 0.46  |      |      |      |      | 0.98   | 0.72  | 0.72  |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 75

Ms

Synchro 9 Report  
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39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.98

Intersection Signal Delay: 28.4

Intersection LOS: C

Intersection Capacity Utilization 76.3%

ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 39: San Jacinto Blvd & W. 15th St



Ms


Synchro 9 Report  
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## 40: Trinity St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2022 Background + Site

Timing Plan: PM

|                         |  |       |      |      |       |      |       |       |       |      |      |      |
|-------------------------|---|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
| Lane Configurations     |   |       |      |      |       |      |       |       |       |      |      |      |
| Traffic Volume (vph)    | 88  | 2000  | 0    | 0    | 777   | 146  | 179   | 309   | 283   | 0    | 0    | 0    |
| Future Volume (vph)     | 88  | 2000  | 0    | 0    | 777   | 146  | 179   | 309   | 283   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 2   |       |      |      |       | 2    | 7     |       | 8     |      |      |      |
| Confl. Bikes (#/hr)     |   |       |      |      |       |      |       |       | 8     |      |      |      |
| Peak Hour Factor        | 0.96  | 0.96  | 0.96 | 0.96 | 0.96  | 0.96 | 0.96  | 0.96  | 0.96  | 0.96 | 0.96 | 0.96 |
| Adj. Flow (vph)         | 92  | 2083  | 0    | 0    | 809   | 152  | 186   | 322   | 295   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |   |       |      |      |       |      |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 92  | 2083  | 0    | 0    | 961   | 0    | 0     | 508   | 295   | 0    | 0    | 0    |
| Turn Type               | pm+pt   | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5   | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2   |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5   | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |   |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 28.0  |      |      | 28.0  |      | 35.0  | 35.0  | 35.0  |      |      |      |
| Total Split (s)         | 10.0  | 100.0 |      |      | 90.0  |      | 35.0  | 35.0  | 35.0  |      |      |      |
| Total Split (%)         | 7.4%  | 74.1% |      |      | 66.7% |      | 25.9% | 25.9% | 25.9% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 95.0  | 95.0  |      |      | 85.0  |      | 30.0  | 30.0  | 30.0  |      |      |      |
| Actuated g/C Ratio      | 0.70  | 0.70  |      |      | 0.63  |      | 0.22  | 0.22  | 0.22  |      |      |      |
| v/c Ratio               | 0.25  | 0.58  |      |      | 0.31  |      | 0.66  | 0.77  | 0.77  |      |      |      |
| Control Delay           | 5.9   | 6.8   |      |      | 15.0  |      | 52.6  | 53.7  | 53.7  |      |      |      |
| Queue Delay             | 0.0   | 0.3   |      |      | 0.0   |      | 0.0   | 0.1   | 0.1   |      |      |      |
| Total Delay             | 5.9   | 7.1   |      |      | 15.0  |      | 52.6  | 53.8  | 53.8  |      |      |      |
| LOS                     | A   | A     |      |      | B     |      | D     | D     | D     |      |      |      |
| Approach Delay          |   | 7.1   |      |      | 15.0  |      | 53.1  |       |       |      |      |      |
| Approach LOS            |   | A     |      |      | B     |      | D     |       |       |      |      |      |
| Queue Length 50th (ft)  | 19  | 160   |      |      | 182   |      | 215   | 200   | 200   |      |      |      |
| Queue Length 95th (ft)  | m25   | m169  |      |      | 195   |      | 278   | #331  | #331  |      |      |      |
| Internal Link Dist (ft) |   | 282   |      |      | 641   |      | 149   |       |       | 621  |      |      |
| Turn Bay Length (ft)    | 100   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 372   | 3578  |      |      | 3137  |      | 769   | 385   | 385   |      |      |      |
| Starvation Cap Reductn  | 0   | 683   |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0   | 291   |      |      | 0     |      | 0     | 2     | 2     |      |      |      |
| Storage Cap Reductn     | 0   | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.25  | 0.72  |      |      | 0.31  |      | 0.66  | 0.77  | 0.77  |      |      |      |

## Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 75

Ms

Synchro 9 Report  
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## 40: Trinity St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2022 Background + Site

Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 18.4

Intersection LOS: B

Intersection Capacity Utilization 76.3%

ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 40: Trinity St &amp; W. 15th St



Ms

Synchro 9 Report  
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11: Colorado St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection              |    |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 26 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | D  |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | +    |      |      |      | +    |      |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 6    | 105  | 14   | 0    | 64   | 202  | 10   | 0    | 15   | 154  | 259  |
| Future Vol, veh/h   | 0    | 6    | 105  | 14   | 0    | 64   | 202  | 10   | 0    | 15   | 154  | 259  |
| Peak Hour Factor    | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 8    | 135  | 18   | 0    | 82   | 259  | 13   | 0    | 19   | 197  | 332  |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB   | NB   |
|----------------------------|------|------|------|
| Opposing Approach          | WB   | EB   | SB   |
| Opposing Lanes             | 1    | 1    | 1    |
| Conflicting Approach Left  | SB   | NB   | EB   |
| Conflicting Lanes Left     | 1    | 1    | 1    |
| Conflicting Approach Right | NB   | SB   | WB   |
| Conflicting Lanes Right    | 1    | 1    | 1    |
| HCM Control Delay          | 13.4 | 21.3 | 37.1 |
| HCM LOS                    | B    | C    | E    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 4%    | 5%    | 23%   | 12%   |
| Vol Thru, %            | 36%   | 84%   | 73%   | 60%   |
| Vol Right, %           | 61%   | 11%   | 4%    | 28%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 428   | 125   | 276   | 149   |
| LT Vol                 | 15    | 6     | 64    | 18    |
| Through Vol            | 154   | 105   | 202   | 90    |
| RT Vol                 | 259   | 14    | 10    | 41    |
| Lane Flow Rate         | 549   | 160   | 354   | 191   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.881 | 0.315 | 0.651 | 0.357 |
| Departure Headway (Hd) | 5.778 | 7.078 | 6.621 | 6.728 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 626   | 505   | 541   | 531   |
| Service Time           | 3.841 | 5.175 | 4.697 | 4.82  |
| HCM Lane V/C Ratio     | 0.877 | 0.317 | 0.654 | 0.36  |
| HCM Control Delay      | 37.1  | 13.4  | 21.3  | 13.6  |
| HCM Lane LOS           | E     | B     | C     | B     |
| HCM 95th-tile Q        | 10.4  | 1.3   | 4.7   | 1.6   |

11: Colorado St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 18   | 90   | 41   |
| Future Vol, veh/h   | 0    | 18   | 90   | 41   |
| Peak Hour Factor    | 0.78 | 0.78 | 0.78 | 0.78 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 23   | 115  | 53   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 13.6 |
| HCM LOS                    | B    |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 11.9 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↶    |      |      |      | ↷    |      |      |      | ↶    |      |
| Traffic Vol, veh/h  | 0    | 0    | 384  | 0    | 0    | 0    | 334  | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h   | 0    | 0    | 384  | 0    | 0    | 0    | 334  | 0    | 0    | 0    | 0    | 0    |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 447  | 0    | 0    | 0    | 388  | 0    | 0    | 0    | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB   | NB |
|----------------------------|------|------|----|
| Opposing Approach          | WB   | EB   | SB |
| Opposing Lanes             | 1    | 1    | 1  |
| Conflicting Approach Left  | SB   | NB   | EB |
| Conflicting Lanes Left     | 1    | 1    | 1  |
| Conflicting Approach Right | NB   | SB   | WB |
| Conflicting Lanes Right    | 1    | 1    | 1  |
| HCM Control Delay          | 12.4 | 11.4 | 0  |
| HCM LOS                    | B    | B    | -  |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 0%    | 0%    | 0%    | 0%    |
| Vol Thru, %            | 100%  | 100%  | 100%  | 0%    |
| Vol Right, %           | 0%    | 0%    | 0%    | 100%  |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 0     | 384   | 334   | 13    |
| LT Vol                 | 0     | 0     | 0     | 0     |
| Through Vol            | 0     | 384   | 334   | 0     |
| RT Vol                 | 0     | 0     | 0     | 13    |
| Lane Flow Rate         | 0     | 447   | 388   | 15    |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0     | 0.541 | 0.477 | 0.021 |
| Departure Headway (Hd) | 5.737 | 4.363 | 4.417 | 5.092 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 0     | 831   | 819   | 701   |
| Service Time           | 3.784 | 2.377 | 2.431 | 3.137 |
| HCM Lane V/C Ratio     | 0     | 0.538 | 0.474 | 0.021 |
| HCM Control Delay      | 8.8   | 12.4  | 11.4  | 8.2   |
| HCM Lane LOS           | N     | B     | B     | A     |
| HCM 95th-tile Q        | 0     | 3.3   | 2.6   | 0.1   |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      |      | ↶    |
| Traffic Vol, veh/h  | 0    | 0    | 0    | 13   |
| Future Vol, veh/h   | 0    | 0    | 0    | 13   |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 0    | 15   |
| Number of Lanes     | 0    | 0    | 0    | 1    |

| Approach                   | SB  |
|----------------------------|-----|
| Opposing Approach          | NB  |
| Opposing Lanes             | 1   |
| Conflicting Approach Left  | WB  |
| Conflicting Lanes Left     | 1   |
| Conflicting Approach Right | EB  |
| Conflicting Lanes Right    | 1   |
| HCM Control Delay          | 8.2 |
| HCM LOS                    | A   |

14: Brazos St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 40.9 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | E    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |      |      | ↕    |      |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 40   | 379  | 25   | 0    | 11   | 64   | 25   | 0    | 187  | 163  | 0    |
| Future Vol, veh/h   | 0    | 40   | 379  | 25   | 0    | 11   | 64   | 25   | 0    | 187  | 163  | 0    |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 47   | 441  | 29   | 0    | 13   | 74   | 29   | 0    | 217  | 190  | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB   | NB |
|----------------------------|------|------|----|
| Opposing Approach          | WB   | EB   | SB |
| Opposing Lanes             | 1    | 1    | 1  |
| Conflicting Approach Left  | SB   | NB   | EB |
| Conflicting Lanes Left     | 1    | 1    | 1  |
| Conflicting Approach Right | NB   | SB   | WB |
| Conflicting Lanes Right    | 1    | 1    | 1  |
| HCM Control Delay          | 62.1 | 14.2 | 36 |
| HCM LOS                    | F    | B    | E  |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 53%   | 9%    | 11%   | 36%   |
| Vol Thru, %            | 47%   | 85%   | 64%   | 21%   |
| Vol Right, %           | 0%    | 6%    | 25%   | 43%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 350   | 444   | 100   | 270   |
| LT Vol                 | 187   | 40    | 11    | 97    |
| Through Vol            | 163   | 379   | 64    | 57    |
| RT Vol                 | 0     | 25    | 25    | 116   |
| Lane Flow Rate         | 407   | 516   | 116   | 314   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.822 | 0.985 | 0.266 | 0.634 |
| Departure Headway (Hd) | 7.27  | 6.867 | 8.234 | 7.266 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 497   | 527   | 440   | 493   |
| Service Time           | 5.35  | 4.936 | 6.234 | 5.354 |
| HCM Lane V/C Ratio     | 0.819 | 0.979 | 0.264 | 0.637 |
| HCM Control Delay      | 36    | 62.1  | 14.2  | 22.2  |
| HCM Lane LOS           | E     | F     | B     | C     |
| HCM 95th-tile Q        | 8     | 13.4  | 1.1   | 4.4   |

14: Brazos St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 97   | 57   | 116  |
| Future Vol, veh/h   | 0    | 97   | 57   | 116  |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 113  | 66   | 135  |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 22.2 |
| HCM LOS                    | C    |

16: San Jacinto Blvd & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection              |    |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 25 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | C  |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↶    |      |      |      | ↷    |      |      |      |      |      |
| Traffic Vol, veh/h  | 0    | 0    | 202  | 303  | 0    | 36   | 53   | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h   | 0    | 0    | 202  | 303  | 0    | 36   | 53   | 0    | 0    | 0    | 0    | 0    |
| Peak Hour Factor    | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 213  | 319  | 0    | 38   | 56   | 0    | 0    | 0    | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    |

| Approach                   |  | EB   | WB   |
|----------------------------|--|------|------|
| Opposing Approach          |  | WB   | EB   |
| Opposing Lanes             |  | 1    | 1    |
| Conflicting Approach Left  |  | SB   |      |
| Conflicting Lanes Left     |  | 3    | 0    |
| Conflicting Approach Right |  |      | SB   |
| Conflicting Lanes Right    |  | 0    | 3    |
| HCM Control Delay          |  | 37.7 | 11.8 |
| HCM LOS                    |  | E    | B    |

| Lane                   | EBLn1 | WBLn1 | SBLn1 | SBLn2 | SBLn3 |
|------------------------|-------|-------|-------|-------|-------|
| Vol Left, %            | 0%    | 40%   | 0%    | 0%    | 0%    |
| Vol Thru, %            | 40%   | 60%   | 100%  | 100%  | 0%    |
| Vol Right, %           | 60%   | 0%    | 0%    | 0%    | 100%  |
| Sign Control           | Stop  | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 505   | 89    | 279   | 279   | 23    |
| LT Vol                 | 0     | 36    | 0     | 0     | 0     |
| Through Vol            | 202   | 53    | 279   | 279   | 0     |
| RT Vol                 | 303   | 0     | 0     | 0     | 23    |
| Lane Flow Rate         | 532   | 94    | 294   | 294   | 24    |
| Geometry Grp           | 7     | 7     | 7     | 7     | 7     |
| Degree of Util (X)     | 0.881 | 0.19  | 0.528 | 0.528 | 0.027 |
| Departure Headway (Hd) | 5.965 | 7.282 | 6.467 | 6.467 | 3.993 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 606   | 491   | 555   | 555   | 890   |
| Service Time           | 3.722 | 5.059 | 4.222 | 4.222 | 1.747 |
| HCM Lane V/C Ratio     | 0.878 | 0.191 | 0.53  | 0.53  | 0.027 |
| HCM Control Delay      | 37.7  | 11.8  | 16.3  | 16.3  | 6.9   |
| HCM Lane LOS           | E     | B     | C     | C     | A     |
| HCM 95th-tile Q        | 10.3  | 0.7   | 3.1   | 3.1   | 0.1   |

16: San Jacinto Blvd & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↶↷   | ↷    |
| Traffic Vol, veh/h  | 0    | 0    | 558  | 23   |
| Future Vol, veh/h   | 0    | 0    | 558  | 23   |
| Peak Hour Factor    | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 587  | 24   |
| Number of Lanes     | 0    | 0    | 2    | 1    |

| Approach                   |  | SB   |
|----------------------------|--|------|
| Opposing Approach          |  |      |
| Opposing Lanes             |  | 0    |
| Conflicting Approach Left  |  | WB   |
| Conflicting Lanes Left     |  | 1    |
| Conflicting Approach Right |  | EB   |
| Conflicting Lanes Right    |  | 1    |
| HCM Control Delay          |  | 15.9 |
| HCM LOS                    |  | C    |

20: Colorado St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 13.2 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | +    |      |      |      | +    |      |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 79   | 36   | 15   | 0    | 0    | 174  | 0    | 0    | 15   | 300  | 0    |
| Future Vol, veh/h   | 0    | 79   | 36   | 15   | 0    | 0    | 174  | 0    | 0    | 15   | 300  | 0    |
| Peak Hour Factor    | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 96   | 44   | 18   | 0    | 0    | 212  | 0    | 0    | 18   | 366  | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB   | NB   |
|----------------------------|------|------|------|
| Opposing Approach          | WB   | EB   | SB   |
| Opposing Lanes             | 1    | 1    | 1    |
| Conflicting Approach Left  | SB   | NB   | EB   |
| Conflicting Lanes Left     | 1    | 1    | 1    |
| Conflicting Approach Right | NB   | SB   | WB   |
| Conflicting Lanes Right    | 1    | 1    | 1    |
| HCM Control Delay          | 11.3 | 12.1 | 15.7 |
| HCM LOS                    | B    | B    | C    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 5%    | 61%   | 0%    | 0%    |
| Vol Thru, %            | 95%   | 28%   | 100%  | 51%   |
| Vol Right, %           | 0%    | 12%   | 0%    | 49%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 315   | 130   | 174   | 178   |
| LT Vol                 | 15    | 79    | 0     | 0     |
| Through Vol            | 300   | 36    | 174   | 91    |
| RT Vol                 | 0     | 15    | 0     | 87    |
| Lane Flow Rate         | 384   | 159   | 212   | 217   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.578 | 0.266 | 0.347 | 0.325 |
| Departure Headway (Hd) | 5.414 | 6.043 | 5.882 | 5.394 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 665   | 591   | 609   | 662   |
| Service Time           | 3.468 | 4.116 | 3.949 | 3.461 |
| HCM Lane V/C Ratio     | 0.577 | 0.269 | 0.348 | 0.328 |
| HCM Control Delay      | 15.7  | 11.3  | 12.1  | 11.1  |
| HCM Lane LOS           | C     | B     | B     | B     |
| HCM 95th-ile Q         | 3.7   | 1.1   | 1.5   | 1.4   |

20: Colorado St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 0    | 91   | 87   |
| Future Vol, veh/h   | 0    | 0    | 91   | 87   |
| Peak Hour Factor    | 0.82 | 0.82 | 0.82 | 0.82 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 111  | 106  |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 11.1 |
| HCM LOS                    | B    |

24: E. 17th St & Brazos St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection              |     |
|---------------------------|-----|
| Intersection Delay, s/veh | 8.7 |
| Intersection LOS          | A   |

| Movement            | EBU  | EBL  | EBT  | WBU  | WBT  | WBR  | SBU  | SBL  | SBR  |
|---------------------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↰    |      | ↰    |      |      | ↰    |      |
| Traffic Vol, veh/h  | 0    | 0    | 193  | 0    | 40   | 51   | 0    | 96   | 0    |
| Future Vol, veh/h   | 0    | 0    | 193  | 0    | 40   | 51   | 0    | 96   | 0    |
| Peak Hour Factor    | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 238  | 0    | 49   | 63   | 0    | 119  | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 1    | 0    | 0    | 1    | 0    |

| Approach                   | EB  | WB  | SB  |
|----------------------------|-----|-----|-----|
| Opposing Approach          | WB  | EB  |     |
| Opposing Lanes             | 1   | 1   | 0   |
| Conflicting Approach Left  | SB  |     | WB  |
| Conflicting Lanes Left     | 1   | 0   | 1   |
| Conflicting Approach Right |     | SB  | EB  |
| Conflicting Lanes Right    | 0   | 1   | 1   |
| HCM Control Delay          | 9.1 | 7.8 | 8.9 |
| HCM LOS                    | A   | A   | A   |

| Lane                   | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, %            | 0%    | 0%    | 100%  |
| Vol Thru, %            | 100%  | 44%   | 0%    |
| Vol Right, %           | 0%    | 56%   | 0%    |
| Sign Control           | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 193   | 91    | 96    |
| LT Vol                 | 0     | 0     | 96    |
| Through Vol            | 193   | 40    | 0     |
| RT Vol                 | 0     | 51    | 0     |
| Lane Flow Rate         | 238   | 112   | 119   |
| Geometry Grp           | 1     | 1     | 1     |
| Degree of Util (X)     | 0.288 | 0.13  | 0.161 |
| Departure Headway (Hd) | 4.354 | 4.155 | 4.903 |
| Convergence, Y/N       | Yes   | Yes   | Yes   |
| Cap                    | 827   | 864   | 732   |
| Service Time           | 2.369 | 2.173 | 2.926 |
| HCM Lane V/C Ratio     | 0.288 | 0.13  | 0.163 |
| HCM Control Delay      | 9.1   | 7.8   | 8.9   |
| HCM Lane LOS           | A     | A     | A     |
| HCM 95th-tile Q        | 1.2   | 0.4   | 0.6   |

4: Colorado St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.8  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑↑   |      | ↑    | ↑↑   | ↑    |      |
| Traffic Vol, veh/h       | 659  | 39   | 44   | 1340 | 13   | 170  |
| Future Vol, veh/h        | 659  | 39   | 44   | 1340 | 13   | 170  |
| Conflicting Peds, #/hr   | 0    | 8    | 8    | 0    | 0    | 12   |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | 40   | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 94   | 94   | 94   | 94   | 94   | 94   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 701  | 41   | 47   | 1426 | 14   | 181  |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |      |
|----------------------|--------|---|--------|---|--------|------|
| Conflicting Flow All | 0      | 0 | 751    | 0 | 1536   | 391  |
| Stage 1              | -      | - | -      | - | 730    | -    |
| Stage 2              | -      | - | -      | - | 806    | -    |
| Critical Hdwy        | -      | - | 4.14   | - | 6.84   | 6.94 |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.84   | -    |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.84   | -    |
| Follow-up Hdwy       | -      | - | 2.22   | - | 3.52   | 3.32 |
| Pot Cap-1 Maneuver   | -      | - | 854    | - | 107    | 608  |
| Stage 1              | -      | - | -      | - | 438    | -    |
| Stage 2              | -      | - | -      | - | 400    | -    |
| Platoon blocked, %   | -      | - | -      | - | -      | -    |
| Mov Cap-1 Maneuver   | -      | - | 844    | - | 100    | 596  |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 100    | -    |
| Stage 1              | -      | - | -      | - | 435    | -    |
| Stage 2              | -      | - | -      | - | 378    | -    |

| Approach             | EB | WB  | NB   |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0  | 0.3 | 19.5 |
| HCM LOS              |    |     | C    |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 441   | -   | -   | 844   | -   |
| HCM Lane V/C Ratio    | 0.441 | -   | -   | 0.055 | -   |
| HCM Control Delay (s) | 19.5  | -   | -   | 9.5   | -   |
| HCM Lane LOS          | C     | -   | -   | A     | -   |
| HCM 95th %tile Q(veh) | 2.2   | -   | -   | 0.2   | -   |

9: Guadalupe St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 38.1 |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    | ↑    |      | ↑    |      |      |      |      |      | ↑↑   |      |
| Traffic Vol, veh/h       | 0    | 20   | 12   | 202  | 96   | 0    | 0    | 0    | 0    | 36   | 1024 | 22   |
| Future Vol, veh/h        | 0    | 20   | 12   | 202  | 96   | 0    | 0    | 0    | 0    | 36   | 1024 | 22   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 55   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 41   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 0    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 21   | 12   | 208  | 99   | 0    | 0    | 0    | 0    | 37   | 1056 | 23   |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |      |
|----------------------|--------|------|--------|------|--------|------|
| Conflicting Flow All | -      | 1182 | 635    | 667  | 1194   | 0    |
| Stage 1              | -      | 1182 | -      | 0    | 0      | -    |
| Stage 2              | -      | 0    | -      | 667  | 1194   | -    |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | 4.14 |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | -    |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | -    |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | 2.22 |
| Pot Cap-1 Maneuver   | 0      | 188  | 421    | 344  | 185    | 0    |
| Stage 1              | 0      | 262  | -      | -    | -      | 0    |
| Stage 2              | 0      | -    | -      | 414  | 258    | 0    |
| Platoon blocked, %   | -      | -    | -      | -    | -      | -    |
| Mov Cap-1 Maneuver   | -      | 181  | 405    | 304  | 178    | -    |
| Mov Cap-2 Maneuver   | -      | 181  | -      | 304  | 178    | -    |
| Stage 1              | -      | 252  | -      | -    | -      | -    |
| Stage 2              | -      | -    | -      | 369  | 248    | -    |

| Approach             | EB   | WB  | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 22.4 | 178 |    |
| HCM LOS              | C    | F   |    |

| Minor Lane/Major Mvmt | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-------|-------|-----|-----|-----|
| Capacity (veh/h)      | 181   | 405   | 248   | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.114 | 0.031 | 1.239 | -   | -   | -   |
| HCM Control Delay (s) | 27.4  | 14.2  | 178   | -   | -   | -   |
| HCM Lane LOS          | D     | B     | F     | -   | -   | -   |
| HCM 95th %tile Q(veh) | 0.4   | 0.1   | 15.1  | -   | -   | -   |

10: Lavaca St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |       |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|-------|------|------|------|------|------|
| Int Delay, s/veh         | 56.2 |      |      |      |      |      |       |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL   | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      | ↕ ↕ ↕ |      |      |      |      |      |
| Traffic Vol, veh/h       | 11   | 53   | 0    | 0    | 171  | 75   | 65    | 1136 | 77   | 0    | 0    | 0    |
| Future Vol, veh/h        | 11   | 53   | 0    | 0    | 171  | 75   | 65    | 1136 | 77   | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 21   | 25    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free  | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -     | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 0     | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | -    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 95   | 95   | 95   | 95   | 95   | 95   | 95    | 95   | 95   | 95   | 95   | 95   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2     | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 12   | 56   | 0    | 0    | 180  | 79   | 68    | 1196 | 81   | 0    | 0    | 0    |

| Major/Minor          | Minor2 |      | Minor1 |   | Major1 |      |
|----------------------|--------|------|--------|---|--------|------|
| Conflicting Flow All | 751    | 1439 | -      | - | 1398   | 659  |
| Stage 1              | 25     | 25   | -      | - | 1373   | -    |
| Stage 2              | 726    | 1414 | -      | - | 25     | -    |
| Critical Hdwy        | 6.44   | 6.54 | -      | - | 6.54   | 7.14 |
| Critical Hdwy Stg 1  | -      | -    | -      | - | 5.54   | -    |
| Critical Hdwy Stg 2  | 6.74   | 5.54 | -      | - | -      | -    |
| Follow-up Hdwy       | 3.82   | 4.02 | -      | - | 4.02   | 3.92 |
| Pot Cap-1 Maneuver   | 357    | 132  | 0      | 0 | ~ 140  | 348  |
| Stage 1              | -      | -    | 0      | 0 | 212    | -    |
| Stage 2              | 347    | 202  | 0      | 0 | -      | -    |
| Platoon blocked, %   | -      | -    | -      | - | -      | -    |
| Mov Cap-1 Maneuver   | -      | 121  | -      | - | ~ 128  | 348  |
| Mov Cap-2 Maneuver   | -      | 121  | -      | - | ~ 128  | -    |
| Stage 1              | -      | -    | -      | - | 199    | -    |
| Stage 2              | 24     | 190  | -      | - | -      | -    |

| Approach             | EB | WB       | NB  |
|----------------------|----|----------|-----|
| HCM Control Delay, s |    | \$ 360.4 | 0.4 |
| HCM LOS              | -  | F        |     |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1 | WBLn1    |
|-----------------------|-------|-----|-----|-------|----------|
| Capacity (veh/h)      | 1124  | -   | -   | -     | 159      |
| HCM Lane V/C Ratio    | 0.061 | -   | -   | -     | 1.629    |
| HCM Control Delay (s) | 8.4   | -   | -   | -     | \$ 360.4 |
| HCM Lane LOS          | A     | -   | -   | -     | F        |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | -     | 17.9     |

| Notes                      |                        |                            |                                |  |
|----------------------------|------------------------|----------------------------|--------------------------------|--|
| -: Volume exceeds capacity | \$: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |  |

13: W. 18th St & Parking Dr. 2  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 4.9  |      |      |      |      |      |
| Movement                 | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
| Lane Configurations      |      | ↕    |      | ↕    | ↕    |      |
| Traffic Vol, veh/h       | 24   | 389  | 348  | 20   | 97   | 116  |
| Future Vol, veh/h        | 24   | 389  | 348  | 20   | 97   | 116  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | -    | 0    | 0    | -    | 0    | -    |
| Grade, %                 | -    | 0    | 0    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 26   | 423  | 378  | 22   | 105  | 126  |

| Major/Minor          | Major1 |   | Major2 |   | Minor2 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 400    | 0 | -      | 0 | 864    | 389   |
| Stage 1              | -      | - | -      | - | 389    | -     |
| Stage 2              | -      | - | -      | - | 475    | -     |
| Critical Hdwy        | 4.12   | - | -      | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | 2.218  | - | -      | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | 1159   | - | -      | - | 325    | 659   |
| Stage 1              | -      | - | -      | - | 685    | -     |
| Stage 2              | -      | - | -      | - | 626    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | 1159   | - | -      | - | 316    | 659   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 316    | -     |
| Stage 1              | -      | - | -      | - | 685    | -     |
| Stage 2              | -      | - | -      | - | 608    | -     |

| Approach             | EB  | WB | SB   |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.5 | 0  | 21.8 |
| HCM LOS              |     |    | C    |

| Minor Lane/Major Mvmt | EBL   | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h)      | 1159  | -   | -   | -   | 441   |
| HCM Lane V/C Ratio    | 0.023 | -   | -   | -   | 0.525 |
| HCM Control Delay (s) | 8.2   | 0   | -   | -   | 21.8  |
| HCM Lane LOS          | A     | A   | -   | -   | C     |
| HCM 95th %tile Q(veh) | 0.1   | -   | -   | -   | 3     |

15: Brazos St & Parking Dr. 1  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 9.4  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | ↱    |      |      | ↱    | ↱    |      |
| Traffic Vol, veh/h       | 242  | 145  | 30   | 199  | 52   | 50   |
| Future Vol, veh/h        | 242  | 145  | 30   | 199  | 52   | 50   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 263  | 158  | 33   | 216  | 57   | 54   |

| Major/Minor          | Minor2 | Major1 |       | Major2 |     |
|----------------------|--------|--------|-------|--------|-----|
| Conflicting Flow All | 366    | 84     | 111   | 0      | - 0 |
| Stage 1              | 84     | -      | -     | -      | -   |
| Stage 2              | 282    | -      | -     | -      | -   |
| Critical Hdwy        | 6.42   | 6.22   | 4.12  | -      | -   |
| Critical Hdwy Stg 1  | 5.42   | -      | -     | -      | -   |
| Critical Hdwy Stg 2  | 5.42   | -      | -     | -      | -   |
| Follow-up Hdwy       | 3.518  | 3.318  | 2.218 | -      | -   |
| Pot Cap-1 Maneuver   | 634    | 975    | 1479  | -      | -   |
| Stage 1              | 939    | -      | -     | -      | -   |
| Stage 2              | 766    | -      | -     | -      | -   |
| Platoon blocked, %   |        |        |       | -      | -   |
| Mov Cap-1 Maneuver   | 618    | 975    | 1479  | -      | -   |
| Mov Cap-2 Maneuver   | 618    | -      | -     | -      | -   |
| Stage 1              | 939    | -      | -     | -      | -   |
| Stage 2              | 747    | -      | -     | -      | -   |

| Approach             | EB   | NB |  | SB |  |
|----------------------|------|----|--|----|--|
| HCM Control Delay, s | 16.9 | 1  |  | 0  |  |
| HCM LOS              | C    |    |  |    |  |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1479  | -   | 716   | -   | -   |
| HCM Lane V/C Ratio    | 0.022 | -   | 0.588 | -   | -   |
| HCM Control Delay (s) | 7.5   | 0   | 16.9  | -   | -   |
| HCM Lane LOS          | A     | A   | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.1   | -   | 3.9   | -   | -   |

17: Trinity St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 21.4 |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↱    |      |      | ↱    |      | ↱    | ↱    | ↱    |      |      |      |
| Traffic Vol, veh/h       | 285  | 0    | 0    | 0    | 0    | 0    | 173  | 595  | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 285  | 0    | 0    | 0    | 0    | 0    | 173  | 595  | 0    | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 18   | 0    | 0    | 0    | 21   | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 115  | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | -    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 335  | 0    | 0    | 0    | 0    | 0    | 204  | 700  | 0    | 0    | 0    | 0    |

| Major/Minor          | Minor2 | Major2 |   | Major1 |           |
|----------------------|--------|--------|---|--------|-----------|
| Conflicting Flow All | 709    | 1129   | - | - 0    | 22 0 -    |
| Stage 1              | 22     | 22     | - | - - -  | - - -     |
| Stage 2              | 687    | 1107   | - | - - -  | - - -     |
| Critical Hdwy        | 6.08   | 6.53   | - | - - -  | 4.13 - -  |
| Critical Hdwy Stg 1  | 5.43   | 5.53   | - | - - -  | - - -     |
| Critical Hdwy Stg 2  | 6.03   | 5.53   | - | - - -  | - - -     |
| Follow-up Hdwy       | 3.669  | 4.019  | - | - - -  | 2.219 - - |
| Pot Cap-1 Maneuver   | 416    | 203    | 0 | 0 - -  | 1593 - 0  |
| Stage 1              | 960    | 877    | 0 | 0 - -  | - - 0     |
| Stage 2              | 432    | 285    | 0 | 0 - -  | - - 0     |
| Platoon blocked, %   |        |        |   | - - -  | - - -     |
| Mov Cap-1 Maneuver   | 348    | 0      | - | - - -  | 1593 - -  |
| Mov Cap-2 Maneuver   | 348    | 0      | - | - - -  | - - -     |
| Stage 1              | 941    | 0      | - | - - -  | - - -     |
| Stage 2              | 369    | 0      | - | - - -  | - - -     |

| Approach             | EB   | WB |  | NB  |  |
|----------------------|------|----|--|-----|--|
| HCM Control Delay, s | 74.6 | 0  |  | 1.7 |  |
| HCM LOS              | F    |    |  |     |  |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | WBT | WBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1593  | -   | 348   | -   | -   |
| HCM Lane V/C Ratio    | 0.128 | -   | 0.963 | -   | -   |
| HCM Control Delay (s) | 7.6   | -   | 74.6  | -   | -   |
| HCM Lane LOS          | A     | -   | F     | -   | -   |
| HCM 95th %tile Q(veh) | 0.4   | -   | 10.4  | -   | -   |

25: San Jacinto Blvd & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 37.2 |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    | ↑    |      | ↑    |      |      |      |      | ↑↑   | ↑    | ↑    |
| Traffic Vol, veh/h       | 0    | 147  | 159  | 36   | 43   | 0    | 0    | 0    | 0    | 106  | 1035 | 20   |
| Future Vol, veh/h        | 0    | 147  | 159  | 36   | 43   | 0    | 0    | 0    | 0    | 106  | 1035 | 20   |
| Conflicting Peds, #/hr   | 0    | 0    | 19   | 0    | 0    | 0    | 0    | 0    | 0    | 96   | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 40   | -    | -    | -    | -    | -    | -    | -    | -    | 50   |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 155  | 167  | 38   | 45   | 0    | 0    | 0    | 0    | 112  | 1089 | 21   |

| Major/Minor          | Minor2 |       |      | Minor1 |      |   | Major2 |   |   |
|----------------------|--------|-------|------|--------|------|---|--------|---|---|
| Conflicting Flow All | -      | 1409  | 564  | 960    | 1409 | - | 96     | 0 | 0 |
| Stage 1              | -      | 1313  | -    | 96     | 96   | - | -      | - | - |
| Stage 2              | -      | 96    | -    | 864    | 1313 | - | -      | - | - |
| Critical Hdwy        | -      | 6.54  | 6.94 | 7.54   | 6.54 | - | 4.14   | - | - |
| Critical Hdwy Stg 1  | -      | 5.54  | -    | -      | -    | - | -      | - | - |
| Critical Hdwy Stg 2  | -      | -     | -    | 6.54   | 5.54 | - | -      | - | - |
| Follow-up Hdwy       | -      | 4.02  | 3.32 | 3.52   | 4.02 | - | 2.22   | - | - |
| Pot Cap-1 Maneuver   | 0      | ~ 137 | 469  | 211    | 137  | 0 | 1496   | - | - |
| Stage 1              | 0      | 226   | -    | -      | -    | 0 | -      | - | - |
| Stage 2              | 0      | -     | -    | 315    | 226  | 0 | -      | - | - |
| Platoon blocked, %   | -      | -     | -    | -      | -    | - | -      | - | - |
| Mov Cap-1 Maneuver   | -      | ~ 100 | 469  | -      | 100  | - | 1496   | - | - |
| Mov Cap-2 Maneuver   | -      | ~ 100 | -    | -      | 100  | - | -      | - | - |
| Stage 1              | -      | 181   | -    | -      | -    | - | -      | - | - |
| Stage 2              | -      | -     | -    | ~ 24   | 181  | - | -      | - | - |

| Approach             | EB  | WB | SB  |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 184 |    | 1.1 |
| HCM LOS              | F   | -  |     |

| Minor Lane/Major Mvmt | EBLn1    | EBLn2 | WBLn1 | SBL   | SBT | SBR |
|-----------------------|----------|-------|-------|-------|-----|-----|
| Capacity (veh/h)      | 100      | 469   | -     | 1496  | -   | -   |
| HCM Lane V/C Ratio    | 1.547    | 0.357 | -     | 0.075 | -   | -   |
| HCM Control Delay (s) | \$ 364.7 | 16.9  | -     | 7.6   | 0.4 | -   |
| HCM Lane LOS          | F        | C     | -     | A     | A   | -   |
| HCM 95th %tile Q(veh) | 11.8     | 1.6   | -     | 0.2   | -   | -   |

| Notes                      |                        |                            |                                |
|----------------------------|------------------------|----------------------------|--------------------------------|
| -: Volume exceeds capacity | \$: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

26: Trinity St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 4    |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | ↓    |      | ↑↑   | ↑↑   |      |      |
| Traffic Vol, veh/h       | 228  | 0    | 20   | 540  | 0    | 0    |
| Future Vol, veh/h        | 228  | 0    | 20   | 540  | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | -    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 83   | 83   | 83   | 83   | 83   | 83   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 275  | 0    | 24   | 651  | 0    | 0    |

| Major/Minor          | Minor2 | Major1 |      |   |
|----------------------|--------|--------|------|---|
| Conflicting Flow All | 308    | -      | 0    | 0 |
| Stage 1              | 0      | -      | -    | - |
| Stage 2              | 308    | -      | -    | - |
| Critical Hdwy        | 5.74   | -      | 5.34 | - |
| Critical Hdwy Stg 1  | -      | -      | -    | - |
| Critical Hdwy Stg 2  | 6.04   | -      | -    | - |
| Follow-up Hdwy       | 3.82   | -      | 3.12 | - |
| Pot Cap-1 Maneuver   | 676    | 0      | -    | - |
| Stage 1              | -      | 0      | -    | - |
| Stage 2              | 659    | 0      | -    | - |
| Platoon blocked, %   | -      | -      | -    | - |
| Mov Cap-1 Maneuver   | 676    | -      | -    | - |
| Mov Cap-2 Maneuver   | 676    | -      | -    | - |
| Stage 1              | -      | -      | -    | - |
| Stage 2              | 659    | -      | -    | - |

| Approach             | EB   | NB |
|----------------------|------|----|
| HCM Control Delay, s | 13.9 |    |
| HCM LOS              | B    |    |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 |
|-----------------------|-----|-----|-------|
| Capacity (veh/h)      | -   | -   | 676   |
| HCM Lane V/C Ratio    | -   | -   | 0.406 |
| HCM Control Delay (s) | -   | -   | 13.9  |
| HCM Lane LOS          | -   | -   | B     |
| HCM 95th %tile Q(veh) | -   | -   | 2     |

27: Guadalupe St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 64.8 |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↱    |      |      | ↱    |      |      |      |      | ↱↱   | ↱    | ↱    |
| Traffic Vol, veh/h       | 0    | 20   | 12   | 124  | 96   | 0    | 0    | 0    | 0    | 48   | 1268 | 23   |
| Future Vol, veh/h        | 0    | 20   | 12   | 124  | 96   | 0    | 0    | 0    | 0    | 48   | 1268 | 23   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 24   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 42   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 23   | 14   | 143  | 110  | 0    | 0    | 0    | 0    | 55   | 1457 | 26   |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |   |
|----------------------|--------|------|--------|------|--------|---|
| Conflicting Flow All | -      | 1610 | 795    | 875  | 1610   | - |
| Stage 1              | -      | 1610 | -      | 0    | 0      | - |
| Stage 2              | -      | 0    | -      | 875  | 1610   | - |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | - |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | - |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | - |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | - |
| Pot Cap-1 Maneuver   | 0      | 104  | 330    | 243  | ~ 104  | 0 |
| Stage 1              | 0      | 162  | -      | -    | -      | 0 |
| Stage 2              | 0      | -    | -      | 310  | 162    | 0 |
| Platoon blocked, %   | -      | -    | -      | -    | -      | - |
| Mov Cap-1 Maneuver   | -      | 100  | 317    | 191  | ~ 100  | - |
| Mov Cap-2 Maneuver   | -      | 100  | -      | 191  | ~ 100  | - |
| Stage 1              | -      | 156  | -      | -    | -      | - |
| Stage 2              | -      | -    | -      | 253  | 156    | - |

| Approach             | EB   | WB       | SB |
|----------------------|------|----------|----|
| HCM Control Delay, s | 41.4 | \$ 462.5 |    |
| HCM LOS              | E    | F        |    |

| Minor Lane/Major Mvmt | EBLn1WBLn1   | SBL | SBT | SBR |
|-----------------------|--------------|-----|-----|-----|
| Capacity (veh/h)      | 135 137      | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.272 1.846  | -   | -   | -   |
| HCM Control Delay (s) | 41.4\$ 462.5 | -   | -   | -   |
| HCM Lane LOS          | E F          | -   | -   | -   |
| HCM 95th %tile Q(veh) | 1 19.4       | -   | -   | -   |

Notes  
 -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    \*: All major volume in platoon

29: Colorado St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 31.5 |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↱    |      |      | ↱    |      |      | ↱    |      |      | ↱    |      |
| Traffic Vol, veh/h       | 38   | 70   | 53   | 36   | 45   | 8    | 56   | 203  | 41   | 10   | 380  | 45   |
| Future Vol, veh/h        | 38   | 70   | 53   | 36   | 45   | 8    | 56   | 203  | 41   | 10   | 380  | 45   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 15   | 87   | 0    | 0    | 0    | 0    | 87   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 49   | 90   | 68   | 46   | 58   | 10   | 72   | 260  | 53   | 13   | 487  | 58   |

| Major/Minor          | Minor2 |       | Minor1 |       | Major1 |       | Major2 |   |
|----------------------|--------|-------|--------|-------|--------|-------|--------|---|
| Conflicting Flow All | 1108   | 1085  | 603    | 1051  | 1088   | 302   | 632    | 0 |
| Stage 1              | 629    | 629   | -      | 430   | 430    | -     | -      | - |
| Stage 2              | 479    | 456   | -      | 621   | 658    | -     | -      | - |
| Critical Hdwy        | 7.12   | 6.52  | 6.22   | 7.12  | 6.52   | 6.22  | 4.12   | - |
| Critical Hdwy Stg 1  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -      | - |
| Critical Hdwy Stg 2  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -      | - |
| Follow-up Hdwy       | 3.518  | 4.018 | 3.318  | 3.518 | 4.018  | 3.318 | 2.218  | - |
| Pot Cap-1 Maneuver   | 187    | 217   | 499    | 205   | 216    | 738   | 951    | - |
| Stage 1              | 470    | 475   | -      | 603   | 583    | -     | -      | - |
| Stage 2              | 568    | 568   | -      | 475   | 461    | -     | -      | - |
| Platoon blocked, %   | -      | -     | -      | -     | -      | -     | -      | - |
| Mov Cap-1 Maneuver   | 115    | 178   | 458    | 98    | 177    | 727   | 951    | - |
| Mov Cap-2 Maneuver   | 115    | 178   | -      | 98    | 177    | -     | -      | - |
| Stage 1              | 391    | 429   | -      | 548   | 529    | -     | -      | - |
| Stage 2              | 447    | 516   | -      | 315   | 416    | -     | -      | - |

| Approach             | EB    | WB   | NB  | SB  |
|----------------------|-------|------|-----|-----|
| HCM Control Delay, s | 137.4 | 93.2 | 1.7 | 0.2 |
| HCM LOS              | F     | F    |     |     |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1WBLn1       | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|------------------|-----|-----|-----|
| Capacity (veh/h)      | 951   | -   | -   | 192 141 1229     | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.075 | -   | -   | 1.075 0.809 0.01 | -   | -   | -   |
| HCM Control Delay (s) | 9.1   | 0   | -   | 137.4 93.2 8     | 0   | -   | -   |
| HCM Lane LOS          | A     | A   | -   | F F A A          | -   | -   | -   |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | 9.7 5.1 0        | -   | -   | -   |

30: N. Congress Ave  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 10   |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    |      |      | ↑    |      |      | ↑    |      |      | ↑    |      |
| Traffic Vol, veh/h       | 0    | 124  | 0    | 0    | 152  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 0    | 124  | 0    | 0    | 152  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 58   | 0    | 25   | 21   | 0    | 0    | 0    | 0    | 21   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 153  | 0    | 0    | 188  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |

| Major/Minor          | Minor2 |       |   | Minor1 |       |   | Major1 |   |   | Major2 |   |   |
|----------------------|--------|-------|---|--------|-------|---|--------|---|---|--------|---|---|
| Conflicting Flow All | -      | 1     | - | -      | 1     | - | -      | 0 | - | -      | - | 0 |
| Stage 1              | -      | 1     | - | -      | 0     | - | -      | - | - | -      | - | - |
| Stage 2              | -      | 0     | - | -      | 1     | - | -      | - | - | -      | - | - |
| Critical Hdwy        | -      | 6.52  | - | -      | 6.52  | - | -      | - | - | -      | - | - |
| Critical Hdwy Stg 1  | -      | 5.52  | - | -      | 5.52  | - | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | -      | 5.52  | - | -      | 5.52  | - | -      | - | - | -      | - | - |
| Follow-up Hdwy       | -      | 4.018 | - | -      | 4.018 | - | -      | - | - | -      | - | - |
| Pot Cap-1 Maneuver   | 0      | 895   | 0 | 0      | 895   | 0 | 0      | - | 0 | 0      | - | 0 |
| Stage 1              | 0      | 895   | 0 | 0      | -     | 0 | 0      | - | 0 | 0      | - | 0 |
| Stage 2              | 0      | -     | 0 | 0      | 895   | 0 | 0      | - | 0 | 0      | - | 0 |
| Platoon blocked, %   | -      | -     | - | -      | -     | - | -      | - | - | -      | - | - |
| Mov Cap-1 Maneuver   | -      | 895   | - | -      | 895   | - | -      | - | - | -      | - | - |
| Mov Cap-2 Maneuver   | -      | 895   | - | -      | 895   | - | -      | - | - | -      | - | - |
| Stage 1              | -      | 895   | - | -      | -     | - | -      | - | - | -      | - | - |
| Stage 2              | -      | -     | - | -      | 895   | - | -      | - | - | -      | - | - |

| Approach             | EB  |  | WB   |  | NB |  | SB |  |
|----------------------|-----|--|------|--|----|--|----|--|
| HCM Control Delay, s | 9.9 |  | 10.1 |  | 0  |  | 0  |  |
| HCM LOS              | A   |  | B    |  |    |  |    |  |

| Minor Lane/Major Mvmt | NBT | EBLn1 | WBLn1 | SBT |
|-----------------------|-----|-------|-------|-----|
| Capacity (veh/h)      | -   | 895   | 895   | -   |
| HCM Lane V/C Ratio    | -   | 0.171 | 0.21  | -   |
| HCM Control Delay (s) | -   | 9.9   | 10.1  | -   |
| HCM Lane LOS          | -   | A     | B     | -   |
| HCM 95th %tile Q(veh) | -   | 0.6   | 0.8   | -   |

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Synchro 9 Report  
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31: Brazos St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.9  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑    |      |      | ↑    | ↑    |      |
| Traffic Vol, veh/h       | 81   | 0    | 15   | 66   | 43   | 0    |
| Future Vol, veh/h        | 81   | 0    | 15   | 66   | 43   | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 1    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 58   | 58   | 58   | 58   | 58   | 58   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 140  | 0    | 26   | 114  | 74   | 0    |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 0      | 0 | 141    | 0 | 307    | 141   |
| Stage 1              | -      | - | -      | - | 141    | -     |
| Stage 2              | -      | - | -      | - | 166    | -     |
| Critical Hdwy        | -      | - | 4.12   | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | -      | - | 2.218  | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | -      | - | 1442   | - | 685    | 907   |
| Stage 1              | -      | - | -      | - | 886    | -     |
| Stage 2              | -      | - | -      | - | 863    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | -      | - | 1442   | - | 671    | 906   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 671    | -     |
| Stage 1              | -      | - | -      | - | 885    | -     |
| Stage 2              | -      | - | -      | - | 847    | -     |

| Approach             | EB |  | WB  |  | NB |  |
|----------------------|----|--|-----|--|----|--|
| HCM Control Delay, s | 0  |  | 1.4 |  | 11 |  |
| HCM LOS              |    |  |     |  | B  |  |




| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 671   | -   | -   | 1442  | -   |
| HCM Lane V/C Ratio    | 0.11  | -   | -   | 0.018 | -   |
| HCM Control Delay (s) | 11    | -   | -   | 7.5   | 0   |
| HCM Lane LOS          | B     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 0.4   | -   | -   | 0.1   | -   |

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Synchro 9 Report  
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32: San Jacinto Blvd & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection             |      |   |      |      |   |   |
|--------------------------|------|---|------|------|---|---|
| Int Delay, s/veh         | 0.9  |   |      |      |   |   |
| Movement                 | EBL  | EBR   | NBL  | NBT  | SBT   | SBR   |
| Lane Configurations      |      |  |      |      |  |  |
| Traffic Vol, veh/h       | 0    | 62  | 0    | 0    | 1277  | 52  |
| Future Vol, veh/h        | 0    | 62  | 0    | 0    | 1277  | 52  |
| Conflicting Peds, #/hr   | 0    | 0   | 0    | 0    | 0   | 15  |
| Sign Control             | Stop | Stop  | Free | Free | Free  | Free  |
| RT Channelized           | -    | None  | -    | None | -   | None  |
| Storage Length           | -    | 0   | -    | -    | -   | 50  |
| Veh in Median Storage, # | 0    | -   | -    | -    | 0   | -   |
| Grade, %                 | 0    | -   | -    | 0    | 0   | -   |
| Peak Hour Factor         | 89   | 89  | 89   | 89   | 89  | 89  |
| Heavy Vehicles, %        | 2    | 2   | 2    | 2    | 2   | 2   |
| Mvmt Flow                | 0    | 70  | 0    | 0    | 1435  | 58  |




| Major/Minor          | Minor2 | Major2 |
|----------------------|--------|--------|
| Conflicting Flow All | - 732  | - 0    |
| Stage 1              | - -    | - -    |
| Stage 2              | - -    | - -    |
| Critical Hdwy        | - 7.14 | - -    |
| Critical Hdwy Stg 1  | - -    | - -    |
| Critical Hdwy Stg 2  | - -    | - -    |
| Follow-up Hdwy       | - 3.92 | - -    |
| Pot Cap-1 Maneuver   | 0 312  | - -    |
| Stage 1              | 0 -    | - -    |
| Stage 2              | 0 -    | - -    |
| Platoon blocked, %   | - -    | - -    |
| Mov Cap-1 Maneuver   | - 308  | - -    |
| Mov Cap-2 Maneuver   | - -    | - -    |
| Stage 1              | - -    | - -    |
| Stage 2              | - -    | - -    |

| Approach             | EB   | SB |
|----------------------|------|----|
| HCM Control Delay, s | 20.1 | 0  |
| HCM LOS              | C    |    |

| Minor Lane/Major Mvmt | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-----|
| Capacity (veh/h)      | 308   | -   | -   |
| HCM Lane V/C Ratio    | 0.226 | -   | -   |
| HCM Control Delay (s) | 20.1  | -   | -   |
| HCM Lane LOS          | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.9   | -   | -   |

33: Colorado St & Parking Dr. 3  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection             |   |      |   |      |      |   |
|--------------------------|---|------|---|------|------|---|
| Int Delay, s/veh         | 3.5   |      |   |      |      |   |
| Movement                 | WBL   | WBR  | NBT   | NBR  | SBL  | SBT   |
| Lane Configurations      |  |      |  |      |      |  |
| Traffic Vol, veh/h       | 89  | 95   | 87  | 16   | 21   | 509   |
| Future Vol, veh/h        | 89  | 95   | 87  | 16   | 21   | 509   |
| Conflicting Peds, #/hr   | 0   | 0    | 0   | 0    | 0    | 0   |
| Sign Control             | Stop  | Stop | Free  | Free | Free | Free  |
| RT Channelized           | -   | None | -   | None | -    | None  |
| Storage Length           | 0   | -    | -   | -    | -    | -   |
| Veh in Median Storage, # | 0   | -    | 0   | -    | -    | 0   |
| Grade, %                 | 0   | -    | 0   | -    | -    | 0   |
| Peak Hour Factor         | 92  | 92   | 92  | 92   | 92   | 92  |
| Heavy Vehicles, %        | 2   | 2    | 2   | 2    | 2    | 2   |
| Mvmt Flow                | 97  | 103  | 95  | 17   | 23   | 553   |




| Major/Minor          | Minor1      | Major1 | Major2  |
|----------------------|-------------|--------|---------|
| Conflicting Flow All | 702 103     | 0 0    | 112 0   |
| Stage 1              | 103 -       | - -    | - -     |
| Stage 2              | 599 -       | - -    | - -     |
| Critical Hdwy        | 6.42 6.22   | - -    | 4.12 -  |
| Critical Hdwy Stg 1  | 5.42 -      | - -    | - -     |
| Critical Hdwy Stg 2  | 5.42 -      | - -    | - -     |
| Follow-up Hdwy       | 3.518 3.318 | - -    | 2.218 - |
| Pot Cap-1 Maneuver   | 404 952     | - -    | 1478 -  |
| Stage 1              | 921 -       | - -    | - -     |
| Stage 2              | 549 -       | - -    | - -     |
| Platoon blocked, %   | - -         | - -    | - -     |
| Mov Cap-1 Maneuver   | 395 952     | - -    | 1478 -  |
| Mov Cap-2 Maneuver   | 395 -       | - -    | - -     |
| Stage 1              | 921 -       | - -    | - -     |
| Stage 2              | 537 -       | - -    | - -     |

| Approach             | WB   | NB | SB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 14.8 | 0  | 0.3 |
| HCM LOS              | B    |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT |
|-----------------------|-----|----------|-------|-----|
| Capacity (veh/h)      | -   | - 566    | 1478  | -   |
| HCM Lane V/C Ratio    | -   | - 0.353  | 0.015 | -   |
| HCM Control Delay (s) | -   | - 14.8   | 7.5   | 0   |
| HCM Lane LOS          | -   | - B      | A     | A   |
| HCM 95th %tile Q(veh) | -   | - 1.6    | 0     | -   |

62: Colorado St & Parking Dr. 4  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection             |   |      |      |   |   |      |
|--------------------------|---|------|------|---|---|------|
| Int Delay, s/veh         | 3.5   |      |      |   |   |      |
| Movement                 | EBL   | EBR  | NBL  | NBT   | SBT   | SBR  |
| Lane Configurations      |  |      |      |  |  |      |
| Traffic Vol, veh/h       | 79  | 79   | 15   | 167   | 452   | 17   |
| Future Vol, veh/h        | 79  | 79   | 15   | 167   | 452   | 17   |
| Conflicting Peds, #/hr   | 0   | 0    | 0    | 0   | 0   | 0    |
| Sign Control             | Stop  | Stop | Free | Free  | Free  | Free |
| RT Channelized           | -   | None | -    | None  | -   | None |
| Storage Length           | 0   | -    | -    | -   | -   | -    |
| Veh in Median Storage, # | 0   | -    | -    | 0   | 0   | -    |
| Grade, %                 | 0   | -    | -    | 0   | 0   | -    |
| Peak Hour Factor         | 92  | 92   | 92   | 92  | 92  | 92   |
| Heavy Vehicles, %        | 2   | 2    | 2    | 2   | 2   | 2    |
| Mvmt Flow                | 86  | 86   | 16   | 182   | 491   | 18   |

| Major/Minor          | Minor2 | Major1 |       | Major2 |     |
|----------------------|--------|--------|-------|--------|-----|
| Conflicting Flow All | 715    | 501    | 510   | 0      | - 0 |
| Stage 1              | 501    | -      | -     | -      | -   |
| Stage 2              | 214    | -      | -     | -      | -   |
| Critical Hdwy        | 6.42   | 6.22   | 4.12  | -      | -   |
| Critical Hdwy Stg 1  | 5.42   | -      | -     | -      | -   |
| Critical Hdwy Stg 2  | 5.42   | -      | -     | -      | -   |
| Follow-up Hdwy       | 3.518  | 3.318  | 2.218 | -      | -   |
| Pot Cap-1 Maneuver   | 397    | 570    | 1055  | -      | -   |
| Stage 1              | 609    | -      | -     | -      | -   |
| Stage 2              | 822    | -      | -     | -      | -   |
| Platoon blocked, %   | -      | -      | -     | -      | -   |
| Mov Cap-1 Maneuver   | 390    | 570    | 1055  | -      | -   |
| Mov Cap-2 Maneuver   | 390    | -      | -     | -      | -   |
| Stage 1              | 609    | -      | -     | -      | -   |
| Stage 2              | 808    | -      | -     | -      | -   |

| Approach             | EB   | NB  | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 17.3 | 0.7 | 0  |
| HCM LOS              | C    |     |    |




| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1055  | -   | 463   | -   | -   |
| HCM Lane V/C Ratio    | 0.015 | -   | 0.371 | -   | -   |
| HCM Control Delay (s) | 8.5   | 0   | 17.3  | -   | -   |
| HCM Lane LOS          | A     | A   | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0     | -   | 1.7   | -   | -   |

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69: Parking Dr. 5 & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2022 Background + Site  
Timing Plan: PM

| Intersection             |   |      |      |   |   |      |
|--------------------------|---|------|------|---|---|------|
| Int Delay, s/veh         | 4.9   |      |      |   |   |      |
| Movement                 | EBT   | EBR  | WBL  | WBT   | NBL   | NBR  |
| Lane Configurations      |  |      |      |  |  |      |
| Traffic Vol, veh/h       | 103   | 21   | 16   | 129   | 121   | 63   |
| Future Vol, veh/h        | 103   | 21   | 16   | 129   | 121   | 63   |
| Conflicting Peds, #/hr   | 0   | 0    | 0    | 0   | 0   | 0    |
| Sign Control             | Free  | Free | Free | Free  | Stop  | Stop |
| RT Channelized           | -   | None | -    | None  | -   | None |
| Storage Length           | -   | -    | -    | -   | 0   | -    |
| Veh in Median Storage, # | 0   | -    | -    | 0   | 0   | -    |
| Grade, %                 | 0   | -    | -    | 0   | 0   | -    |
| Peak Hour Factor         | 92  | 92   | 92   | 92  | 92  | 92   |
| Heavy Vehicles, %        | 2   | 2    | 2    | 2   | 2   | 2    |
| Mvmt Flow                | 112   | 23   | 17   | 140   | 132   | 68   |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 0      | 0 | 135    | 0 | 298    | 123   |
| Stage 1              | -      | - | -      | - | 123    | -     |
| Stage 2              | -      | - | -      | - | 175    | -     |
| Critical Hdwy        | -      | - | 4.12   | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | -      | - | 2.218  | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | -      | - | 1449   | - | 693    | 928   |
| Stage 1              | -      | - | -      | - | 902    | -     |
| Stage 2              | -      | - | -      | - | 855    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | -      | - | 1449   | - | 684    | 928   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 684    | -     |
| Stage 1              | -      | - | -      | - | 902    | -     |
| Stage 2              | -      | - | -      | - | 844    | -     |

| Approach             | EB | WB  | NB   |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0  | 0.8 | 11.5 |
| HCM LOS              |    |     | B    |




















| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 752   | -   | -   | 1449  | -   |
| HCM Lane V/C Ratio    | 0.266 | -   | -   | 0.012 | -   |
| HCM Control Delay (s) | 11.5  | -   | -   | 7.5   | 0   |
| HCM Lane LOS          | B     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 1.1   | -   | -   | 0     | -   |

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Synchro 9 Report  
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1: Martin Luther King Jr. Blvd & Guadalupe St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     |  |  |   |   |  |  |   |   |   |  |  |  |
| Traffic Volume (vph)    | 68  | 807   | 409   | 0   | 563   | 335   | 0   | 0   | 0   | 294   | 738   | 134   |
| Future Volume (vph)     | 68  | 807   | 409   | 0   | 563   | 335   | 0   | 0   | 0   | 294   | 738   | 134   |
| Confl. Peds. (#/hr)     | 28  |   | 19  | 19  |   | 28  |   |   |   | 29  |   | 19  |
| Confl. Bikes (#/hr)     |   |   | 1   |   |   | 1   |   |   |   |   |   | 13  |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  |
| Adj. Flow (vph)         | 72  | 859   | 435   | 0   | 599   | 356   | 0   | 0   | 0   | 313   | 785   | 143   |
| Shared Lane Traffic (%) |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)   | 72  | 1294  | 0   | 0   | 599   | 356   | 0   | 0   | 0   | 313   | 785   | 143   |
| Turn Type               | Prot  | NA  |   |   | NA  | pm+ov   |   |   |   | pm+pt   | NA  | Perm  |
| Protected Phases        | 5   | 2   |   |   | 6   | 7   |   |   |   | 7   | 4   |   |
| Permitted Phases        |   |   |   |   | 6   |   |   |   |   | 4   |   | 4   |
| Detector Phase          | 5   | 2   |   |   | 6   | 7   |   |   |   | 7   | 4   | 4   |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     | 2.0   | 15.0  |   |   | 15.0  | 10.0  |   |   |   | 10.0  | 5.0   | 5.0   |
| Minimum Split (s)       | 7.0   | 27.0  |   |   | 34.0  | 15.0  |   |   |   | 15.0  | 32.0  | 32.0  |
| Total Split (s)         | 18.0  | 75.0  |   |   | 57.0  | 45.0  |   |   |   | 45.0  | 45.0  | 45.0  |
| Total Split (%)         | 15.0%   | 62.5%   |   |   | 47.5%   | 37.5%   |   |   |   | 37.5%   | 37.5%   | 37.5%   |
| Yellow Time (s)         | 4.0   | 4.0   |   |   | 4.0   | 4.0   |   |   |   | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |   |   | 1.0   | 1.0   |   |   |   | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |   |   | 0.0   | 0.0   |   |   |   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   | 5.0   |   |   | 5.0   | 5.0   |   |   |   | 5.0   | 5.0   | 5.0   |
| Lead/Lag                | Lag   |   |   |   | Lead  |   |   |   |   |   |   |   |
| Lead-Lag Optimize?      | Yes   |   |   |   | Yes   |   |   |   |   |   |   |   |
| Recall Mode             | None  | C-Max   |   |   | C-Max   | None  |   |   |   | None  | Max   | Max   |
| Act Effect Green (s)    | 11.6  | 70.0  |   |   | 55.6  | 95.6  |   |   |   | 40.0  | 40.0  | 40.0  |
| Actuated g/C Ratio      | 0.10  | 0.58  |   |   | 0.46  | 0.80  |   |   |   | 0.33  | 0.33  | 0.33  |
| v/c Ratio               | 0.42  | 0.66  |   |   | 0.37  | 0.28  |   |   |   | 0.53  | 0.67  | 0.25  |
| Control Delay           | 58.1  | 18.5  |   |   | 24.6  | 1.5   |   |   |   | 36.4  | 37.6  | 13.0  |
| Queue Delay             | 0.0   | 0.0   |   |   | 0.0   | 0.1   |   |   |   | 0.0   | 0.0   | 0.0   |
| Total Delay             | 58.1  | 18.5  |   |   | 24.6  | 1.6   |   |   |   | 36.4  | 37.6  | 13.0  |
| LOS                     | E   | B   |   |   | C   | A   |   |   |   | D   | D   | B   |
| Approach Delay          |   | 20.6  |   |   | 16.0  |   |   |   |   |   | 34.5  |   |
| Approach LOS            |   | C   |   |   | B   |   |   |   |   |   | C   |   |
| Queue Length 50th (ft)  | 53  | 330   |   |   | 165   | 3   |   |   |   | 195   | 273   | 28  |
| Queue Length 95th (ft)  | 101   | 405   |   |   | 246   | 49  |   |   |   | 287   | 342   | 78  |
| Internal Link Dist (ft) |   | 228   |   |   | 45  |   | 159   |   |   |   | 210   |   |
| Turn Bay Length (ft)    | 160   |   |   |   |   |   |   |   |   | 130   |   | 120   |
| Base Capacity (vph)     | 191   | 1949  |   |   | 1639  | 1276  |   |   |   | 590   | 1179  | 564   |
| Starvation Cap Reductn  | 0   | 0   |   |   | 0   | 136   |   |   |   | 0   | 0   | 0   |
| Spillback Cap Reductn   | 0   | 0   |   |   | 0   | 0   |   |   |   | 0   | 0   | 0   |
| Storage Cap Reductn     | 0   | 0   |   |   | 0   | 0   |   |   |   | 0   | 0   | 0   |
| Reduced v/c Ratio       | 0.38  | 0.66  |   |   | 0.37  | 0.31  |   |   |   | 0.53  | 0.67  | 0.25  |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 75

MS

Synchro 9 Report  
Page 1

1: Martin Luther King Jr. Blvd & Guadalupe St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.67

Intersection Signal Delay: 24.2

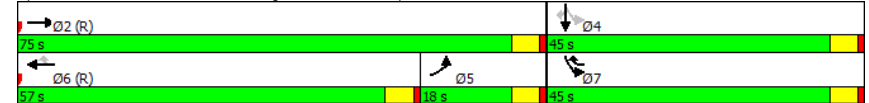
Intersection LOS: C

Intersection Capacity Utilization 66.9%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Martin Luther King Jr. Blvd & Guadalupe St



MS

Synchro 9 Report  
Page 2

3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

|                         |       |      |      |       |       |       |
|-------------------------|-------|------|------|-------|-------|-------|
|                         | →     | ↗    | ↖    | ←     | ↙     | ↘     |
| Lane Group              | EBT   | EBR  | WBL  | WBT   | NBL   | NBR   |
| Lane Configurations     | ↑↑    |      |      | ↑↑    | ↖↗    | ↗     |
| Traffic Volume (vph)    | 1101  | 0    | 0    | 736   | 375   | 227   |
| Future Volume (vph)     | 1101  | 0    | 0    | 736   | 375   | 227   |
| Confl. Peds. (#/hr)     |       |      |      |       |       | 11    |
| Peak Hour Factor        | 0.86  | 0.86 | 0.86 | 0.86  | 0.86  | 0.86  |
| Adj. Flow (vph)         | 1280  | 0    | 0    | 856   | 436   | 264   |
| Shared Lane Traffic (%) |       |      |      |       |       |       |
| Lane Group Flow (vph)   | 1280  | 0    | 0    | 856   | 436   | 264   |
| Turn Type               | NA    |      |      | NA    | Prot  | Perm  |
| Protected Phases        | 2     |      |      | 6     | 8     |       |
| Permitted Phases        |       |      |      |       |       | 3     |
| Detector Phase          | 2     |      |      | 6     | 8     | 3     |
| Switch Phase            |       |      |      |       |       |       |
| Minimum Initial (s)     | 10.0  |      |      | 10.0  | 5.0   | 5.0   |
| Minimum Split (s)       | 30.0  |      |      | 15.0  | 10.0  | 29.0  |
| Total Split (s)         | 87.0  |      |      | 87.0  | 33.0  | 33.0  |
| Total Split (%)         | 72.5% |      |      | 72.5% | 27.5% | 27.5% |
| Yellow Time (s)         | 4.0   |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |       |      |      |       |       |       |
| Lead-Lag Optimize?      |       |      |      |       |       |       |
| Recall Mode             | C-Max |      |      | C-Max | Max   | Max   |
| Act Effct Green (s)     | 82.0  |      |      | 82.0  | 28.0  | 28.0  |
| Actuated g/C Ratio      | 0.68  |      |      | 0.68  | 0.23  | 0.23  |
| v/c Ratio               | 0.53  |      |      | 0.35  | 0.54  | 0.62  |
| Control Delay           | 8.5   |      |      | 5.8   | 59.9  | 50.8  |
| Queue Delay             | 0.4   |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             | 8.8   |      |      | 5.8   | 59.9  | 50.8  |
| LOS                     | A     |      |      | A     | E     | D     |
| Approach Delay          | 8.8   |      |      | 5.8   | 56.5  |       |
| Approach LOS            | A     |      |      | A     | E     |       |
| Queue Length 50th (ft)  | 159   |      |      | 61    | 181   | 149   |
| Queue Length 95th (ft)  | 171   |      |      | 68    | 213   | 167   |
| Internal Link Dist (ft) | 272   |      |      | 277   | 337   |       |
| Turn Bay Length (ft)    |       |      |      |       |       |       |
| Base Capacity (vph)     | 2418  |      |      | 2418  | 801   | 428   |
| Starvation Cap Reductn  | 547   |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   | 0     |      |      | 0     | 0     | 0     |
| Storage Cap Reductn     | 0     |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       | 0.68  |      |      | 0.35  | 0.54  | 0.62  |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green  
Natural Cycle: 60  
Control Type: Actuated-Coordinated

MS

Synchro 9 Report  
Page 3

3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

Maximum v/c Ratio: 0.62  
Intersection Signal Delay: 19.7  
Intersection Capacity Utilization 58.8%  
Analysis Period (min) 15  
Intersection LOS: B  
ICU Level of Service B

Splits and Phases: 3: Lavaca St & Martin Luther King Jr. Blvd

|          |      |
|----------|------|
| → Ø2 (R) | ↖ Ø3 |
| 87 s     | 33 s |
| ← Ø6 (R) | ↗ Ø8 |
| 87 s     | 33 s |

MS

Synchro 9 Report  
Page 4

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

|                         | →     | ↖    | ↙     | ←      | ↘    | ↗    |
|-------------------------|-------|------|-------|--------|------|------|
| Lane Group              | EBT   | EBR  | WBL   | WBT    | NBL  | NBR  |
| Lane Configurations     | ↕↕    |      | ↖     | ↕↕     |      |      |
| Traffic Volume (vph)    | 1138  | 0    | 9     | 1054   | 0    | 0    |
| Future Volume (vph)     | 1138  | 0    | 9     | 1054   | 0    | 0    |
| Confl. Peds. (#/hr)     |       | 6    | 6     |        | 1    |      |
| Confl. Bikes (#/hr)     |       | 1    |       |        |      |      |
| Peak Hour Factor        | 0.89  | 0.89 | 0.89  | 0.89   | 0.89 | 0.89 |
| Adj. Flow (vph)         | 1279  | 0    | 10    | 1184   | 0    | 0    |
| Shared Lane Traffic (%) |       |      |       |        |      |      |
| Lane Group Flow (vph)   | 1279  | 0    | 10    | 1184   | 0    | 0    |
| Turn Type               | NA    |      | pm+pt | NA     |      |      |
| Protected Phases        | 2     |      | 1     | 6      |      |      |
| Permitted Phases        |       |      | 6     |        |      |      |
| Detector Phase          | 2     |      | 1     | 6      |      |      |
| Switch Phase            |       |      |       |        |      |      |
| Minimum Initial (s)     | 15.0  |      | 1.0   | 5.0    |      |      |
| Minimum Split (s)       | 34.0  |      | 5.5   | 29.0   |      |      |
| Total Split (s)         | 107.0 |      | 13.0  | 120.0  |      |      |
| Total Split (%)         | 89.2% |      | 10.8% | 100.0% |      |      |
| Yellow Time (s)         | 4.0   |      | 3.5   | 4.0    |      |      |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0    |      |      |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0    |      |      |
| Total Lost Time (s)     | 5.0   |      | 4.5   | 5.0    |      |      |
| Lead/Lag                | Lead  |      | Lag   |        |      |      |
| Lead-Lag Optimize?      | Yes   |      | Yes   |        |      |      |
| Recall Mode             | C-Max |      | None  | C-Max  |      |      |
| Act Effect Green (s)    | 116.4 |      | 119.1 | 120.0  |      |      |
| Actuated g/C Ratio      | 0.97  |      | 0.99  | 1.00   |      |      |
| v/c Ratio               | 0.37  |      | 0.02  | 0.33   |      |      |
| Control Delay           | 0.5   |      | 0.1   | 0.2    |      |      |
| Queue Delay             | 0.0   |      | 0.0   | 0.0    |      |      |
| Total Delay             | 0.5   |      | 0.1   | 0.2    |      |      |
| LOS                     | A     |      | A     | A      |      |      |
| Approach Delay          | 0.5   |      |       | 0.2    |      |      |
| Approach LOS            | A     |      |       | A      |      |      |
| Queue Length 50th (ft)  | 0     |      | 0     | 0      |      |      |
| Queue Length 95th (ft)  | 46    |      | m0    | 0      |      |      |
| Internal Link Dist (ft) | 366   |      |       | 377    | 331  |      |
| Turn Bay Length (ft)    |       |      | 115   |        |      |      |
| Base Capacity (vph)     | 3433  |      | 480   | 3539   |      |      |
| Starvation Cap Reductn  | 0     |      | 0     | 0      |      |      |
| Spillback Cap Reductn   | 0     |      | 0     | 0      |      |      |
| Storage Cap Reductn     | 0     |      | 0     | 0      |      |      |
| Reduced v/c Ratio       | 0.37  |      | 0.02  | 0.33   |      |      |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 40

MS

Synchro 9 Report  
Page 5

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.37

Intersection Signal Delay: 0.4

Intersection LOS: A

Intersection Capacity Utilization 35.6%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: N. Congress Ave & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 6

6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
|-------------------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations     | ↰     | ↰↱    | ↱    | ↰     | ↰↱    | ↱     | ↰     | ↰     | ↰     | ↰     | ↱     | ↱     |
| Traffic Volume (vph)    | 143   | 772   | 231  | 293   | 1047  | 141   | 20    | 0     | 35    | 43    | 1     | 11    |
| Future Volume (vph)     | 143   | 772   | 231  | 293   | 1047  | 141   | 20    | 0     | 35    | 43    | 1     | 11    |
| Confl. Peds. (#/hr)     | 18    |       | 9    | 9     |       | 18    | 24    |       | 8     | 8     |       | 24    |
| Confl. Bikes (#/hr)     |       |       | 3    |       |       | 3     |       |       |       |       |       | 1     |
| Peak Hour Factor        | 0.84  | 0.84  | 0.84 | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  |
| Adj. Flow (vph)         | 170   | 919   | 275  | 349   | 1246  | 168   | 24    | 0     | 42    | 51    | 1     | 13    |
| Shared Lane Traffic (%) |       |       |      |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)   | 170   | 1194  | 0    | 349   | 1246  | 168   | 0     | 24    | 42    | 0     | 52    | 13    |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    | Perm  | Perm  | NA    | Perm  | Perm  | NA    | Perm  |
| Protected Phases        | 5     | 2     |      | 1     | 6     |       |       | 8     |       |       | 4     |       |
| Permitted Phases        | 2     |       |      | 6     |       | 6     | 8     |       | 8     | 4     |       | 4     |
| Detector Phase          | 5     | 2     |      | 1     | 6     | 6     | 8     | 8     | 8     | 4     | 4     | 4     |
| Switch Phase            |       |       |      |       |       |       |       |       |       |       |       |       |
| Minimum Initial (s)     | 1.0   | 10.0  |      | 1.0   | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  |
| Minimum Split (s)       | 5.5   | 22.0  |      | 5.5   | 28.0  | 28.0  | 22.0  | 22.0  | 22.0  | 28.0  | 28.0  | 28.0  |
| Total Split (s)         | 20.0  | 70.0  |      | 20.0  | 70.0  | 70.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  |
| Total Split (%)         | 16.7% | 58.3% |      | 16.7% | 58.3% | 58.3% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% |
| Yellow Time (s)         | 3.5   | 4.0   |      | 3.5   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Total Lost Time (s)     | 4.5   | 5.0   |      | 4.5   | 5.0   | 5.0   |       | 5.0   | 5.0   |       | 5.0   | 5.0   |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   | Lag   |       |       |       |       |       |       |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   | Yes   |       |       |       |       |       |       |
| Recall Mode             | None  | C-Max |      | None  | C-Max | C-Max | Max   | Max   | Max   | Max   | Max   | Max   |
| Act Effect Green (s)    | 75.4  | 65.3  |      | 85.0  | 70.9  | 70.9  |       | 25.0  | 25.0  |       | 25.0  | 25.0  |
| Actuated g/C Ratio      | 0.63  | 0.54  |      | 0.71  | 0.59  | 0.59  |       | 0.21  | 0.21  |       | 0.21  | 0.21  |
| v/c Ratio               | 0.55  | 0.64  |      | 0.93  | 0.60  | 0.19  |       | 0.09  | 0.11  |       | 0.18  | 0.04  |
| Control Delay           | 16.9  | 15.0  |      | 58.0  | 12.3  | 4.4   |       | 39.5  | 6.2   |       | 41.2  | 0.2   |
| Queue Delay             | 0.0   | 0.4   |      | 0.0   | 0.4   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Total Delay             | 16.9  | 15.4  |      | 58.0  | 12.8  | 4.4   |       | 39.5  | 6.2   |       | 41.2  | 0.2   |
| LOS                     | B     | B     |      | E     | B     | A     |       | D     | A     |       | D     | A     |
| Approach Delay          |       | 15.6  |      |       | 20.9  |       |       | 18.3  |       |       | 33.0  |       |
| Approach LOS            |       | B     |      |       | C     |       |       | B     |       |       | C     |       |
| Queue Length 50th (ft)  | 32    | 215   |      | 150   | 212   | 12    |       | 15    | 0     |       | 33    | 0     |
| Queue Length 95th (ft)  | 80    | 185   |      | #276  | 227   | 21    |       | 37    | 16    |       | 65    | 0     |
| Internal Link Dist (ft) |       | 377   |      |       | 273   |       |       | 135   |       |       | 212   |       |
| Turn Bay Length (ft)    | 160   |       |      | 100   |       | 100   |       |       | 100   |       |       |       |
| Base Capacity (vph)     | 396   | 1858  |      | 378   | 2090  | 906   |       | 270   | 367   |       | 283   | 360   |
| Starvation Cap Reductn  | 0     | 252   |      | 0     | 375   | 0     |       | 0     | 0     |       | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Reduced v/c Ratio       | 0.43  | 0.74  |      | 0.92  | 0.73  | 0.19  |       | 0.09  | 0.11  |       | 0.18  | 0.04  |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

MS

Synchro 9 Report  
Page 7

6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 18.9

Intersection LOS: B

Intersection Capacity Utilization 76.4%

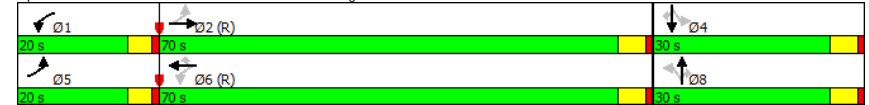
ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: Brazos St & Martin Luther King Jr. Blvd















MS

Synchro 9 Report  
Page 8

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     |   | ↑↑  |   | ↓   | ↑↑  |   |   |   |   | ↓   | ↑↑  | ↓   |
| Traffic Volume (vph)    | 0   | 744   | 172   | 625   | 1469  | 0   | 0   | 0   | 0   | 37  | 52  | 56  |
| Future Volume (vph)     | 0   | 744   | 172   | 625   | 1469  | 0   | 0   | 0   | 0   | 37  | 52  | 56  |
| Confl. Peds. (#/hr)     |   |   | 54  | 54  |   |   |   |   |   | 8   |   | 49  |
| Confl. Bikes (#/hr)     |   |   | 2   |   |   |   |   |   |   |   |   | 29  |
| Peak Hour Factor        | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  |
| Adj. Flow (vph)         | 0   | 800   | 185   | 672   | 1580  | 0   | 0   | 0   | 0   | 40  | 56  | 60  |
| Shared Lane Traffic (%) |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)   | 0   | 985   | 0   | 672   | 1580  | 0   | 0   | 0   | 0   | 40  | 56  | 60  |
| Turn Type               |   | NA  |   | pm+pt   | NA  |   |   |   |   | Perm  | NA  | Perm  |
| Protected Phases        |   | 2   |   | 1   | 6   |   |   |   |   |   | 4   |   |
| Permitted Phases        |   |   |   | 6   |   |   |   |   |   | 4   |   | 4   |
| Detector Phase          |   | 2   |   | 1   | 6   |   |   |   |   | 4   | 4   | 4   |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     |   | 5.0   |   |   | 10.0  |   |   |   |   | 10.0  | 10.0  | 10.0  |
| Minimum Split (s)       |   | 30.0  |   |   | 30.0  |   |   |   |   | 28.0  | 28.0  | 28.0  |
| Total Split (s)         |   | 62.0  |   |   | 92.0  |   |   |   |   | 28.0  | 28.0  | 28.0  |
| Total Split (%)         |   | 51.7%   |   |   | 76.7%   |   |   |   |   | 23.3%   | 23.3%   | 23.3%   |
| Yellow Time (s)         |   | 4.0   |   |   | 4.0   |   |   |   |   | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |   | 1.0   |   |   | 1.0   |   |   |   |   | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |   | 0.0   |   |   | 0.0   |   |   |   |   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |   | 5.0   |   |   | 5.0   |   |   |   |   | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |   | Lag   |   |   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?      |   | Yes   |   |   |   |   |   |   |   |   |   |   |
| Recall Mode             |   | C-Max   |   |   | C-Max   |   |   |   |   | Max   | Max   | Max   |
| Act Effect Green (s)    |   | 57.0  |   |   | 87.5  | 87.0  |   |   |   | 23.0  | 23.0  | 23.0  |
| Actuated g/C Ratio      |   | 0.48  |   |   | 0.73  | 0.72  |   |   |   | 0.19  | 0.19  | 0.19  |
| v/c Ratio               |   | 0.61  |   |   | 1.36  | 0.62  |   |   |   | 0.12  | 0.08  | 0.17  |
| Control Delay           |   | 14.9  |   |   | 188.3   | 5.6   |   |   |   | 41.4  | 40.3  | 2.2   |
| Queue Delay             |   | 0.5   |   |   | 1.3   | 0.9   |   |   |   | 0.0   | 0.0   | 0.1   |
| Total Delay             |   | 15.3  |   |   | 189.6   | 6.5   |   |   |   | 41.4  | 40.3  | 2.3   |
| LOS                     |   | B   |   |   | F   | A   |   |   |   | D   | D   | A   |
| Approach Delay          |   | 15.3  |   |   |   | 61.1  |   |   |   |   | 26.0  |   |
| Approach LOS            |   | B   |   |   |   | E   |   |   |   |   | C   |   |
| Queue Length 50th (ft)  |   | 110   |   |   | -394  | 125   |   |   |   | 26  | 18  | 0   |
| Queue Length 95th (ft)  |   | 122   |   |   | m#344   | m118  |   |   |   | 58  | 37  | 8   |
| Internal Link Dist (ft) |   | 273   |   |   |   | 321   |   |   | 343   |   | 244   |   |
| Turn Bay Length (ft)    |   |   |   |   | 120   |   |   |   |   | 100   |   | 100   |
| Base Capacity (vph)     |   | 1623  |   |   | 495   | 2565  |   |   |   | 334   | 678   | 353   |
| Starvation Cap Reductn  |   | 246   |   |   | 66  | 629   |   |   |   | 0   | 0   | 0   |
| Spillback Cap Reductn   |   | 0   |   |   | 0   | 24  |   |   |   | 0   | 0   | 46  |
| Storage Cap Reductn     |   | 0   |   |   | 0   | 0   |   |   |   | 0   | 0   | 0   |
| Reduced v/c Ratio       |   | 0.72  |   |   | 1.57  | 0.82  |   |   |   | 0.12  | 0.08  | 0.20  |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 110

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Lane Group              | Ø1   | Ø9   |
|-------------------------|------|------|
| Lane Configurations     |      |      |
| Traffic Volume (vph)    |      |      |
| Future Volume (vph)     |      |      |
| Confl. Peds. (#/hr)     |      |      |
| Confl. Bikes (#/hr)     |      |      |
| Peak Hour Factor        |      |      |
| Adj. Flow (vph)         |      |      |
| Shared Lane Traffic (%) |      |      |
| Lane Group Flow (vph)   |      |      |
| Turn Type               |      |      |
| Protected Phases        | 1    | 9    |
| Permitted Phases        |      |      |
| Detector Phase          |      |      |
| Switch Phase            |      |      |
| Minimum Initial (s)     | 1.0  | 5.0  |
| Minimum Split (s)       | 5.5  | 9.5  |
| Total Split (s)         | 15.0 | 15.0 |
| Total Split (%)         | 13%  | 13%  |
| Yellow Time (s)         | 3.5  | 3.5  |
| All-Red Time (s)        | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |
| Total Lost Time (s)     |      |      |
| Lead/Lag                | Lead |      |
| Lead-Lag Optimize?      | Yes  |      |
| Recall Mode             | None | None |
| Act Effect Green (s)    |      |      |
| Actuated g/C Ratio      |      |      |
| v/c Ratio               |      |      |
| Control Delay           |      |      |
| Queue Delay             |      |      |
| Total Delay             |      |      |
| LOS                     |      |      |
| Approach Delay          |      |      |
| Approach LOS            |      |      |
| Queue Length 50th (ft)  |      |      |
| Queue Length 95th (ft)  |      |      |
| Internal Link Dist (ft) |      |      |
| Turn Bay Length (ft)    |      |      |
| Base Capacity (vph)     |      |      |
| Starvation Cap Reductn  |      |      |
| Spillback Cap Reductn   |      |      |
| Storage Cap Reductn     |      |      |
| Reduced v/c Ratio       |      |      |

Intersection Summary

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.36

Intersection Signal Delay: 46.2

Intersection LOS: D

Intersection Capacity Utilization 95.5%

ICU Level of Service F

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

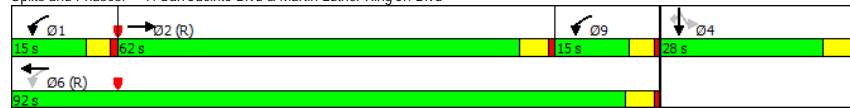
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: San Jacinto Blvd & Martin Luther King Jr. Blvd



8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↰     | ↱     | ↱    | ↰    | ↱     | ↱    | ↰     | ↱     | ↱     | ↰    | ↱    | ↱    |
| Traffic Volume (vph)    | 155   | 552   | 0    | 0    | 2015  | 60   | 68    | 86    | 126   | 0    | 0    | 0    |
| Future Volume (vph)     | 155   | 552   | 0    | 0    | 2015  | 60   | 68    | 86    | 126   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     |       |       | 36   |      |       | 60   | 35    |       | 28    |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       | 4    |       |       | 4     |      |      |      |
| Peak Hour Factor        | 0.89  | 0.89  | 0.89 | 0.89 | 0.89  | 0.89 | 0.89  | 0.89  | 0.89  | 0.89 | 0.89 | 0.89 |
| Adj. Flow (vph)         | 174   | 620   | 0    | 0    | 2264  | 67   | 76    | 97    | 142   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       | 10%  |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 174   | 620   | 0    | 0    | 2331  | 0    | 68    | 105   | 142   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 1.0   | 10.0  |      |      | 1.0   |      | 10.0  | 10.0  | 10.0  |      |      |      |
| Minimum Split (s)       | 5.5   | 26.0  |      |      | 5.5   |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (s)         | 15.0  | 94.0  |      |      | 79.0  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (%)         | 12.5% | 78.3% |      |      | 65.8% |      | 21.7% | 21.7% | 21.7% |      |      |      |
| Yellow Time (s)         | 3.5   | 4.0   |      |      | 3.5   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 4.5   | 5.0   |      |      | 4.5   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 89.5  | 89.0  |      |      | 75.0  |      | 21.0  | 21.0  | 21.0  |      |      |      |
| Actuated g/C Ratio      | 0.75  | 0.74  |      |      | 0.62  |      | 0.18  | 0.18  | 0.18  |      |      |      |
| v/c Ratio               | 0.83  | 0.24  |      |      | 1.06  |      | 0.25  | 0.34  | 0.38  |      |      |      |
| Control Delay           | 76.7  | 1.0   |      |      | 43.5  |      | 41.5  | 42.6  | 8.8   |      |      |      |
| Queue Delay             | 0.0   | 0.1   |      |      | 17.2  |      | 2.2   | 0.0   | 0.0   |      |      |      |
| Total Delay             | 76.7  | 1.1   |      |      | 60.7  |      | 43.7  | 42.6  | 8.8   |      |      |      |
| LOS                     | E     | A     |      |      | E     |      | D     | D     | A     |      |      |      |
| Approach Delay          |       | 17.7  |      |      | 60.7  |      |       | 27.6  |       |      |      |      |
| Approach LOS            |       | B     |      |      | E     |      |       | C     |       |      |      |      |
| Queue Length 50th (ft)  | 101   | 14    |      |      | -346  |      | 47    | 73    | 5     |      |      |      |
| Queue Length 95th (ft)  | #202  | 16    |      |      | m123  |      | m67   | m103  | m28   |      |      |      |
| Internal Link Dist (ft) |       | 321   |      |      | 675   |      |       | 350   |       |      | 106  |      |
| Turn Bay Length (ft)    | 120   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 217   | 2624  |      |      | 2200  |      | 276   | 306   | 376   |      |      |      |
| Starvation Cap Reductn  | 0     | 930   |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 228   |      | 124   | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.80  | 0.37  |      |      | 1.18  |      | 0.45  | 0.34  | 0.38  |      |      |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 130

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.06

Intersection Signal Delay: 47.8

Intersection LOS: D

Intersection Capacity Utilization 95.5%

ICU Level of Service F

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Trinity St & Martin Luther King Jr. Blvd



18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

|  | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|--|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations  |      | ↑    | ↑    |      | ↑    |      |      |      |      |      | ↑    | ↑    |
| Traffic Volume (vph)                                       | 0    | 14   | 48   | 52   | 10   | 0    | 0    | 0    | 0    | 128  | 1197 | 18   |
| Future Volume (vph)  | 0    | 14   | 48   | 52   | 10   | 0    | 0    | 0    | 0    | 128  | 1197 | 18   |
| Confl. Peds. (#/hr)  |      |      | 18   |      |      |      |      |      |      | 45   |      |      |
| Peak Hour Factor   | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Parking (#/hr)   |      | 0    |      |      |      |      |      |      |      |      |      |      |
| Adj. Flow (vph)  | 0    | 15   | 52   | 57   | 11   | 0    | 0    | 0    | 0    | 139  | 1301 | 20   |
| Shared Lane Traffic (%)                                    |      |      |      |      |      |      |      |      |      |      |      |      |
| Lane Group Flow (vph)                                      | 0    | 15   | 52   | 0    | 68   | 0    | 0    | 0    | 0    | 0    | 1460 | 0    |
| Turn Type  |      | NA   | Perm | Perm | NA   |      |      |      |      | Perm | NA   |      |
| Protected Phases   |      | 4 12 |      |      | 4 12 |      |      |      |      |      | 2 10 |      |
| Permitted Phases   |      |      | 4 12 | 4 12 |      |      |      |      |      | 2 10 |      |      |
| Detector Phase   |      | 4 12 | 4 12 | 4 12 | 4 12 |      |      |      |      | 2 10 | 2 10 |      |
| Switch Phase   |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Initial (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Split (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (%)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Yellow Time (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| All-Red Time (s)   |      |      |      |      |      |      |      |      |      |      |      |      |
| Lost Time Adjust (s)                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Lost Time (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead/Lag   |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead-Lag Optimize?   |      |      |      |      |      |      |      |      |      |      |      |      |
| Recall Mode  |      |      |      |      |      |      |      |      |      |      |      |      |
| Act Effct Green (s)  |      | 21.8 | 21.8 |      | 21.8 |      |      |      |      |      | 82.9 |      |
| Actuated g/C Ratio   |      | 0.18 | 0.18 |      | 0.18 |      |      |      |      |      | 0.69 |      |
| v/c Ratio  |      | 0.05 | 0.16 |      | 0.27 |      |      |      |      |      | 0.61 |      |
| Control Delay  |      | 20.7 | 4.1  |      | 26.9 |      |      |      |      |      | 8.2  |      |
| Queue Delay  |      | 0.0  | 0.0  |      | 0.0  |      |      |      |      |      | 0.0  |      |
| Total Delay  |      | 20.7 | 4.1  |      | 26.9 |      |      |      |      |      | 8.2  |      |
| LOS  |      | C    | A    |      | C    |      |      |      |      |      | A    |      |
| Approach Delay   |      | 7.8  |      |      | 26.9 |      |      |      |      |      | 8.2  |      |
| Approach LOS   |      | A    |      |      | C    |      |      |      |      |      | A    |      |
| Queue Length 50th (ft)                                     |      | 5    | 0    |      | 36   |      |      |      |      |      | 193  |      |
| Queue Length 95th (ft)                                     |      | 16   | 13   |      | 50   |      |      |      |      |      | 234  |      |
| Internal Link Dist (ft)                                    |      | 177  |      |      | 244  |      |      | 271  |      |      | 262  |      |
| Turn Bay Length (ft)                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| Base Capacity (vph)  |      | 754  | 714  |      | 628  |      |      |      |      |      | 2392 |      |
| Starvation Cap Reductn                                     |      | 0    | 0    |      | 0    |      |      |      |      |      | 0    |      |
| Spillback Cap Reductn                                      |      | 0    | 0    |      | 0    |      |      |      |      |      | 0    |      |
| Storage Cap Reductn  |      | 0    | 0    |      | 0    |      |      |      |      |      | 0    |      |
| Reduced v/c Ratio  |      | 0.02 | 0.07 |      | 0.11 |      |      |      |      |      | 0.61 |      |
| Intersection Summary                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| Cycle Length: 120  |      |      |      |      |      |      |      |      |      |      |      |      |
| Actuated Cycle Length: 120                                 |      |      |      |      |      |      |      |      |      |      |      |      |
| Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green |      |      |      |      |      |      |      |      |      |      |      |      |
| Natural Cycle: 95  |      |      |      |      |      |      |      |      |      |      |      |      |

18: Guadalupe St & E. 17th St

TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background

Timing Plan: AM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 23.0  | 23.0 | 22.5 | 22.5 |
| Total Split (s)         | 26.0  | 43.0 | 28.0 | 23.0 |
| Total Split (%)         | 22%   | 36%  | 23%  | 19%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effect Green (s)    |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

18: Guadalupe St & E. 17th St

TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background


















Timing Plan: AM

|   |                        |
|---|------------------------|
| Control Type: Actuated-Coordinated      |                        |
| Maximum v/c Ratio: 0.61                 |                        |
| Intersection Signal Delay: 9.0          | Intersection LOS: A    |
| Intersection Capacity Utilization 78.1% | ICU Level of Service D |
| Analysis Period (min) 15                |                        |



19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     |   |  |   |   |  |   |   |  |  |  |   |   |
| Traffic Volume (vph)    | 4   | 121   | 0   | 0   | 28  | 26  | 90  | 813   | 132   | 0   | 0   | 0   |
| Future Volume (vph)     | 4   | 121   | 0   | 0   | 28  | 26  | 90  | 813   | 132   | 0   | 0   | 0   |
| Confl. Peds. (#/hr)     | 31  |   |   |   |   |   |   |   | 34  |   |   |   |
| Peak Hour Factor        | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  |
| Parking (#/hr)          |   | 0   |   |   |   |   |   |   |   |   |   |   |
| Adj. Flow (vph)         | 5   | 146   | 0   | 0   | 34  | 31  | 108   | 980   | 159   | 0   | 0   | 0   |
| Shared Lane Traffic (%) |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)   | 0   | 151   | 0   | 0   | 65  | 0   | 0   | 1088  | 159   | 0   | 0   | 0   |
| Turn Type               | Perm  | NA  |   |   | NA  |   | Perm  | NA  | Perm  |   |   |   |
| Protected Phases        |   | 4 12  |   |   | 4 12  |   |   | 2 10  |   |   |   |   |
| Permitted Phases        | 4 12  |   |   |   |   |   | 2 10  |   | 2 10  |   |   |   |
| Detector Phase          | 4 12  | 4 12  |   |   | 4 12  |   | 2 10  | 2 10  | 2 10  |   |   |   |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Split (s)       |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (s)         |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (%)         |   |   |   |   |   |   |   |   |   |   |   |   |
| Yellow Time (s)         |   |   |   |   |   |   |   |   |   |   |   |   |
| All-Red Time (s)        |   |   |   |   |   |   |   |   |   |   |   |   |
| Lost Time Adjust (s)    |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Lost Time (s)     |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead/Lag                |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?      |   |   |   |   |   |   |   |   |   |   |   |   |
| Recall Mode             |   |   |   |   |   |   |   |   |   |   |   |   |
| Act Effct Green (s)     | 25.4  |   |   | 25.4  |   |   | 70.6  | 70.6  |   |   |   |   |
| Actuated g/C Ratio      | 0.21  |   |   | 0.21  |   |   | 0.59  | 0.59  |   |   |   |   |
| v/c Ratio               | 0.43  |   |   | 0.17  |   |   | 0.37  | 0.18  |   |   |   |   |
| Control Delay           | 27.1  |   |   | 12.8  |   |   | 10.8  | 6.1   |   |   |   |   |
| Queue Delay             | 0.0   |   |   | 0.0   |   |   | 0.0   | 0.0   |   |   |   |   |
| Total Delay             | 27.1  |   |   | 12.8  |   |   | 10.8  | 6.1   |   |   |   |   |
| LOS                     | C   |   |   | B   |   |   | B   | A   |   |   |   |   |
| Approach Delay          | 27.1  |   |   | 12.8  |   |   | 10.2  |   |   |   |   |   |
| Approach LOS            | C   |   |   | B   |   |   | B   |   |   |   |   |   |
| Queue Length 50th (ft)  | 62  |   |   | 14  |   |   | 167   | 46  |   |   |   |   |
| Queue Length 95th (ft)  | 87  |   |   | 29  |   |   | 98  | 33  |   |   |   |   |
| Internal Link Dist (ft) | 244   |   |   | 319   |   |   | 272   |   |   | 254   |   |   |
| Turn Bay Length (ft)    |   |   |   |   |   |   |   | 100   |   |   |   |   |
| Base Capacity (vph)     | 595   |   |   | 644   |   |   | 3126  | 901   |   |   |   |   |
| Starvation Cap Reductn  | 0   |   |   | 0   |   |   | 392   | 0   |   |   |   |   |
| Spillback Cap Reductn   | 0   |   |   | 0   |   |   | 0   | 0   |   |   |   |   |
| Storage Cap Reductn     | 0   |   |   | 0   |   |   | 0   | 0   |   |   |   |   |
| Reduced v/c Ratio       | 0.25  |   |   | 0.10  |   |   | 0.40  | 0.18  |   |   |   |   |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green  
Natural Cycle: 100

19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 26.0  | 28.0 | 22.5 | 22.5 |
| Total Split (s)         | 38.0  | 29.0 | 27.0 | 26.0 |
| Total Split (%)         | 32%   | 24%  | 23%  | 22%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effct Green (s)     |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |

Intersection Summary



| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Confl. Bikes (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 28.0  | 32.0 | 21.0 | 20.0 |
| Total Split (s)         | 42.0  | 32.0 | 21.0 | 25.0 |
| Total Split (%)         | 35%   | 27%  | 18%  | 21%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effct Green (s)     |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

Natural Cycle: 105  
Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 0.49  
Intersection Signal Delay: 6.7  
Intersection LOS: A  
Intersection Capacity Utilization 46.2%  
ICU Level of Service A  
Analysis Period (min) 15  
m Volume for 95th percentile queue is metered by upstream signal.



34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑↑   |      | ↓     | ↑↑↑   |      |      |      |      |       | ↑↑↑   | ↓     |
| Traffic Volume (vph)    | 0    | 1792  | 330  | 205   | 994   | 0    | 0    | 0    | 0    | 105   | 697   | 79    |
| Future Volume (vph)     | 0    | 1792  | 330  | 205   | 994   | 0    | 0    | 0    | 0    | 105   | 697   | 79    |
| Confl. Peds. (#/hr)     |      |       | 32   | 32    |       |      |      |      |      | 30    |       | 38    |
| Confl. Bikes (#/hr)     |      |       |      |       |       | 1    |      |      |      |       |       | 21    |
| Peak Hour Factor        | 0.98 | 0.98  | 0.98 | 0.98  | 0.98  | 0.98 | 0.98 | 0.98 | 0.98 | 0.98  | 0.98  | 0.98  |
| Adj. Flow (vph)         | 0    | 1829  | 337  | 209   | 1014  | 0    | 0    | 0    | 0    | 107   | 711   | 81    |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 2166  | 0    | 209   | 1014  | 0    | 0    | 0    | 0    | 0     | 818   | 81    |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1 3   | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1 3   | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      |       | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       |      | 25.0  |      |       | 25.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (s)         |      | 56.0  |      |       | 84.0  |      |      |      |      | 36.0  | 36.0  | 36.0  |
| Total Split (%)         |      | 46.7% |      |       | 70.0% |      |      |      |      | 30.0% | 30.0% | 30.0% |
| Yellow Time (s)         |      | 4.0   |      |       | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      |       | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      |       | 0.0   |      |      |      |      |       | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      |       | 5.0   |      |      |      |      |       | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      |       |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      |       |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      |       | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effect Green (s)    |      | 51.2  |      | 79.0  | 79.0  |      |      |      |      |       | 31.0  | 31.0  |
| Actuated g/C Ratio      |      | 0.43  |      | 0.66  | 0.66  |      |      |      |      |       | 0.26  | 0.26  |
| v/c Ratio               |      | 1.02  |      | 0.65  | 0.30  |      |      |      |      |       | 0.63  | 0.18  |
| Control Delay           |      | 59.2  |      | 39.7  | 3.5   |      |      |      |      |       | 36.2  | 5.0   |
| Queue Delay             |      | 6.1   |      | 15.4  | 0.1   |      |      |      |      |       | 0.4   | 0.0   |
| Total Delay             |      | 65.3  |      | 55.1  | 3.6   |      |      |      |      |       | 36.6  | 5.0   |
| LOS                     |      | E     |      | E     | A     |      |      |      |      |       | D     | A     |
| Approach Delay          |      | 65.3  |      |       | 12.4  |      |      |      |      |       | 33.8  |       |
| Approach LOS            |      | E     |      |       | B     |      |      |      |      |       | C     |       |
| Queue Length 50th (ft)  |      | -649  |      | 109   | 35    |      |      |      |      |       | 199   | 4     |
| Queue Length 95th (ft)  |      | #745  |      | 183   | 40    |      |      |      |      |       | 235   | m20   |
| Internal Link Dist (ft) |      | 262   |      |       | 240   |      |      | 197  |      |       | 285   |       |
| Turn Bay Length (ft)    |      |       |      | 50    |       |      |      |      |      |       |       | 100   |
| Base Capacity (vph)     |      | 2118  |      | 327   | 3347  |      |      |      |      |       | 1298  | 458   |
| Starvation Cap Reductn  |      | 0     |      | 100   | 927   | 0    |      |      |      |       | 0     | 0     |
| Spillback Cap Reductn   |      | 35    |      | 0     | 0     |      |      |      |      |       | 144   | 0     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      |       | 0     | 0     |
| Reduced v/c Ratio       |      | 1.04  |      | 0.92  | 0.42  |      |      |      |      |       | 0.71  | 0.18  |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 100

34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Lane Group              | Ø1   | Ø3   |
|-------------------------|------|------|
| Lane Configurations     |      |      |
| Traffic Volume (vph)    |      |      |
| Future Volume (vph)     |      |      |
| Confl. Peds. (#/hr)     |      |      |
| Confl. Bikes (#/hr)     |      |      |
| Peak Hour Factor        |      |      |
| Adj. Flow (vph)         |      |      |
| Shared Lane Traffic (%) |      |      |
| Lane Group Flow (vph)   |      |      |
| Turn Type               |      |      |
| Protected Phases        | 1    | 3    |
| Permitted Phases        |      |      |
| Detector Phase          |      |      |
| Switch Phase            |      |      |
| Minimum Initial (s)     | 8.0  | 5.0  |
| Minimum Split (s)       | 13.0 | 10.0 |
| Total Split (s)         | 14.0 | 14.0 |
| Total Split (%)         | 12%  | 12%  |
| Yellow Time (s)         | 4.0  | 4.0  |
| All-Red Time (s)        | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |
| Total Lost Time (s)     |      |      |
| Lead/Lag                | Lead |      |
| Lead-Lag Optimize?      | Yes  |      |
| Recall Mode             | Min  | None |
| Act Effect Green (s)    |      |      |
| Actuated g/C Ratio      |      |      |
| v/c Ratio               |      |      |
| Control Delay           |      |      |
| Queue Delay             |      |      |
| Total Delay             |      |      |
| LOS                     |      |      |
| Approach Delay          |      |      |
| Approach LOS            |      |      |
| Queue Length 50th (ft)  |      |      |
| Queue Length 95th (ft)  |      |      |
| Internal Link Dist (ft) |      |      |
| Turn Bay Length (ft)    |      |      |
| Base Capacity (vph)     |      |      |
| Starvation Cap Reductn  |      |      |
| Spillback Cap Reductn   |      |      |
| Storage Cap Reductn     |      |      |
| Reduced v/c Ratio       |      |      |

Intersection Summary

34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.02

Intersection Signal Delay: 43.6

Intersection LOS: D

Intersection Capacity Utilization 88.8%

ICU Level of Service E

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

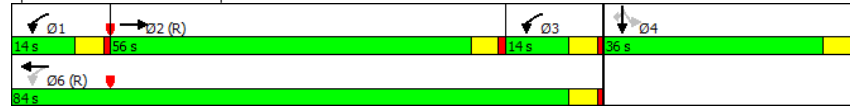
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 34: Guadalupe St & W. 15th St



35: Lavaca St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↰     | ↱↱↱   |      |      | ↱↱↱   |      |       | ↱↱↱   | ↱     |      |      |      |
| Traffic Volume (vph)    | 308   | 1513  | 0    | 0    | 1076  | 132  | 133   | 694   | 179   | 0    | 0    | 0    |
| Future Volume (vph)     | 308   | 1513  | 0    | 0    | 1076  | 132  | 133   | 694   | 179   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 38    |       |      |      |       | 38   | 17    |       | 48    |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       |      |       |       | 11    |      |      |      |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94 | 0.94 | 0.94  | 0.94 | 0.94  | 0.94  | 0.94  | 0.94 | 0.94 | 0.94 |
| Adj. Flow (vph)         | 328   | 1610  | 0    | 0    | 1145  | 140  | 141   | 738   | 190   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 328   | 1610  | 0    | 0    | 1285  | 0    | 0     | 879   | 190   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 28.0  |      |      | 28.0  |      | 33.0  | 33.0  | 33.0  |      |      |      |
| Total Split (s)         | 19.0  | 79.0  |      |      | 60.0  |      | 41.0  | 41.0  | 41.0  |      |      |      |
| Total Split (%)         | 15.8% | 65.8% |      |      | 50.0% |      | 34.2% | 34.2% | 34.2% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 2.0   | 2.0   | 2.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      |       | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      |       | 6.0   | 6.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effct Green (s)     | 74.0  | 74.0  |      |      | 55.0  |      |       | 35.0  | 35.0  |      |      |      |
| Actuated g/C Ratio      | 0.62  | 0.62  |      |      | 0.46  |      |       | 0.29  | 0.29  |      |      |      |
| v/c Ratio               | 1.02  | 0.51  |      |      | 0.56  |      |       | 0.60  | 0.41  |      |      |      |
| Control Delay           | 76.4  | 2.7   |      |      | 11.3  |      |       | 38.5  | 25.2  |      |      |      |
| Queue Delay             | 13.3  | 0.5   |      |      | 0.1   |      |       | 0.0   | 0.0   |      |      |      |
| Total Delay             | 89.8  | 3.1   |      |      | 11.4  |      |       | 38.5  | 25.2  |      |      |      |
| LOS                     | F     | A     |      |      | B     |      |       | D     | C     |      |      |      |
| Approach Delay          |       | 17.8  |      |      | 11.4  |      |       | 36.2  |       |      |      |      |
| Approach LOS            |       | B     |      |      | B     |      |       | D     |       |      |      |      |
| Queue Length 50th (ft)  | -198  | 47    |      |      | 78    |      |       | 213   | 76    |      |      |      |
| Queue Length 95th (ft)  | m#196 | m46   |      |      | 86    |      |       | 260   | 146   |      |      |      |
| Internal Link Dist (ft) |       | 240   |      |      | 335   |      |       | 116   |       |      | 281  |      |
| Turn Bay Length (ft)    | 50    |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 323   | 3135  |      |      | 2288  |      |       | 1465  | 469   |      |      |      |
| Starvation Cap Reductn  | 13    | 912   |      |      | 181   |      |       | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      |       | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      |       | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 1.06  | 0.72  |      |      | 0.61  |      |       | 0.60  | 0.41  |      |      |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 75

35: Lavaca St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.02

Intersection Signal Delay: 20.5

Intersection LOS: C

Intersection Capacity Utilization 88.8%

ICU Level of Service E

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 35: Lavaca St & W. 15th St



36: Colorado St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR    |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|--------|
| Lane Group              | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR    |
| Lane Configurations     | ↔↔↔   | ↔↔↔   | ↔    | ↔↔↔   | ↔↔↔   | ↔    | ↔     | ↔     | ↔    | ↔     | ↔     | ↔      |
| Traffic Volume (vph)    | 270   | 1407  | 53   | 73    | 1131  | 262  | 1     | 22    | 22   | 26    | 19    | 31     |
| Future Volume (vph)     | 270   | 1407  | 53   | 73    | 1131  | 262  | 1     | 22    | 22   | 26    | 19    | 31     |
| Confl. Peds. (#/hr)     | 6     |       | 83   | 83    |       | 6    | 4     |       | 35   | 35    |       | 4      |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94 | 0.94  | 0.94  | 0.94 | 0.94  | 0.94  | 0.94 | 0.94  | 0.94  | 0.94   |
| Adj. Flow (vph)         | 287   | 1497  | 56   | 78    | 1203  | 279  | 1     | 23    | 23   | 28    | 20    | 33     |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |      |       |       |        |
| Lane Group Flow (vph)   | 287   | 1553  | 0    | 78    | 1482  | 0    | 0     | 47    | 0    | 0     | 48    | 33     |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | Perm  | NA    |      | Perm  | NA    | custom |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |       | 4     |      |       | 8     |        |
| Permitted Phases        | 2     |       |      | 6     |       |      | 4     |       |      | 8     |       | 6      |
| Detector Phase          | 5     | 2     |      | 1     | 6     |      | 4     | 4     |      | 8     | 8     | 6      |
| Switch Phase            |       |       |      |       |       |      |       |       |      |       |       |        |
| Minimum Initial (s)     | 5.0   | 15.0  |      | 5.0   | 15.0  |      | 5.0   | 5.0   |      | 5.0   | 5.0   | 15.0   |
| Minimum Split (s)       | 10.0  | 22.0  |      | 10.0  | 30.0  |      | 32.0  | 32.0  |      | 32.0  | 32.0  | 30.0   |
| Total Split (s)         | 15.0  | 72.0  |      | 15.0  | 72.0  |      | 33.0  | 33.0  |      | 33.0  | 33.0  | 72.0   |
| Total Split (%)         | 12.5% | 60.0% |      | 12.5% | 60.0% |      | 27.5% | 27.5% |      | 27.5% | 27.5% | 60.0%  |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0    |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0    |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0    |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      | 5.0   | 5.0   |      | 5.0   | 5.0   | 5.0    |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   |      |       |       |      |       |       | Lag    |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |       |       |      |       |       | Yes    |
| Recall Mode             | None  | C-Max |      | None  | C-Max |      | Max   | Max   |      | Max   | Max   | C-Max  |
| Act Effct Green (s)     | 79.9  | 71.9  |      | 74.2  | 67.0  |      |       | 28.0  |      |       | 28.0  | 67.0   |
| Actuated g/C Ratio      | 0.67  | 0.60  |      | 0.62  | 0.56  |      |       | 0.23  |      |       | 0.23  | 0.56   |
| v/c Ratio               | 1.06  | 0.52  |      | 0.33  | 0.53  |      |       | 0.11  |      |       | 0.13  | 0.04   |
| Control Delay           | 105.5 | 4.7   |      | 11.0  | 9.1   |      |       | 22.8  |      |       | 37.7  | 0.7    |
| Queue Delay             | 0.0   | 0.1   |      | 0.0   | 0.1   |      |       | 0.0   |      |       | 0.0   | 0.0    |
| Total Delay             | 105.5 | 4.8   |      | 11.0  | 9.2   |      |       | 22.8  |      |       | 37.7  | 0.7    |
| LOS                     | F     | A     |      | B     | A     |      |       | C     |      |       | D     | A      |
| Approach Delay          |       | 20.5  |      |       | 9.3   |      |       | 22.8  |      |       | 22.6  |        |
| Approach LOS            |       | C     |      |       | A     |      |       | C     |      |       | C     |        |
| Queue Length 50th (ft)  | -172  | 85    |      | 11    | 190   |      |       | 15    |      |       | 30    | 0      |
| Queue Length 95th (ft)  | #321  | 98    |      | 24    | 241   |      |       | 47    |      |       | 63    | 4      |
| Internal Link Dist (ft) |       | 335   |      |       | 362   |      |       | 155   |      |       | 114   |        |
| Turn Bay Length (ft)    | 90    |       |      | 90    |       |      |       |       |      |       |       | 100    |
| Base Capacity (vph)     | 270   | 3002  |      | 274   | 2773  |      |       | 410   |      |       | 358   | 896    |
| Starvation Cap Reductn  | 0     | 356   |      | 0     | 193   |      |       | 0     |      |       | 0     | 0      |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 0     |      |       | 0     |      |       | 0     | 0      |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      |       | 0     |      |       | 0     | 0      |
| Reduced v/c Ratio       | 1.06  | 0.59  |      | 0.28  | 0.57  |      |       | 0.11  |      |       | 0.13  | 0.04   |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

36: Colorado St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

Maximum v/c Ratio: 1.06

Intersection Signal Delay: 15.6

Intersection LOS: B

Intersection Capacity Utilization 83.6%

ICU Level of Service E

Analysis Period (min) 15

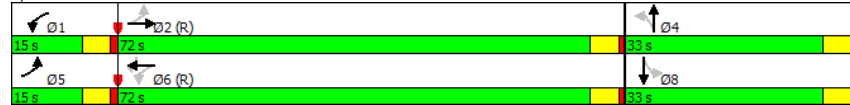
- Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 36: Colorado St & W. 15th St



37: N. Congress Ave & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

|                         | →     | ↖    | ↗     | ←     | ↖    | ↗     |
|-------------------------|-------|------|-------|-------|------|-------|
| Lane Group              | EBT   | EBR  | WBL   | WBT   | NBL  | NBR   |
| Lane Configurations     | ↑↑↑   | ↖    | ↖     | ↑↑↑   | ↖    | ↖     |
| Traffic Volume (vph)    | 1427  | 28   | 18    | 1555  | 0    | 1     |
| Future Volume (vph)     | 1427  | 28   | 18    | 1555  | 0    | 1     |
| Confl. Peds. (#/hr)     |       | 30   | 30    |       | 13   | 21    |
| Confl. Bikes (#/hr)     |       |      |       |       |      | 13    |
| Peak Hour Factor        | 0.98  | 0.98 | 0.98  | 0.98  | 0.98 | 0.98  |
| Adj. Flow (vph)         | 1456  | 29   | 18    | 1587  | 0    | 1     |
| Shared Lane Traffic (%) |       |      |       |       |      |       |
| Lane Group Flow (vph)   | 1485  | 0    | 18    | 1587  | 0    | 1     |
| Turn Type               | NA    |      | pm+pt | NA    |      | Perm  |
| Protected Phases        | 2     |      | 1     | 6     |      |       |
| Permitted Phases        |       |      | 6     |       |      | 4     |
| Detector Phase          | 2     |      | 1     | 6     |      | 4     |
| Switch Phase            |       |      |       |       |      |       |
| Minimum Initial (s)     | 5.0   |      | 5.0   | 5.0   |      | 5.0   |
| Minimum Split (s)       | 25.0  |      | 10.0  | 25.0  |      | 33.0  |
| Total Split (s)         | 72.0  |      | 15.0  | 87.0  |      | 33.0  |
| Total Split (%)         | 60.0% |      | 12.5% | 72.5% |      | 27.5% |
| Yellow Time (s)         | 4.0   |      | 4.0   | 4.0   |      | 4.0   |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0   |      | 1.0   |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0   |      | 0.0   |
| Total Lost Time (s)     | 5.0   |      | 5.0   | 5.0   |      | 5.0   |
| Lead/Lag                | Lag   |      | Lead  |       |      |       |
| Lead-Lag Optimize?      | Yes   |      | Yes   |       |      |       |
| Recall Mode             | C-Max |      | None  | C-Max |      | Max   |
| Act Effect Green (s)    | 77.5  |      | 82.0  | 82.0  |      | 28.0  |
| Actuated g/C Ratio      | 0.65  |      | 0.68  | 0.68  |      | 0.23  |
| v/c Ratio               | 0.45  |      | 0.08  | 0.46  |      | 0.00  |
| Control Delay           | 4.1   |      | 5.3   | 7.0   |      | 0.0   |
| Queue Delay             | 0.0   |      | 0.0   | 0.1   |      | 0.0   |
| Total Delay             | 4.1   |      | 5.3   | 7.1   |      | 0.0   |
| LOS                     | A     |      | A     | A     |      | A     |
| Approach Delay          | 4.1   |      |       | 7.1   |      |       |
| Approach LOS            | A     |      |       | A     |      |       |
| Queue Length 50th (ft)  | 46    |      | 3     | 178   |      | 0     |
| Queue Length 95th (ft)  | 54    |      | m5    | 71    |      | 0     |
| Internal Link Dist (ft) | 362   |      |       | 356   | 125  |       |
| Turn Bay Length (ft)    |       |      | 100   |       |      |       |
| Base Capacity (vph)     | 3270  |      | 286   | 3474  |      | 484   |
| Starvation Cap Reductn  | 172   |      | 0     | 507   |      | 0     |
| Spillback Cap Reductn   | 0     |      | 0     | 0     |      | 0     |
| Storage Cap Reductn     | 0     |      | 0     | 0     |      | 0     |
| Reduced v/c Ratio       | 0.48  |      | 0.06  | 0.53  |      | 0.00  |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 70

37: N. Congress Ave & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.46

Intersection Signal Delay: 5.6

Intersection LOS: A

Intersection Capacity Utilization 59.9%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 37: N. Congress Ave & W. 15th St



38: Brazos St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR   | SBL   | SBT   | SBR  |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|-------|-------|-------|------|
| Lane Configurations     | ↰     | ↱     | ↱    | ↰     | ↱     | ↱    | ↰     | ↱     | ↱     | ↰     | ↱     | ↱    |
| Traffic Volume (vph)    | 80    | 1153  | 49   | 27    | 1577  | 115  | 4     | 2     | 8     | 2     | 0     | 4    |
| Future Volume (vph)     | 80    | 1153  | 49   | 27    | 1577  | 115  | 4     | 2     | 8     | 2     | 0     | 4    |
| Confl. Peds. (#/hr)     | 1     |       | 10   | 10    |       | 1    | 10    |       | 4     | 4     |       | 10   |
| Confl. Bikes (#/hr)     |       |       |      |       |       | 1    |       |       |       |       |       | 17   |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97 |
| Adj. Flow (vph)         | 82    | 1189  | 51   | 28    | 1626  | 119  | 4     | 2     | 8     | 2     | 0     | 4    |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |       |       |       |      |
| Lane Group Flow (vph)   | 82    | 1240  | 0    | 28    | 1745  | 0    | 0     | 6     | 8     | 0     | 6     | 0    |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | Perm  | NA    | Perm  | Perm  | NA    |      |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |       | 4     |       |       | 8     |      |
| Permitted Phases        | 2     |       |      | 6     |       |      | 4     |       | 4     | 8     |       |      |
| Detector Phase          | 5     | 2     |      | 1     | 6     |      | 4     | 4     | 4     | 8     | 8     |      |
| Switch Phase            |       |       |      |       |       |      |       |       |       |       |       |      |
| Minimum Initial (s)     | 5.0   | 15.0  |      | 5.0   | 15.0  |      | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  |      |
| Minimum Split (s)       | 10.0  | 22.0  |      | 10.0  | 22.0  |      | 32.0  | 32.0  | 32.0  | 32.0  | 32.0  |      |
| Total Split (s)         | 15.0  | 78.0  |      | 10.0  | 73.0  |      | 32.0  | 32.0  | 32.0  | 32.0  | 32.0  |      |
| Total Split (%)         | 12.5% | 65.0% |      | 8.3%  | 60.8% |      | 26.7% | 26.7% | 26.7% | 26.7% | 26.7% |      |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |      |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      |       | 0.0   | 0.0   |       | 0.0   |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      |       | 5.0   | 5.0   |       | 5.0   |      |
| Lead/Lag                | Lead  | Lead  |      | Lag   | Lag   |      |       |       |       |       |       |      |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |       |       |       |       |       |      |
| Recall Mode             | None  | C-Max |      | None  | C-Max |      | None  | None  | None  | None  | None  |      |
| Act Effct Green (s)     | 103.0 | 105.0 |      | 99.4  | 100.4 |      |       | 10.0  | 10.0  |       | 10.0  |      |
| Actuated g/C Ratio      | 0.86  | 0.88  |      | 0.83  | 0.84  |      |       | 0.08  | 0.08  |       | 0.08  |      |
| v/c Ratio               | 0.32  | 0.28  |      | 0.07  | 0.41  |      |       | 0.05  | 0.03  |       | 0.03  |      |
| Control Delay           | 10.5  | 4.0   |      | 2.0   | 1.8   |      |       | 51.7  | 0.2   |       | 0.2   |      |
| Queue Delay             | 0.0   | 0.0   |      | 0.0   | 0.0   |      |       | 0.0   | 0.0   |       | 0.0   |      |
| Total Delay             | 10.5  | 4.1   |      | 2.0   | 1.8   |      |       | 51.7  | 0.2   |       | 0.2   |      |
| LOS                     | B     | A     |      | A     | A     |      |       | D     | A     |       | A     |      |
| Approach Delay          |       | 4.5   |      |       | 1.8   |      |       | 22.3  |       |       | 0.2   |      |
| Approach LOS            |       | A     |      |       | A     |      |       | C     |       |       | A     |      |
| Queue Length 50th (ft)  | 11    | 103   |      | 1     | 17    |      |       | 4     | 0     |       | 0     |      |
| Queue Length 95th (ft)  | 52    | 119   |      | m3    | 141   |      |       | 18    | 0     |       | 0     |      |
| Internal Link Dist (ft) |       | 356   |      |       | 297   |      |       | 199   |       |       | 273   |      |
| Turn Bay Length (ft)    | 100   |       |      | 40    |       |      |       |       | 50    |       |       |      |
| Base Capacity (vph)     | 299   | 4413  |      | 383   | 4206  |      |       | 346   | 434   |       | 412   |      |
| Starvation Cap Reductn  | 0     | 1012  |      | 0     | 504   |      |       | 0     | 0     |       | 0     |      |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 0     |      |       | 0     | 0     |       | 0     |      |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      |       | 0     | 0     |       | 0     |      |
| Reduced v/c Ratio       | 0.27  | 0.36  |      | 0.07  | 0.47  |      |       | 0.02  | 0.02  |       | 0.01  |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 70

38: Brazos St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.41

Intersection Signal Delay: 3.0

Intersection LOS: A

Intersection Capacity Utilization 62.3%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 38: Brazos St & W. 15th St



39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

|                         | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑↑   |      | ↓     | ↑↑↑   |      |      |      |      |       | ↑↑↑   | ↓     |
| Traffic Volume (vph)    | 0    | 878   | 357  | 164   | 1696  | 0    | 0    | 0    | 0    | 93    | 182   | 45    |
| Future Volume (vph)     | 0    | 878   | 357  | 164   | 1696  | 0    | 0    | 0    | 0    | 93    | 182   | 45    |
| Confl. Peds. (#/hr)     |      |       | 23   | 23    |       |      |      |      |      | 10    |       | 8     |
| Peak Hour Factor        | 0.99 | 0.99  | 0.99 | 0.99  | 0.99  | 0.99 | 0.99 | 0.99 | 0.99 | 0.99  | 0.99  | 0.99  |
| Adj. Flow (vph)         | 0    | 887   | 361  | 166   | 1713  | 0    | 0    | 0    | 0    | 94    | 184   | 45    |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 1248  | 0    | 166   | 1713  | 0    | 0    | 0    | 0    | 0     | 278   | 45    |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      | 3.0   | 10.0  |      |      |      |      | 7.0   | 7.0   | 7.0   |
| Minimum Split (s)       |      | 28.0  |      | 8.0   | 28.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (s)         |      | 68.0  |      | 20.0  | 88.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (%)         |      | 56.7% |      | 16.7% | 73.3% |      |      |      |      | 26.7% | 26.7% | 26.7% |
| Yellow Time (s)         |      | 4.0   |      | 4.0   | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      | 1.0   | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      | 0.0   | 0.0   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      | 5.0   | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      | Lead  |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      | Yes   |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      | None  | C-Max |      |      |      |      | None  | None  | None  |
| Act Effct Green (s)     |      | 84.9  |      | 97.8  | 97.8  |      |      |      |      | 12.2  | 12.2  | 12.2  |
| Actuated g/C Ratio      |      | 0.71  |      | 0.82  | 0.82  |      |      |      |      | 0.10  | 0.10  | 0.10  |
| v/c Ratio               |      | 0.36  |      | 0.45  | 0.41  |      |      |      |      | 0.55  | 0.21  | 0.21  |
| Control Delay           |      | 2.4   |      | 8.1   | 3.9   |      |      |      |      | 55.1  | 7.9   | 7.9   |
| Queue Delay             |      | 0.1   |      | 0.0   | 0.3   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             |      | 2.6   |      | 8.1   | 4.2   |      |      |      |      | 55.1  | 7.9   | 7.9   |
| LOS                     |      | A     |      | A     | A     |      |      |      |      | E     | A     | A     |
| Approach Delay          |      | 2.6   |      | 4.5   |       |      |      |      |      | 48.6  |       |       |
| Approach LOS            |      | A     |      | A     |       |      |      |      |      | D     |       |       |
| Queue Length 50th (ft)  |      | 0     |      | 24    | 102   |      |      |      |      | 76    | 0     | 0     |
| Queue Length 95th (ft)  |      | 0     |      | m29   | 113   |      |      |      |      | 104   | 22    | 22    |
| Internal Link Dist (ft) |      | 297   |      | 282   |       |      |      | 125  |      | 272   |       |       |
| Turn Bay Length (ft)    |      |       |      | 70    |       |      |      |      |      |       |       | 50    |
| Base Capacity (vph)     |      | 3433  |      | 456   | 4143  |      |      |      |      | 1119  | 397   | 397   |
| Starvation Cap Reductn  |      | 927   |      | 0     | 1601  |      |      |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       |      | 0.50  |      | 0.36  | 0.67  |      |      |      |      | 0.25  | 0.11  | 0.11  |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

Maximum v/c Ratio: 0.55

Intersection Signal Delay: 7.9

Intersection LOS: A

Intersection Capacity Utilization 92.6%

ICU Level of Service F

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 39: San Jacinto Blvd & W. 15th St



40: Trinity St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↙ ↘ ↘ | ↙ ↘ ↘ |      |      | ↙ ↘ ↘ |      |       | ↙ ↘ ↘ | ↙ ↘ ↘ |      |      |      |
| Traffic Volume (vph)    | 222   | 800   | 0    | 0    | 1808  | 649  | 61    | 169   | 12    | 0    | 0    | 0    |
| Future Volume (vph)     | 222   | 800   | 0    | 0    | 1808  | 649  | 61    | 169   | 12    | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 1     |       |      |      |       | 1    | 3     |       | 6     |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       |      |       |       | 2     |      |      |      |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97 | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph)         | 229   | 825   | 0    | 0    | 1864  | 669  | 63    | 174   | 12    | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 229   | 825   | 0    | 0    | 2533  | 0    | 0     | 237   | 12    | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 1.0   | 10.0  |      |      | 1.0   |      | 10.0  | 10.0  | 10.0  |      |      |      |
| Minimum Split (s)       | 5.5   | 28.0  |      |      | 5.5   |      | 28.0  | 28.0  | 28.0  |      |      |      |
| Total Split (s)         | 20.0  | 92.0  |      |      | 72.0  |      | 28.0  | 28.0  | 28.0  |      |      |      |
| Total Split (%)         | 16.7% | 76.7% |      |      | 60.0% |      | 23.3% | 23.3% | 23.3% |      |      |      |
| Yellow Time (s)         | 3.5   | 4.0   |      |      | 3.5   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      |       | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 4.5   | 5.0   |      |      | 4.5   |      |       | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effct Green (s)     | 87.5  | 87.0  |      |      | 69.0  |      |       | 23.0  | 23.0  |      |      |      |
| Actuated g/C Ratio      | 0.73  | 0.72  |      |      | 0.58  |      |       | 0.19  | 0.19  |      |      |      |
| v/c Ratio               | 0.85  | 0.22  |      |      | 0.89  |      |       | 0.35  | 0.03  |      |      |      |
| Control Delay           | 64.3  | 3.6   |      |      | 10.7  |      |       | 43.8  | 0.2   |      |      |      |
| Queue Delay             | 0.0   | 0.1   |      |      | 0.3   |      |       | 0.0   | 0.0   |      |      |      |
| Total Delay             | 64.3  | 3.7   |      |      | 10.9  |      |       | 43.8  | 0.2   |      |      |      |
| LOS                     | E     | A     |      |      | B     |      |       | D     | A     |      |      |      |
| Approach Delay          |       | 16.9  |      |      | 10.9  |      |       | 41.7  |       |      |      |      |
| Approach LOS            |       | B     |      |      | B     |      |       | D     |       |      |      |      |
| Queue Length 50th (ft)  | 123   | 36    |      |      | 160   |      |       | 84    | 0     |      |      |      |
| Queue Length 95th (ft)  | #231  | 43    |      |      | m165  |      |       | 124   | 0     |      |      |      |
| Internal Link Dist (ft) |       | 282   |      |      | 657   |      |       | 149   |       |      | 621  |      |
| Turn Bay Length (ft)    | 100   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 289   | 3686  |      |      | 2849  |      |       | 668   | 344   |      |      |      |
| Starvation Cap Reductn  | 0     | 1600  |      |      | 47    |      |       | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      |       | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      |       | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.79  | 0.40  |      |      | 0.90  |      |       | 0.35  | 0.03  |      |      |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 90

40: Trinity St & W. 15th St

2024 Background

TIA for Texas Capitol Complex Master Plan 2018 Update

Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 14.6

Intersection LOS: B

Intersection Capacity Utilization 92.6%

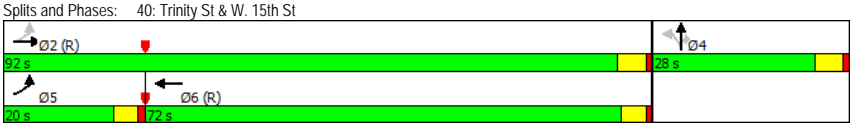
ICU Level of Service F

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



11: Colorado St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 11.9 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ⬆    |      |      |      | ⬆    |      |      |      | ⬆    |      |
| Traffic Vol, veh/h  | 0    | 4    | 202  | 36   | 0    | 22   | 32   | 5    | 0    | 15   | 31   | 62   |
| Future Vol, veh/h   | 0    | 4    | 202  | 36   | 0    | 22   | 32   | 5    | 0    | 15   | 31   | 62   |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 5    | 230  | 41   | 0    | 25   | 36   | 6    | 0    | 17   | 35   | 70   |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB  | NB  |
|----------------------------|------|-----|-----|
| Opposing Approach          | WB   | EB  | SB  |
| Opposing Lanes             | 1    | 1   | 1   |
| Conflicting Approach Left  | SB   | NB  | EB  |
| Conflicting Lanes Left     | 1    | 1   | 1   |
| Conflicting Approach Right | NB   | SB  | WB  |
| Conflicting Lanes Right    | 1    | 1   | 1   |
| HCM Control Delay          | 11.8 | 9.4 | 9.2 |
| HCM LOS                    | B    | A   | A   |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 14%   | 2%    | 37%   | 1%    |
| Vol Thru, %            | 29%   | 83%   | 54%   | 94%   |
| Vol Right, %           | 57%   | 15%   | 8%    | 5%    |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 108   | 242   | 59    | 326   |
| LT Vol                 | 15    | 4     | 22    | 4     |
| Through Vol            | 31    | 202   | 32    | 306   |
| RT Vol                 | 62    | 36    | 5     | 16    |
| Lane Flow Rate         | 123   | 275   | 67    | 370   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.174 | 0.401 | 0.106 | 0.521 |
| Departure Headway (Hd) | 5.11  | 5.243 | 5.703 | 5.062 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 701   | 688   | 627   | 715   |
| Service Time           | 3.148 | 3.277 | 3.749 | 3.062 |
| HCM Lane V/C Ratio     | 0.175 | 0.4   | 0.107 | 0.517 |
| HCM Control Delay      | 9.2   | 11.8  | 9.4   | 13.4  |
| HCM Lane LOS           | A     | B     | A     | B     |
| HCM 95th-tile Q        | 0.6   | 1.9   | 0.4   | 3     |

11: Colorado St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ⬆    |      |
| Traffic Vol, veh/h  | 0    | 4    | 306  | 16   |
| Future Vol, veh/h   | 0    | 4    | 306  | 16   |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 5    | 348  | 18   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 13.4 |
| HCM LOS                    | B    |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection              |     |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 8.8 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | A   |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↱    |      |      |      | ↱    |      |      |      | ↱    |      |
| Traffic Vol, veh/h  | 0    | 0    | 271  | 0    | 0    | 0    | 55   | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h   | 0    | 0    | 271  | 0    | 0    | 0    | 55   | 0    | 0    | 0    | 0    | 0    |
| Peak Hour Factor    | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 311  | 0    | 0    | 0    | 63   | 0    | 0    | 0    | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB  | WB  | NB |
|----------------------------|-----|-----|----|
| Opposing Approach          | WB  | EB  | SB |
| Opposing Lanes             | 1   | 1   | 1  |
| Conflicting Approach Left  | SB  | NB  | EB |
| Conflicting Lanes Left     | 1   | 1   | 1  |
| Conflicting Approach Right | NB  | SB  | WB |
| Conflicting Lanes Right    | 1   | 1   | 1  |
| HCM Control Delay          | 9.1 | 7.6 | 0  |
| HCM LOS                    | A   | A   | -  |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 0%    | 0%    | 0%    | 0%    |
| Vol Thru, %            | 100%  | 100%  | 100%  | 0%    |
| Vol Right, %           | 0%    | 0%    | 0%    | 100%  |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 0     | 271   | 55    | 9     |
| LT Vol                 | 0     | 0     | 0     | 0     |
| Through Vol            | 0     | 271   | 55    | 0     |
| RT Vol                 | 0     | 0     | 0     | 9     |
| Lane Flow Rate         | 0     | 311   | 63    | 10    |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0     | 0.346 | 0.073 | 0.012 |
| Departure Headway (Hd) | 4.749 | 3.999 | 4.183 | 4.131 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 0     | 900   | 848   | 872   |
| Service Time           | 2.75  | 2.019 | 2.248 | 2.131 |
| HCM Lane V/C Ratio     | 0     | 0.346 | 0.074 | 0.011 |
| HCM Control Delay      | 7.8   | 9.1   | 7.6   | 7.2   |
| HCM Lane LOS           | N     | A     | A     | A     |
| HCM 95th-tile Q        | 0     | 1.6   | 0.2   | 0     |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      |      | ↱    |
| Traffic Vol, veh/h  | 0    | 0    | 0    | 9    |
| Future Vol, veh/h   | 0    | 0    | 0    | 9    |
| Peak Hour Factor    | 0.87 | 0.87 | 0.87 | 0.87 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 0    | 10   |
| Number of Lanes     | 0    | 0    | 0    | 1    |

| Approach                   | SB  |
|----------------------------|-----|
| Opposing Approach          | NB  |
| Opposing Lanes             | 1   |
| Conflicting Approach Left  | WB  |
| Conflicting Lanes Left     | 1   |
| Conflicting Approach Right | EB  |
| Conflicting Lanes Right    | 1   |
| HCM Control Delay          | 7.2 |
| HCM LOS                    | A   |

14: Brazos St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 13.2 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | +    |      |      |      | +    |      |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 120  | 98   | 8    | 0    | 17   | 116  | 106  | 0    | 21   | 0    | 0    |
| Future Vol, veh/h   | 0    | 120  | 98   | 8    | 0    | 17   | 116  | 106  | 0    | 21   | 0    | 0    |
| Peak Hour Factor    | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 152  | 124  | 10   | 0    | 22   | 147  | 134  | 0    | 27   | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB | WB   | NB  |
|----------------------------|----|------|-----|
| Opposing Approach          | WB | EB   | SB  |
| Opposing Lanes             | 1  | 1    | 1   |
| Conflicting Approach Left  | SB | NB   | EB  |
| Conflicting Lanes Left     | 1  | 1    | 1   |
| Conflicting Approach Right | NB | SB   | WB  |
| Conflicting Lanes Right    | 1  | 1    | 1   |
| HCM Control Delay          | 13 | 12.3 | 9.8 |
| HCM LOS                    | B  | B    | A   |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 100%  | 53%   | 7%    | 5%    |
| Vol Thru, %            | 0%    | 43%   | 49%   | 86%   |
| Vol Right, %           | 0%    | 4%    | 44%   | 9%    |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 21    | 226   | 239   | 271   |
| LT Vol                 | 21    | 120   | 17    | 14    |
| Through Vol            | 0     | 98    | 116   | 233   |
| RT Vol                 | 0     | 8     | 106   | 24    |
| Lane Flow Rate         | 27    | 286   | 303   | 343   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.047 | 0.442 | 0.439 | 0.525 |
| Departure Headway (Hd) | 6.398 | 5.565 | 5.227 | 5.508 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 557   | 647   | 687   | 655   |
| Service Time           | 4.469 | 3.61  | 3.272 | 3.55  |
| HCM Lane V/C Ratio     | 0.048 | 0.442 | 0.441 | 0.524 |
| HCM Control Delay      | 9.8   | 13    | 12.3  | 14.5  |
| HCM Lane LOS           | A     | B     | B     | B     |
| HCM 95th-tile Q        | 0.1   | 2.3   | 2.2   | 3.1   |

14: Brazos St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 14   | 233  | 24   |
| Future Vol, veh/h   | 0    | 14   | 233  | 24   |
| Peak Hour Factor    | 0.79 | 0.79 | 0.79 | 0.79 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 18   | 295  | 30   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 14.5 |
| HCM LOS                    | B    |

16: San Jacinto Blvd & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 17.3 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | C    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↰    |      |      |      | ↱    |      |      |      |      |      |
| Traffic Vol, veh/h  | 0    | 0    | 23   | 77   | 0    | 74   | 173  | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h   | 0    | 0    | 23   | 77   | 0    | 74   | 173  | 0    | 0    | 0    | 0    | 0    |
| Peak Hour Factor    | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 24   | 82   | 0    | 79   | 184  | 0    | 0    | 0    | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    |

| Approach                   |  | EB   | WB   |
|----------------------------|--|------|------|
| Opposing Approach          |  | WB   | EB   |
| Opposing Lanes             |  | 1    | 1    |
| Conflicting Approach Left  |  | SB   |      |
| Conflicting Lanes Left     |  | 3    | 0    |
| Conflicting Approach Right |  |      | SB   |
| Conflicting Lanes Right    |  | 0    | 3    |
| HCM Control Delay          |  | 10.9 | 16.6 |
| HCM LOS                    |  | B    | C    |

| Lane                   | EBLn1 | WBLn1 | SBLn1 | SBLn2 | SBLn3 |
|------------------------|-------|-------|-------|-------|-------|
| Vol Left, %            | 0%    | 30%   | 0%    | 0%    | 0%    |
| Vol Thru, %            | 23%   | 70%   | 100%  | 100%  | 0%    |
| Vol Right, %           | 77%   | 0%    | 0%    | 0%    | 100%  |
| Sign Control           | Stop  | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 100   | 247   | 389   | 389   | 69    |
| LT Vol                 | 0     | 74    | 0     | 0     | 0     |
| Through Vol            | 23    | 173   | 389   | 389   | 0     |
| RT Vol                 | 77    | 0     | 0     | 0     | 69    |
| Lane Flow Rate         | 106   | 263   | 413   | 413   | 73    |
| Geometry Grp           | 7     | 7     | 7     | 7     | 7     |
| Degree of Util (X)     | 0.193 | 0.505 | 0.667 | 0.667 | 0.068 |
| Departure Headway (Hd) | 6.539 | 6.924 | 5.807 | 5.807 | 3.348 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 548   | 520   | 624   | 624   | 1067  |
| Service Time           | 4.285 | 4.664 | 3.538 | 3.538 | 1.077 |
| HCM Lane V/C Ratio     | 0.193 | 0.506 | 0.662 | 0.662 | 0.068 |
| HCM Control Delay      | 10.9  | 16.6  | 19.4  | 19.4  | 6.3   |
| HCM Lane LOS           | B     | C     | C     | C     | A     |
| HCM 95th-tile Q        | 0.7   | 2.8   | 5     | 5     | 0.2   |

16: San Jacinto Blvd & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection              |  |  |  |
|---------------------------|--|--|--|
| Intersection Delay, s/veh |  |  |  |
| Intersection LOS          |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↰↱   | ↱    |
| Traffic Vol, veh/h  | 0    | 0    | 777  | 69   |
| Future Vol, veh/h   | 0    | 0    | 777  | 69   |
| Peak Hour Factor    | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 827  | 73   |
| Number of Lanes     | 0    | 0    | 2    | 1    |

| Approach                   |  | SB   |
|----------------------------|--|------|
| Opposing Approach          |  |      |
| Opposing Lanes             |  | 0    |
| Conflicting Approach Left  |  | WB   |
| Conflicting Lanes Left     |  | 1    |
| Conflicting Approach Right |  | EB   |
| Conflicting Lanes Right    |  | 1    |
| HCM Control Delay          |  | 18.3 |
| HCM LOS                    |  | C    |

20: Colorado St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 11.8 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |      |      | ↕    |      |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 31   | 185  | 36   | 0    | 0    | 25   | 0    | 0    | 15   | 69   | 0    |
| Future Vol, veh/h   | 0    | 31   | 185  | 36   | 0    | 0    | 25   | 0    | 0    | 15   | 69   | 0    |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 35   | 210  | 41   | 0    | 0    | 28   | 0    | 0    | 17   | 78   | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB  | NB  |
|----------------------------|------|-----|-----|
| Opposing Approach          | WB   | EB  | SB  |
| Opposing Lanes             | 1    | 1   | 1   |
| Conflicting Approach Left  | SB   | NB  | EB  |
| Conflicting Lanes Left     | 1    | 1   | 1   |
| Conflicting Approach Right | NB   | SB  | WB  |
| Conflicting Lanes Right    | 1    | 1   | 1   |
| HCM Control Delay          | 11.6 | 8.9 | 9.2 |
| HCM LOS                    | B    | A   | A   |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 18%   | 12%   | 0%    | 0%    |
| Vol Thru, %            | 82%   | 73%   | 100%  | 92%   |
| Vol Right, %           | 0%    | 14%   | 0%    | 8%    |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 84    | 252   | 25    | 333   |
| LT Vol                 | 15    | 31    | 0     | 0     |
| Through Vol            | 69    | 185   | 25    | 305   |
| RT Vol                 | 0     | 36    | 0     | 28    |
| Lane Flow Rate         | 95    | 286   | 28    | 378   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.142 | 0.402 | 0.044 | 0.506 |
| Departure Headway (Hd) | 5.361 | 5.057 | 5.625 | 4.816 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 673   | 704   | 640   | 742   |
| Service Time           | 3.361 | 3.145 | 3.631 | 2.894 |
| HCM Lane V/C Ratio     | 0.141 | 0.406 | 0.044 | 0.509 |
| HCM Control Delay      | 9.2   | 11.6  | 8.9   | 12.8  |
| HCM Lane LOS           | A     | B     | A     | B     |
| HCM 95th-tile Q        | 0.5   | 1.9   | 0.1   | 2.9   |

20: Colorado St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 0    | 305  | 28   |
| Future Vol, veh/h   | 0    | 0    | 305  | 28   |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 347  | 32   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 12.8 |
| HCM LOS                    | B    |

| Intersection              |     |  |  |  |  |  |  |  |  |
|---------------------------|-----|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 8.4 |  |  |  |  |  |  |  |  |
| Intersection LOS          | A   |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | WBU  | WBT  | WBR  | SBU  | SBL  | SBR  |
|---------------------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↰    |      | ↱    |      |      | ↰↱   |      |
| Traffic Vol, veh/h  | 0    | 0    | 28   | 0    | 206  | 16   | 0    | 39   | 0    |
| Future Vol, veh/h   | 0    | 0    | 28   | 0    | 206  | 16   | 0    | 39   | 0    |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 32   | 0    | 234  | 18   | 0    | 44   | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 1    | 0    | 0    | 1    | 0    |

| Approach                   | EB  |  |  | WB  |  | SB |  |  |
|----------------------------|-----|--|--|-----|--|----|--|--|
| Opposing Approach          | WB  |  |  | EB  |  |    |  |  |
| Opposing Lanes             | 1   |  |  | 1   |  | 0  |  |  |
| Conflicting Approach Left  | SB  |  |  |     |  | WB |  |  |
| Conflicting Lanes Left     | 1   |  |  | 0   |  | 1  |  |  |
| Conflicting Approach Right |     |  |  | SB  |  | EB |  |  |
| Conflicting Lanes Right    | 0   |  |  | 1   |  | 1  |  |  |
| HCM Control Delay          | 7.5 |  |  | 8.6 |  | 8  |  |  |
| HCM LOS                    | A   |  |  | A   |  | A  |  |  |

| Lane                   | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, %            | 0%    | 0%    | 100%  |
| Vol Thru, %            | 100%  | 93%   | 0%    |
| Vol Right, %           | 0%    | 7%    | 0%    |
| Sign Control           | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 28    | 222   | 39    |
| LT Vol                 | 0     | 0     | 39    |
| Through Vol            | 28    | 206   | 0     |
| RT Vol                 | 0     | 16    | 0     |
| Lane Flow Rate         | 32    | 252   | 44    |
| Geometry Grp           | 1     | 1     | 1     |
| Degree of Util (X)     | 0.037 | 0.28  | 0.058 |
| Departure Headway (Hd) | 4.201 | 3.991 | 4.747 |
| Convergence, Y/N       | Yes   | Yes   | Yes   |
| Cap                    | 840   | 896   | 759   |
| Service Time           | 2.288 | 2.037 | 2.747 |
| HCM Lane V/C Ratio     | 0.038 | 0.281 | 0.058 |
| HCM Control Delay      | 7.5   | 8.6   | 8     |
| HCM Lane LOS           | A     | A     | A     |
| HCM 95th-tile Q        | 0.1   | 1.2   | 0.2   |

4: Colorado St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.4  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑↑   |      | ↑    | ↑↑   | ↑    |      |
| Traffic Vol, veh/h       | 1121 | 125  | 210  | 792  | 2    | 30   |
| Future Vol, veh/h        | 1121 | 125  | 210  | 792  | 2    | 30   |
| Conflicting Peds, #/hr   | 0    | 1    | 1    | 0    | 0    | 5    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | 40   | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 87   | 87   | 87   | 87   | 87   | 87   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 1289 | 144  | 241  | 910  | 2    | 34   |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |      |
|----------------------|--------|---|--------|---|--------|------|
| Conflicting Flow All | 0      | 0 | 1433   | 0 | 2299   | 722  |
| Stage 1              | -      | - | -      | - | 1361   | -    |
| Stage 2              | -      | - | -      | - | 938    | -    |
| Critical Hdwy        | -      | - | 4.14   | - | 6.84   | 6.94 |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.84   | -    |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.84   | -    |
| Follow-up Hdwy       | -      | - | 2.22   | - | 3.52   | 3.32 |
| Pot Cap-1 Maneuver   | -      | - | 470    | - | 33     | 369  |
| Stage 1              | -      | - | -      | - | 203    | -    |
| Stage 2              | -      | - | -      | - | 341    | -    |
| Platoon blocked, %   | -      | - | -      | - | -      | -    |
| Mov Cap-1 Maneuver   | -      | - | 468    | - | 16     | 367  |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 16     | -    |
| Stage 1              | -      | - | -      | - | 203    | -    |
| Stage 2              | -      | - | -      | - | 165    | -    |

| Approach             | EB | WB  | NB   |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0  | 4.3 | 35.3 |
| HCM LOS              |    |     | E    |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 155   | -   | -   | 468   | -   |
| HCM Lane V/C Ratio    | 0.237 | -   | -   | 0.516 | -   |
| HCM Control Delay (s) | 35.3  | -   | -   | 20.6  | -   |
| HCM Lane LOS          | E     | -   | -   | C     | -   |
| HCM 95th %tile Q(veh) | 0.9   | -   | -   | 2.9   | -   |

9: Guadalupe St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.7  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    | ↑    |      | ↑    |      |      |      |      |      | ↑↑   |      |
| Traffic Vol, veh/h       | 0    | 13   | 48   | 61   | 10   | 0    | 0    | 0    | 0    | 75   | 1234 | 18   |
| Future Vol, veh/h        | 0    | 13   | 48   | 61   | 10   | 0    | 0    | 0    | 0    | 75   | 1234 | 18   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 13   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 38   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 0    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 14   | 51   | 64   | 11   | 0    | 0    | 0    | 0    | 79   | 1299 | 19   |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |   |
|----------------------|--------|------|--------|------|--------|---|
| Conflicting Flow All | -      | 1504 | 710    | 827  | 1514   | - |
| Stage 1              | -      | 1504 | -      | 0    | 0      | - |
| Stage 2              | -      | 0    | -      | 827  | 1514   | - |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | - |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | - |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | - |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | - |
| Pot Cap-1 Maneuver   | 0      | 120  | 376    | 264  | 119    | 0 |
| Stage 1              | 0      | 183  | -      | -    | -      | 0 |
| Stage 2              | 0      | -    | -      | 332  | 181    | 0 |
| Platoon blocked, %   | -      | -    | -      | -    | -      | - |
| Mov Cap-1 Maneuver   | -      | 116  | 362    | 207  | 115    | - |
| Mov Cap-2 Maneuver   | -      | 116  | -      | 207  | 115    | - |
| Stage 1              | -      | 176  | -      | -    | -      | - |
| Stage 2              | -      | -    | -      | 263  | 174    | - |

| Approach             | EB   | WB   | SB |
|----------------------|------|------|----|
| HCM Control Delay, s | 21.6 | 36.8 |    |
| HCM LOS              | C    | E    |    |

| Minor Lane/Major Mvmt | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-------|-------|-----|-----|-----|
| Capacity (veh/h)      | 116   | 362   | 186   | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.118 | 0.14  | 0.402 | -   | -   | -   |
| HCM Control Delay (s) | 40.1  | 16.6  | 36.8  | -   | -   | -   |
| HCM Lane LOS          | E     | C     | E     | -   | -   | -   |
| HCM 95th %tile Q(veh) | 0.4   | 0.5   | 1.8   | -   | -   | -   |

10: Lavaca St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |       |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|-------|------|------|------|------|------|
| Int Delay, s/veh         | 4.2  |      |      |      |      |      |       |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL   | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      | ↕ ↕ ↕ |      |      |      |      |      |
| Traffic Vol, veh/h       | 4    | 70   | 0    | 0    | 34   | 19   | 90    | 570  | 173  | 0    | 0    | 0    |
| Future Vol, veh/h        | 4    | 70   | 0    | 0    | 34   | 19   | 90    | 570  | 173  | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 29   | 17    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free  | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -     | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 0     | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | -    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 94   | 94   | 94   | 94   | 94   | 94   | 94    | 94   | 94   | 94   | 94   | 94   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2     | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 4    | 74   | 0    | 0    | 36   | 20   | 96    | 606  | 184  | 0    | 0    | 0    |

| Major/Minor          | Minor2 |      | Minor1 |   | Major1 |      |
|----------------------|--------|------|--------|---|--------|------|
| Conflicting Flow All | 498    | 999  | -      | - | 907    | 424  |
| Stage 1              | 17     | 17   | -      | - | 890    | -    |
| Stage 2              | 481    | 982  | -      | - | 17     | -    |
| Critical Hdwy        | 6.44   | 6.54 | -      | - | 6.54   | 7.14 |
| Critical Hdwy Stg 1  | -      | -    | -      | - | 5.54   | -    |
| Critical Hdwy Stg 2  | 6.74   | 5.54 | -      | - | -      | -    |
| Follow-up Hdwy       | 3.82   | 4.02 | -      | - | 4.02   | 3.92 |
| Pot Cap-1 Maneuver   | 498    | 242  | 0      | 0 | 274    | 495  |
| Stage 1              | -      | -    | 0      | 0 | 359    | -    |
| Stage 2              | 489    | 325  | 0      | 0 | -      | -    |
| Platoon blocked, %   | -      | -    | -      | - | -      | -    |
| Mov Cap-1 Maneuver   | 391    | 218  | -      | - | 247    | 495  |
| Mov Cap-2 Maneuver   | 391    | 218  | -      | - | 247    | -    |
| Stage 1              | -      | -    | -      | - | 329    | -    |
| Stage 2              | 382    | 297  | -      | - | -      | -    |

| Approach             | EB   | WB   | NB  |
|----------------------|------|------|-----|
| HCM Control Delay, s | 29.7 | 19.7 | 0.9 |
| HCM LOS              | D    | C    |     |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1 | WBLn1 |
|-----------------------|-------|-----|-----|-------|-------|
| Capacity (veh/h)      | 1133  | -   | -   | 223   | 301   |
| HCM Lane V/C Ratio    | 0.085 | -   | -   | 0.353 | 0.187 |
| HCM Control Delay (s) | 8.5   | -   | -   | 29.7  | 19.7  |
| HCM Lane LOS          | A     | -   | -   | D     | C     |
| HCM 95th %tile Q(veh) | 0.3   | -   | -   | 1.5   | 0.7   |

13: W. 18th St & Parking Dr. 2  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.8  |      |      |      |      |      |
| Movement                 | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
| Lane Configurations      |      | ↕    |      | ↕    | ↕    |      |
| Traffic Vol, veh/h       | 123  | 147  | 58   | 103  | 14   | 17   |
| Future Vol, veh/h        | 123  | 147  | 58   | 103  | 14   | 17   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | -    | 0    | 0    | -    | 0    | -    |
| Grade, %                 | -    | 0    | 0    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 134  | 160  | 63   | 112  | 15   | 18   |

| Major/Minor          | Major1 | Major2 | Minor2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 175    | 0      | 546    |
| Stage 1              | -      | -      | 119    |
| Stage 2              | -      | -      | 427    |
| Critical Hdwy        | 4.12   | -      | 6.42   |
| Critical Hdwy Stg 1  | -      | -      | 5.42   |
| Critical Hdwy Stg 2  | -      | -      | 5.42   |
| Follow-up Hdwy       | 2.218  | -      | 3.518  |
| Pot Cap-1 Maneuver   | 1401   | -      | 499    |
| Stage 1              | -      | -      | 906    |
| Stage 2              | -      | -      | 658    |
| Platoon blocked, %   | -      | -      | -      |
| Mov Cap-1 Maneuver   | 1401   | -      | 447    |
| Mov Cap-2 Maneuver   | -      | -      | 447    |
| Stage 1              | -      | -      | 906    |
| Stage 2              | -      | -      | 589    |

| Approach             | EB  | WB | SB   |
|----------------------|-----|----|------|
| HCM Control Delay, s | 3.6 | 0  | 11.1 |
| HCM LOS              |     |    | B    |

| Minor Lane/Major Mvmt | EBL   | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h)      | 1401  | -   | -   | -   | 626   |
| HCM Lane V/C Ratio    | 0.095 | -   | -   | -   | 0.054 |
| HCM Control Delay (s) | 7.8   | 0   | -   | -   | 11.1  |
| HCM Lane LOS          | A     | A   | -   | -   | B     |
| HCM 95th %tile Q(veh) | 0.3   | -   | -   | -   | 0.2   |

15: Brazos St & Parking Dr. 1  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 3    |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | ↑    |      |      | ↑    | ↑    |      |
| Traffic Vol, veh/h       | 35   | 21   | 154  | 71   | 267  | 257  |
| Future Vol, veh/h        | 35   | 21   | 154  | 71   | 267  | 257  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 38   | 23   | 167  | 77   | 290  | 279  |

| Major/Minor          | Minor2 | Major1 |       | Major2 |     |
|----------------------|--------|--------|-------|--------|-----|
| Conflicting Flow All | 842    | 430    | 570   | 0      | - 0 |
| Stage 1              | 430    | -      | -     | -      | -   |
| Stage 2              | 412    | -      | -     | -      | -   |
| Critical Hdwy        | 6.42   | 6.22   | 4.12  | -      | -   |
| Critical Hdwy Stg 1  | 5.42   | -      | -     | -      | -   |
| Critical Hdwy Stg 2  | 5.42   | -      | -     | -      | -   |
| Follow-up Hdwy       | 3.518  | 3.318  | 2.218 | -      | -   |
| Pot Cap-1 Maneuver   | 334    | 625    | 1002  | -      | -   |
| Stage 1              | 656    | -      | -     | -      | -   |
| Stage 2              | 669    | -      | -     | -      | -   |
| Platoon blocked, %   |        |        |       | -      | -   |
| Mov Cap-1 Maneuver   | 276    | 625    | 1002  | -      | -   |
| Mov Cap-2 Maneuver   | 276    | -      | -     | -      | -   |
| Stage 1              | 656    | -      | -     | -      | -   |
| Stage 2              | 553    | -      | -     | -      | -   |

| Approach             | EB   | NB  | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 17.5 | 6.4 | 0  |
| HCM LOS              | C    |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1002  | -   | 349   | -   | -   |
| HCM Lane V/C Ratio    | 0.167 | -   | 0.174 | -   | -   |
| HCM Control Delay (s) | 9.3   | 0   | 17.5  | -   | -   |
| HCM Lane LOS          | A     | A   | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.6   | -   | 0.6   | -   | -   |

17: Trinity St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 6.3  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    |      |      | ↑    |      | ↑    | ↑↑↑  |      |      |      |      |
| Traffic Vol, veh/h       | 44   | 0    | 0    | 0    | 0    | 0    | 348  | 227  | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 44   | 0    | 0    | 0    | 0    | 0    | 348  | 227  | 0    | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 5    | 0    | 0    | 0    | 6    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 115  | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | -    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 88   | 88   | 88   | 88   | 88   | 88   | 88   | 88   | 88   | 88   | 88   | 88   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 50   | 0    | 0    | 0    | 0    | 0    | 395  | 258  | 0    | 0    | 0    | 0    |

| Major/Minor          | Minor2 | Major2 |   | Major1 |           |
|----------------------|--------|--------|---|--------|-----------|
| Conflicting Flow All | 901    | 1056   | - | - 0    | 7 0 -     |
| Stage 1              | 7      | 7      | - | - -    | - - -     |
| Stage 2              | 894    | 1049   | - | - -    | - - -     |
| Critical Hdwy        | 6.78   | 6.53   | - | - -    | 4.13 - -  |
| Critical Hdwy Stg 1  | 6.13   | 5.53   | - | - -    | - - -     |
| Critical Hdwy Stg 2  | 6.73   | 5.53   | - | - -    | - - -     |
| Follow-up Hdwy       | 3.669  | 4.019  | - | - -    | 2.219 - - |
| Pot Cap-1 Maneuver   | 275    | 225    | 0 | 0 -    | 1613 - 0  |
| Stage 1              | 973    | 890    | 0 | 0 -    | - - 0     |
| Stage 2              | 281    | 303    | 0 | 0 -    | - - 0     |
| Platoon blocked, %   |        |        | - | - -    | - - -     |
| Mov Cap-1 Maneuver   | 222    | 169    | - | - -    | 1613 - -  |
| Mov Cap-2 Maneuver   | 222    | 169    | - | - -    | - - -     |
| Stage 1              | 731    | 885    | - | - -    | - - -     |
| Stage 2              | 212    | 229    | - | - -    | - - -     |

| Approach             | EB   | WB | NB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 25.9 | 0  | 4.8 |
| HCM LOS              | D    |    |     |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | WBT | WBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1613  | -   | 222   | -   | -   |
| HCM Lane V/C Ratio    | 0.245 | -   | 0.225 | -   | -   |
| HCM Control Delay (s) | 8     | -   | 25.9  | -   | -   |
| HCM Lane LOS          | A     | -   | D     | -   | -   |
| HCM 95th %tile Q(veh) | 1     | -   | 0.8   | -   | -   |

25: San Jacinto Blvd & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 8.5  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    | ↑    |      | ↑    |      |      |      |      | ↑↑   | ↑    | ↑    |
| Traffic Vol, veh/h       | 0    | 21   | 60   | 73   | 121  | 0    | 0    | 0    | 0    | 48   | 680  | 103  |
| Future Vol, veh/h        | 0    | 21   | 60   | 73   | 121  | 0    | 0    | 0    | 0    | 48   | 680  | 103  |
| Conflicting Peds, #/hr   | 0    | 0    | 23   | 0    | 0    | 0    | 0    | 0    | 0    | 4    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 40   | -    | -    | -    | -    | -    | -    | -    | -    | 50   |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 23   | 65   | 79   | 132  | 0    | 0    | 0    | 0    | 52   | 739  | 112  |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |   |
|----------------------|--------|------|--------|------|--------|---|
| Conflicting Flow All | -      | 847  | 393    | 512  | 847    | - |
| Stage 1              | -      | 843  | -      | 4    | 4      | - |
| Stage 2              | -      | 4    | -      | 508  | 843    | - |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | - |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | - |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | - |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | - |
| Pot Cap-1 Maneuver   | 0      | 297  | 606    | 445  | 297    | 0 |
| Stage 1              | 0      | 378  | -      | -    | -      | 0 |
| Stage 2              | 0      | -    | -      | 516  | 378    | 0 |
| Platoon blocked, %   | -      | -    | -      | -    | -      | - |
| Mov Cap-1 Maneuver   | -      | 277  | 606    | 353  | 277    | - |
| Mov Cap-2 Maneuver   | -      | 277  | -      | 353  | 277    | - |
| Stage 1              | -      | 354  | -      | -    | -      | - |
| Stage 2              | -      | -    | -      | 404  | 354    | - |

| Approach             | EB   | WB   | SB  |
|----------------------|------|------|-----|
| HCM Control Delay, s | 13.6 | 40.7 | 0.5 |
| HCM LOS              | B    | E    |     |

| Minor Lane/Major Mvmt | EBLn1 | EBLn2 | WBLn1 | SBL   | SBT | SBR |
|-----------------------|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h)      | 277   | 606   | 301   | 1616  | -   | -   |
| HCM Lane V/C Ratio    | 0.082 | 0.108 | 0.701 | 0.032 | -   | -   |
| HCM Control Delay (s) | 19.2  | 11.7  | 40.7  | 7.3   | 0.1 | -   |
| HCM Lane LOS          | C     | B     | E     | A     | A   | -   |
| HCM 95th %tile Q(veh) | 0.3   | 0.4   | 4.9   | 0.1   | -   | -   |

26: Trinity St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.6  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | ↓    |      | ↑↑↑  | ↑↑↑  |      |      |
| Traffic Vol, veh/h       | 36   | 0    | 103  | 542  | 0    | 0    |
| Future Vol, veh/h        | 36   | 0    | 103  | 542  | 0    | 0    |
| Conflicting Peds, #/hr   | 3    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | -    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 87   | 87   | 87   | 87   | 87   | 87   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 41   | 0    | 118  | 623  | 0    | 0    |

| Major/Minor          | Minor2 | Major1 |      |
|----------------------|--------|--------|------|
| Conflicting Flow All | 489    | -      | 0    |
| Stage 1              | 0      | -      | -    |
| Stage 2              | 489    | -      | -    |
| Critical Hdwy        | 5.74   | -      | 5.34 |
| Critical Hdwy Stg 1  | -      | -      | -    |
| Critical Hdwy Stg 2  | 6.04   | -      | -    |
| Follow-up Hdwy       | 3.82   | -      | 3.12 |
| Pot Cap-1 Maneuver   | 554    | 0      | -    |
| Stage 1              | -      | 0      | -    |
| Stage 2              | 532    | 0      | -    |
| Platoon blocked, %   | -      | -      | -    |
| Mov Cap-1 Maneuver   | 554    | -      | -    |
| Mov Cap-2 Maneuver   | 554    | -      | -    |
| Stage 1              | -      | -      | -    |
| Stage 2              | 532    | -      | -    |

| Approach             | EB | NB |
|----------------------|----|----|
| HCM Control Delay, s | 12 |    |
| HCM LOS              | B  |    |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 |
|-----------------------|-----|-----|-------|
| Capacity (veh/h)      | -   | -   | 554   |
| HCM Lane V/C Ratio    | -   | -   | 0.075 |
| HCM Control Delay (s) | -   | -   | 12    |
| HCM Lane LOS          | -   | -   | B     |
| HCM 95th %tile Q(veh) | -   | -   | 0.2   |

27: Guadalupe St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.8  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↱    |      |      | ↱    |      |      |      |      | ↱↲   | ↱    | ↲    |
| Traffic Vol, veh/h       | 0    | 13   | 48   | 47   | 9    | 0    | 0    | 0    | 0    | 144  | 1129 | 18   |
| Future Vol, veh/h        | 0    | 13   | 48   | 47   | 9    | 0    | 0    | 0    | 0    | 144  | 1129 | 18   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 21   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 25   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 14   | 52   | 51   | 10   | 0    | 0    | 0    | 0    | 157  | 1227 | 20   |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |   |          |
|----------------------|--------|------|--------|------|--------|---|----------|
| Conflicting Flow All | -      | 1565 | 660    | 955  | 1565   | - | 0 0 0    |
| Stage 1              | -      | 1565 | -      | 0    | 0      | - | - - -    |
| Stage 2              | -      | 0    | -      | 955  | 1565   | - | - - -    |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | - | 4.14 - - |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | - | - - -    |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | - | - - -    |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | - | 2.22 - - |
| Pot Cap-1 Maneuver   | 0      | 110  | 406    | 213  | 110    | 0 | - - -    |
| Stage 1              | 0      | 170  | -      | -    | -      | 0 | - - -    |
| Stage 2              | 0      | -    | -      | 278  | 170    | 0 | - - -    |
| Platoon blocked, %   | -      | -    | -      | -    | -      | - | - - -    |
| Mov Cap-1 Maneuver   | -      | 107  | 396    | 166  | 107    | - | - - -    |
| Mov Cap-2 Maneuver   | -      | 107  | -      | 166  | 107    | - | - - -    |
| Stage 1              | -      | 166  | -      | -    | -      | - | - - -    |
| Stage 2              | -      | -    | -      | 221  | 166    | - | - - -    |

| Approach             | EB   |  | WB   |  | SB |  |  |
|----------------------|------|--|------|--|----|--|--|
| HCM Control Delay, s | 24.4 |  | 43.7 |  |    |  |  |
| HCM LOS              | C    |  | E    |  |    |  |  |

| Minor Lane/Major Mvmt | EBLn1WBLn1 | SBL | SBT | SBR |
|-----------------------|------------|-----|-----|-----|
| Capacity (veh/h)      | 251 152    | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.264 0.4  | -   | -   | -   |
| HCM Control Delay (s) | 24.4 43.7  | -   | -   | -   |
| HCM Lane LOS          | C E        | -   | -   | -   |
| HCM 95th %tile Q(veh) | 1 1.7      | -   | -   | -   |

29: Colorado St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 13.8 |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↱    |      |      | ↱    |      |      |      |      | ↱↲   | ↱    | ↲    |
| Traffic Vol, veh/h       | 8    | 26   | 82   | 112  | 56   | 5    | 45   | 313  | 9    | 2    | 120  | 34   |
| Future Vol, veh/h        | 8    | 26   | 82   | 112  | 56   | 5    | 45   | 313  | 9    | 2    | 120  | 34   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 15   | 3    | 0    | 0    | 0    | 0    | 3    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 10   | 33   | 104  | 142  | 71   | 6    | 57   | 396  | 11   | 3    | 152  | 43   |

| Major/Minor          | Minor2 |       | Minor1 |       | Major1 |       |       | Major2 |   |           |
|----------------------|--------|-------|--------|-------|--------|-------|-------|--------|---|-----------|
| Conflicting Flow All | 750    | 703   | 176    | 763   | 719    | 417   | 198   | 0      | 0 | 408 0 0   |
| Stage 1              | 181    | 181   | -      | 516   | 516    | -     | -     | -      | - | - - -     |
| Stage 2              | 569    | 522   | -      | 247   | 203    | -     | -     | -      | - | - - -     |
| Critical Hdwy        | 7.12   | 6.52  | 6.22   | 7.12  | 6.52   | 6.22  | 4.12  | -      | - | 4.12 - -  |
| Critical Hdwy Stg 1  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -     | -      | - | - - -     |
| Critical Hdwy Stg 2  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -     | -      | - | - - -     |
| Follow-up Hdwy       | 3.518  | 4.018 | 3.318  | 3.518 | 4.018  | 3.318 | 2.218 | -      | - | 2.218 - - |
| Pot Cap-1 Maneuver   | 328    | 362   | 867    | 321   | 354    | 636   | 1375  | -      | - | 1151 - -  |
| Stage 1              | 821    | 750   | -      | 542   | 534    | -     | -     | -      | - | - - -     |
| Stage 2              | 507    | 531   | -      | 757   | 733    | -     | -     | -      | - | - - -     |
| Platoon blocked, %   | -      | -     | -      | -     | -      | -     | -     | -      | - | - - -     |
| Mov Cap-1 Maneuver   | 256    | 340   | 865    | 250   | 333    | 627   | 1375  | -      | - | 1135 - -  |
| Mov Cap-2 Maneuver   | 256    | 340   | -      | 250   | 333    | -     | -     | -      | - | - - -     |
| Stage 1              | 774    | 746   | -      | 513   | 505    | -     | -     | -      | - | - - -     |
| Stage 2              | 402    | 502   | -      | 635   | 729    | -     | -     | -      | - | - - -     |

| Approach             | EB   |  | WB   |  | NB  |  |  | SB  |  |  |
|----------------------|------|--|------|--|-----|--|--|-----|--|--|
| HCM Control Delay, s | 13.4 |  | 53.6 |  | 0.9 |  |  | 0.1 |  |  |
| HCM LOS              | B    |  | F    |  |     |  |  |     |  |  |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1WBLn1        | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------------------|-----|-----|-----|
| Capacity (veh/h)      | 1375  | -   | -   | 573 277 1135      | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.041 | -   | -   | 0.256 0.791 0.002 | -   | -   | -   |
| HCM Control Delay (s) | 7.7   | 0   | -   | 13.4 53.6 8.2     | 0   | -   | -   |
| HCM Lane LOS          | A     | A   | -   | B F A A           | -   | -   | -   |
| HCM 95th %tile Q(veh) | 0.1   | -   | -   | 1 6.1 0           | -   | -   | -   |

30: N. Congress Ave  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 9.9  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    |      |      | ↑    |      |      | ↑    |      |      | ↑    |      |
| Traffic Vol, veh/h       | 0    | 37   | 0    | 0    | 169  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 0    | 37   | 0    | 0    | 169  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 11   | 0    | 11   | 12   | 0    | 0    | 0    | 0    | 12   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 40   | 0    | 0    | 184  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |

| Major/Minor          | Minor2 |       |   | Minor1 |       |   | Major1 |   |   | Major2 |   |   |
|----------------------|--------|-------|---|--------|-------|---|--------|---|---|--------|---|---|
| Conflicting Flow All | -      | 1     | - | -      | 1     | - | -      | 0 | - | -      | - | 0 |
| Stage 1              | -      | 1     | - | -      | 0     | - | -      | - | - | -      | - | - |
| Stage 2              | -      | 0     | - | -      | 1     | - | -      | - | - | -      | - | - |
| Critical Hdwy        | -      | 6.52  | - | -      | 6.52  | - | -      | - | - | -      | - | - |
| Critical Hdwy Stg 1  | -      | 5.52  | - | -      | 5.52  | - | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | -      | 5.52  | - | -      | 5.52  | - | -      | - | - | -      | - | - |
| Follow-up Hdwy       | -      | 4.018 | - | -      | 4.018 | - | -      | - | - | -      | - | - |
| Pot Cap-1 Maneuver   | 0      | 895   | 0 | 0      | 895   | 0 | 0      | - | 0 | 0      | - | 0 |
| Stage 1              | 0      | 895   | 0 | 0      | -     | 0 | 0      | - | 0 | 0      | - | 0 |
| Stage 2              | 0      | -     | 0 | 0      | 895   | 0 | 0      | - | 0 | -      | 0 | 0 |
| Platoon blocked, %   | -      | -     | - | -      | -     | - | -      | - | - | -      | - | - |
| Mov Cap-1 Maneuver   | -      | 895   | - | -      | 895   | - | -      | - | - | -      | - | - |
| Mov Cap-2 Maneuver   | -      | 895   | - | -      | 895   | - | -      | - | - | -      | - | - |
| Stage 1              | -      | 895   | - | -      | -     | - | -      | - | - | -      | - | - |
| Stage 2              | -      | -     | - | -      | 895   | - | -      | - | - | -      | - | - |

| Approach             | EB  |  |  | WB   |  |  | NB |  |  | SB |  |  |
|----------------------|-----|--|--|------|--|--|----|--|--|----|--|--|
| HCM Control Delay, s | 9.2 |  |  | 10.1 |  |  | 0  |  |  | 0  |  |  |
| HCM LOS              | A   |  |  | B    |  |  |    |  |  |    |  |  |

| Minor Lane/Major Mvmt | NBT | EBLn1 | WBLn1 | SBT |
|-----------------------|-----|-------|-------|-----|
| Capacity (veh/h)      | -   | 895   | 895   | -   |
| HCM Lane V/C Ratio    | -   | 0.045 | 0.205 | -   |
| HCM Control Delay (s) | -   | 9.2   | 10.1  | -   |
| HCM Lane LOS          | -   | A     | B     | -   |
| HCM 95th %tile Q(veh) | -   | 0.1   | 0.8   | -   |

31: Brazos St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.2  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑    |      |      | ↑    | ↑    |      |
| Traffic Vol, veh/h       | 36   | 0    | 3    | 133  | 44   | 0    |
| Future Vol, veh/h        | 36   | 0    | 3    | 133  | 44   | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 26   | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 83   | 83   | 83   | 83   | 83   | 83   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 43   | 0    | 4    | 160  | 53   | 0    |




| Major/Minor          | Major1 |   | Major2 |   | Minor1 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 0      | 0 | 69     | 0 | 236    | 69    |
| Stage 1              | -      | - | -      | - | 69     | -     |
| Stage 2              | -      | - | -      | - | 167    | -     |
| Critical Hdwy        | -      | - | 4.12   | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | -      | - | 2.218  | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | -      | - | 1532   | - | 752    | 994   |
| Stage 1              | -      | - | -      | - | 954    | -     |
| Stage 2              | -      | - | -      | - | 863    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | -      | - | 1532   | - | 731    | 969   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 731    | -     |
| Stage 1              | -      | - | -      | - | 930    | -     |
| Stage 2              | -      | - | -      | - | 860    | -     |

| Approach             | EB |  | WB  |  | NB   |  |
|----------------------|----|--|-----|--|------|--|
| HCM Control Delay, s | 0  |  | 0.2 |  | 10.3 |  |
| HCM LOS              |    |  |     |  | B    |  |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 731   | -   | -   | 1532  | -   |
| HCM Lane V/C Ratio    | 0.073 | -   | -   | 0.002 | -   |
| HCM Control Delay (s) | 10.3  | -   | -   | 7.4   | 0   |
| HCM Lane LOS          | B     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | 0     | -   |

32: San Jacinto Blvd & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection             |      |   |      |      |   |   |
|--------------------------|------|---|------|------|---|---|
| Int Delay, s/veh         | 1.1  |   |      |      |   |   |
| Movement                 | EBL  | EBR   | NBL  | NBT  | SBT   | SBR   |
| Lane Configurations      |      |  |      |      |  |  |
| Traffic Vol, veh/h       | 0    | 45  | 0    | 0    | 345   | 155   |
| Future Vol, veh/h        | 0    | 45  | 0    | 0    | 345   | 155   |
| Conflicting Peds, #/hr   | 0    | 0   | 0    | 0    | 0   | 125   |
| Sign Control             | Stop | Stop  | Free | Free | Free  | Free  |
| RT Channelized           | -    | None  | -    | None | -   | None  |
| Storage Length           | -    | 0   | -    | -    | -   | 50  |
| Veh in Median Storage, # | 0    | -   | -    | -    | 0   | -   |
| Grade, %                 | 0    | -   | -    | 0    | 0   | -   |
| Peak Hour Factor         | 83   | 83  | 83   | 83   | 83  | 83  |
| Heavy Vehicles, %        | 2    | 2   | 2    | 2    | 2   | 2   |
| Mvmt Flow                | 0    | 54  | 0    | 0    | 416   | 187   |

| Major/Minor          | Minor2 | Major2 |
|----------------------|--------|--------|
| Conflicting Flow All | - 333  | - 0    |
| Stage 1              | - -    | - -    |
| Stage 2              | - -    | - -    |
| Critical Hdwy        | - 7.14 | - -    |
| Critical Hdwy Stg 1  | - -    | - -    |
| Critical Hdwy Stg 2  | - -    | - -    |
| Follow-up Hdwy       | - 3.92 | - -    |
| Pot Cap-1 Maneuver   | 0 566  | - -    |
| Stage 1              | 0 -    | - -    |
| Stage 2              | 0 -    | - -    |
| Platoon blocked, %   | - -    | - -    |
| Mov Cap-1 Maneuver   | - 499  | - -    |
| Mov Cap-2 Maneuver   | - -    | - -    |
| Stage 1              | - -    | - -    |
| Stage 2              | - -    | - -    |




| Approach             | EB   | SB |
|----------------------|------|----|
| HCM Control Delay, s | 13.1 | 0  |
| HCM LOS              | B    |    |

| Minor Lane/Major Mvmt | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-----|
| Capacity (veh/h)      | 499   | -   | -   |
| HCM Lane V/C Ratio    | 0.109 | -   | -   |
| HCM Control Delay (s) | 13.1  | -   | -   |
| HCM Lane LOS          | B     | -   | -   |
| HCM 95th %tile Q(veh) | 0.4   | -   | -   |

33: Colorado St & Parking Dr. 3  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection             |   |      |   |      |      |   |
|--------------------------|---|------|---|------|------|---|
| Int Delay, s/veh         | 1.6   |      |   |      |      |   |
| Movement                 | WBL   | WBR  | NBT   | NBR  | SBL  | SBT   |
| Lane Configurations      |  |      |  |      |      |  |
| Traffic Vol, veh/h       | 14  | 15   | 464   | 90   | 120  | 354   |
| Future Vol, veh/h        | 14  | 15   | 464   | 90   | 120  | 354   |
| Conflicting Peds, #/hr   | 0   | 0    | 0   | 0    | 0    | 0   |
| Sign Control             | Stop  | Stop | Free  | Free | Free | Free  |
| RT Channelized           | -   | None | -   | None | -    | None  |
| Storage Length           | 0   | -    | -   | -    | -    | -   |
| Veh in Median Storage, # | 0   | -    | 0   | -    | -    | 0   |
| Grade, %                 | 0   | -    | 0   | -    | -    | 0   |
| Peak Hour Factor         | 92  | 92   | 92  | 92   | 92   | 92  |
| Heavy Vehicles, %        | 2   | 2    | 2   | 2    | 2    | 2   |
| Mvmt Flow                | 15  | 16   | 504   | 98   | 130  | 385   |

| Major/Minor          | Minor1      | Major1 | Major2  |
|----------------------|-------------|--------|---------|
| Conflicting Flow All | 1199 553    | 0 0    | 602 0   |
| Stage 1              | 553 -       | - -    | - -     |
| Stage 2              | 646 -       | - -    | - -     |
| Critical Hdwy        | 6.42 6.22   | - -    | 4.12 -  |
| Critical Hdwy Stg 1  | 5.42 -      | - -    | - -     |
| Critical Hdwy Stg 2  | 5.42 -      | - -    | - -     |
| Follow-up Hdwy       | 3.518 3.318 | - -    | 2.218 - |
| Pot Cap-1 Maneuver   | 205 533     | - -    | 975 -   |
| Stage 1              | 576 -       | - -    | - -     |
| Stage 2              | 522 -       | - -    | - -     |
| Platoon blocked, %   | - -         | - -    | - -     |
| Mov Cap-1 Maneuver   | 170 533     | - -    | 975 -   |
| Mov Cap-2 Maneuver   | 170 -       | - -    | - -     |
| Stage 1              | 576 -       | - -    | - -     |
| Stage 2              | 433 -       | - -    | - -     |




| Approach             | WB   | NB | SB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 20.6 | 0  | 2.3 |
| HCM LOS              | C    |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1   | SBL | SBT |
|-----------------------|-----|------------|-----|-----|
| Capacity (veh/h)      | - - | 262 975    | -   | -   |
| HCM Lane V/C Ratio    | - - | 0.12 0.134 | -   | -   |
| HCM Control Delay (s) | - - | 20.6 9.3   | 0   | -   |
| HCM Lane LOS          | - - | C A        | A   | -   |
| HCM 95th %tile Q(veh) | - - | 0.4 0.5    | -   | -   |

62: Colorado St & Parking Dr. 4  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection             |   |      |      |   |   |      |
|--------------------------|---|------|------|---|---|------|
| Int Delay, s/veh         | 1.2   |      |      |   |   |      |
| Movement                 | EBL   | EBR  | NBL  | NBT   | SBT   | SBR  |
| Lane Configurations      |  |      |      |  |  |      |
| Traffic Vol, veh/h       | 12  | 12   | 84   | 394   | 462   | 96   |
| Future Vol, veh/h        | 12  | 12   | 84   | 394   | 462   | 96   |
| Conflicting Peds, #/hr   | 0   | 0    | 0    | 0   | 0   | 0    |
| Sign Control             | Stop  | Stop | Free | Free  | Free  | Free |
| RT Channelized           | -   | None | -    | None  | -   | None |
| Storage Length           | 0   | -    | -    | -   | -   | -    |
| Veh in Median Storage, # | 0   | -    | -    | 0   | 0   | -    |
| Grade, %                 | 0   | -    | -    | 0   | 0   | -    |
| Peak Hour Factor         | 92  | 92   | 92   | 92  | 92  | 92   |
| Heavy Vehicles, %        | 2   | 2    | 2    | 2   | 2   | 2    |
| Mvmt Flow                | 13  | 13   | 91   | 428   | 502   | 104  |




| Major/Minor          | Minor2 | Major1 |       | Major2 |     |
|----------------------|--------|--------|-------|--------|-----|
| Conflicting Flow All | 1165   | 554    | 607   | 0      | - 0 |
| Stage 1              | 554    | -      | -     | -      | -   |
| Stage 2              | 611    | -      | -     | -      | -   |
| Critical Hdwy        | 6.42   | 6.22   | 4.12  | -      | -   |
| Critical Hdwy Stg 1  | 5.42   | -      | -     | -      | -   |
| Critical Hdwy Stg 2  | 5.42   | -      | -     | -      | -   |
| Follow-up Hdwy       | 3.518  | 3.318  | 2.218 | -      | -   |
| Pot Cap-1 Maneuver   | 215    | 532    | 971   | -      | -   |
| Stage 1              | 575    | -      | -     | -      | -   |
| Stage 2              | 542    | -      | -     | -      | -   |
| Platoon blocked, %   | -      | -      | -     | -      | -   |
| Mov Cap-1 Maneuver   | 189    | 532    | 971   | -      | -   |
| Mov Cap-2 Maneuver   | 189    | -      | -     | -      | -   |
| Stage 1              | 575    | -      | -     | -      | -   |
| Stage 2              | 475    | -      | -     | -      | -   |

| Approach             | EB   | NB  | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 19.2 | 1.6 | 0  |
| HCM LOS              | C    |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 971   | -   | 279   | -   | -   |
| HCM Lane V/C Ratio    | 0.094 | -   | 0.094 | -   | -   |
| HCM Control Delay (s) | 9.1   | 0   | 19.2  | -   | -   |
| HCM Lane LOS          | A     | A   | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.3   | -   | 0.3   | -   | -   |

69: Parking Dr. 5 & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: AM

| Intersection             |   |      |      |   |   |      |
|--------------------------|---|------|------|---|---|------|
| Int Delay, s/veh         | 2.6   |      |      |   |   |      |
| Movement                 | EBT   | EBR  | WBL  | WBT   | NBL   | NBR  |
| Lane Configurations      |  |      |      |  |  |      |
| Traffic Vol, veh/h       | 110   | 120  | 90   | 45  | 19  | 10   |
| Future Vol, veh/h        | 110   | 120  | 90   | 45  | 19  | 10   |
| Conflicting Peds, #/hr   | 0   | 0    | 0    | 0   | 0   | 0    |
| Sign Control             | Free  | Free | Free | Free  | Stop  | Stop |
| RT Channelized           | -   | None | -    | None  | -   | None |
| Storage Length           | -   | -    | -    | -   | 0   | -    |
| Veh in Median Storage, # | 0   | -    | -    | 0   | 0   | -    |
| Grade, %                 | 0   | -    | -    | 0   | 0   | -    |
| Peak Hour Factor         | 92  | 92   | 92   | 92  | 92  | 92   |
| Heavy Vehicles, %        | 2   | 2    | 2    | 2   | 2   | 2    |
| Mvmt Flow                | 120   | 130  | 98   | 49  | 21  | 11   |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 0      | 0 | 250    | 0 | 430    | 185   |
| Stage 1              | -      | - | -      | - | 185    | -     |
| Stage 2              | -      | - | -      | - | 245    | -     |
| Critical Hdwy        | -      | - | 4.12   | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | -      | - | 2.218  | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | -      | - | 1316   | - | 582    | 857   |
| Stage 1              | -      | - | -      | - | 847    | -     |
| Stage 2              | -      | - | -      | - | 796    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | -      | - | 1316   | - | 537    | 857   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 537    | -     |
| Stage 1              | -      | - | -      | - | 847    | -     |
| Stage 2              | -      | - | -      | - | 735    | -     |

| Approach             | EB | WB  | NB   |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0  | 5.3 | 11.2 |
| HCM LOS              |    |     | B    |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 616   | -   | -   | 1316  | -   |
| HCM Lane V/C Ratio    | 0.051 | -   | -   | 0.074 | -   |
| HCM Control Delay (s) | 11.2  | -   | -   | 8     | 0   |
| HCM Lane LOS          | B     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | 0.2   | -   |

1: Martin Luther King Jr. Blvd & Guadalupe St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

|                         | ↖     | →     | ↘    | ↙    | ←     | ↖     | ↙    | ↘    | ↗    | ↘     | ↗     | ↘     |
|-------------------------|-------|-------|------|------|-------|-------|------|------|------|-------|-------|-------|
| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR   | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
| Lane Configurations     | ↖     | ↖↗    |      |      | ↖↗    | ↖     |      |      |      | ↖     | ↖↗    | ↖     |
| Traffic Volume (vph)    | 155   | 381   | 149  | 0    | 1308  | 720   | 0    | 0    | 0    | 194   | 650   | 237   |
| Future Volume (vph)     | 155   | 381   | 149  | 0    | 1308  | 720   | 0    | 0    | 0    | 194   | 650   | 237   |
| Confl. Peds. (#/hr)     | 30    |       | 70   | 70   |       | 30    |      |      |      | 42    |       | 70    |
| Confl. Bikes (#/hr)     |       |       | 1    |      |       | 6     |      |      |      |       |       | 3     |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94 | 0.94 | 0.94  | 0.94  | 0.94 | 0.94 | 0.94 | 0.94  | 0.94  | 0.94  |
| Adj. Flow (vph)         | 165   | 405   | 159  | 0    | 1391  | 766   | 0    | 0    | 0    | 206   | 691   | 252   |
| Shared Lane Traffic (%) |       |       |      |      |       |       |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 165   | 564   | 0    | 0    | 1391  | 766   | 0    | 0    | 0    | 206   | 691   | 252   |
| Turn Type               | Prot  | NA    |      |      | NA    | pm+ov |      |      |      | pm+pt | NA    | Perm  |
| Protected Phases        | 5     | 2     |      |      | 6     | 7     |      |      |      | 7     | 4     |       |
| Permitted Phases        |       |       |      |      |       | 6     |      |      |      | 4     |       | 4     |
| Detector Phase          | 5     | 2     |      |      | 6     | 7     |      |      |      | 7     | 4     | 4     |
| Switch Phase            |       |       |      |      |       |       |      |      |      |       |       |       |
| Minimum Initial (s)     | 2.0   | 15.0  |      |      | 15.0  | 10.0  |      |      |      | 10.0  | 5.0   | 5.0   |
| Minimum Split (s)       | 7.0   | 27.0  |      |      | 34.0  | 15.0  |      |      |      | 15.0  | 32.0  | 32.0  |
| Total Split (s)         | 25.0  | 92.0  |      |      | 67.0  | 43.0  |      |      |      | 43.0  | 43.0  | 43.0  |
| Total Split (%)         | 18.5% | 68.1% |      |      | 49.6% | 31.9% |      |      |      | 31.9% | 31.9% | 31.9% |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   | 4.0   |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   | 1.0   |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   | 0.0   |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   | 5.0   |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                | Lag   |       |      |      | Lead  |       |      |      |      |       |       |       |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |       |      |      |      |       |       |       |
| Recall Mode             | None  | C-Max |      |      | C-Max | None  |      |      |      | None  | Max   | Max   |
| Act Effect Green (s)    | 20.0  | 87.0  |      |      | 62.0  | 100.0 |      |      |      | 38.0  | 38.0  | 38.0  |
| Actuated g/C Ratio      | 0.15  | 0.64  |      |      | 0.46  | 0.74  |      |      |      | 0.28  | 0.28  | 0.28  |
| v/c Ratio               | 0.63  | 0.27  |      |      | 0.86  | 0.65  |      |      |      | 0.41  | 0.69  | 0.50  |
| Control Delay           | 65.7  | 10.3  |      |      | 29.1  | 2.6   |      |      |      | 42.5  | 47.7  | 19.9  |
| Queue Delay             | 0.0   | 0.0   |      |      | 47.4  | 0.3   |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             | 65.7  | 10.3  |      |      | 76.5  | 2.9   |      |      |      | 42.5  | 47.7  | 19.9  |
| LOS                     | E     | B     |      |      | E     | A     |      |      |      | D     | D     | B     |
| Approach Delay          |       | 22.8  |      |      | 50.4  |       |      |      |      |       | 40.6  |       |
| Approach LOS            |       | C     |      |      | D     |       |      |      |      |       | D     |       |
| Queue Length 50th (ft)  | 138   | 100   |      |      | 525   | 24    |      |      |      | 147   | 285   | 72    |
| Queue Length 95th (ft)  | 217   | 129   |      |      | m592  | m51   |      |      |      | 224   | 356   | 159   |
| Internal Link Dist (ft) |       | 228   |      |      | 45    |       | 159  |      |      |       | 210   |       |
| Turn Bay Length (ft)    | 160   |       |      |      |       |       |      |      |      | 130   |       | 120   |
| Base Capacity (vph)     | 262   | 2106  |      |      | 1625  | 1172  |      |      |      | 498   | 996   | 500   |
| Starvation Cap Reductn  | 0     | 0     |      |      | 382   | 84    |      |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     | 0     |      |      |      | 0     | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     | 0     |      |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       | 0.63  | 0.27  |      |      | 1.12  | 0.70  |      |      |      | 0.41  | 0.69  | 0.50  |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 90

MS

Synchro 9 Report  
Page 1

1: Martin Luther King Jr. Blvd & Guadalupe St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 42.6

Intersection LOS: D

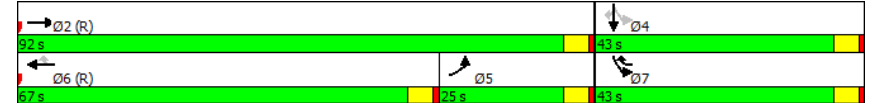
Intersection Capacity Utilization 79.7%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Martin Luther King Jr. Blvd & Guadalupe St



MS

Synchro 9 Report  
Page 2

3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

|   |       |      |      |       |       |       |
|---|-------|------|------|-------|-------|-------|
|   | →     | ↗    | ↖    | ←     | ↙     | ↘     |
| Lane Group  | EBT   | EBR  | WBL  | WBT   | NBL   | NBR   |
| Lane Configurations   | ↑↑    |      |      | ↑↑    | ↗↘    | ↖↗    |
| Traffic Volume (vph)  | 554   | 0    | 0    | 1356  | 1006  | 248   |
| Future Volume (vph)   | 554   | 0    | 0    | 1356  | 1006  | 248   |
| Confl. Peds. (#/hr)   |       |      |      |       |       | 82    |
| Peak Hour Factor  | 0.91  | 0.91 | 0.91 | 0.91  | 0.91  | 0.91  |
| Adj. Flow (vph)   | 609   | 0    | 0    | 1490  | 1105  | 273   |
| Shared Lane Traffic (%)   |       |      |      |       |       |       |
| Lane Group Flow (vph)   | 609   | 0    | 0    | 1490  | 1105  | 273   |
| Turn Type   | NA    |      |      | NA    | Prot  | Perm  |
| Protected Phases  | 2     |      |      | 6     | 8     |       |
| Permitted Phases  |       |      |      |       |       | 3     |
| Detector Phase  | 2     |      |      | 6     | 8     | 3     |
| Switch Phase  |       |      |      |       |       |       |
| Minimum Initial (s)   | 10.0  |      |      | 10.0  | 5.0   | 5.0   |
| Minimum Split (s)   | 30.0  |      |      | 15.0  | 10.0  | 10.0  |
| Total Split (s)   | 86.0  |      |      | 86.0  | 49.0  | 49.0  |
| Total Split (%)   | 63.7% |      |      | 63.7% | 36.3% | 36.3% |
| Yellow Time (s)   | 4.0   |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)  | 1.0   |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)  | 0.0   |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)   | 5.0   |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag  |       |      |      |       |       |       |
| Lead-Lag Optimize?  |       |      |      |       |       |       |
| Recall Mode   | C-Max |      |      | C-Max | Max   | Max   |
| Act Effct Green (s)   | 81.0  |      |      | 81.0  | 44.0  | 44.0  |
| Actuated g/C Ratio  | 0.60  |      |      | 0.60  | 0.33  | 0.33  |
| v/c Ratio   | 0.29  |      |      | 0.70  | 0.99  | 0.45  |
| Control Delay   | 13.8  |      |      | 14.4  | 78.5  | 24.4  |
| Queue Delay   | 0.3   |      |      | 0.7   | 9.9   | 0.0   |
| Total Delay   | 14.1  |      |      | 15.1  | 88.4  | 24.4  |
| LOS   | B     |      |      | B     | F     | C     |
| Approach Delay  | 14.1  |      |      | 15.1  | 75.7  |       |
| Approach LOS  | B     |      |      | B     | E     |       |
| Queue Length 50th (ft)  | 126   |      |      | 266   | 518   | 86    |
| Queue Length 95th (ft)  | 155   |      |      | 330   | #658  | 175   |
| Internal Link Dist (ft)   | 272   |      |      | 277   | 337   |       |
| Turn Bay Length (ft)  |       |      |      |       |       |       |
| Base Capacity (vph)   | 2123  |      |      | 2123  | 1118  | 611   |
| Starvation Cap Reductn  | 865   |      |      | 126   | 0     | 0     |
| Spillback Cap Reductn   | 0     |      |      | 303   | 41    | 0     |
| Storage Cap Reductn   | 0     |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio   | 0.48  |      |      | 0.82  | 1.03  | 0.45  |
| Intersection Summary  |       |      |      |       |       |       |
| Cycle Length: 135   |       |      |      |       |       |       |
| Actuated Cycle Length: 135  |       |      |      |       |       |       |
| Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green |       |      |      |       |       |       |
| Natural Cycle: 60   |       |      |      |       |       |       |
| Control Type: Actuated-Coordinated                                  |       |      |      |       |       |       |

MS

Synchro 9 Report  
Page 3

3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

Maximum v/c Ratio: 0.99

Intersection Signal Delay: 38.9

Intersection LOS: D

Intersection Capacity Utilization 93.9%

ICU Level of Service F

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Lavaca St & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 4

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

|                         | →     | ↖    | ↙     | ←      | ↘    | ↗    |
|-------------------------|-------|------|-------|--------|------|------|
| Lane Group              | EBT   | EBR  | WBL   | WBT    | NBL  | NBR  |
| Lane Configurations     | ↔↔    |      | ↖↗    | ↔↔     |      |      |
| Traffic Volume (vph)    | 819   | 0    | 13    | 1300   | 0    | 0    |
| Future Volume (vph)     | 819   | 0    | 13    | 1300   | 0    | 0    |
| Confl. Peds. (#/hr)     |       | 33   | 33    |        | 35   |      |
| Confl. Bikes (#/hr)     |       | 4    |       |        |      |      |
| Peak Hour Factor        | 0.94  | 0.94 | 0.94  | 0.94   | 0.94 | 0.94 |
| Adj. Flow (vph)         | 871   | 0    | 14    | 1383   | 0    | 0    |
| Shared Lane Traffic (%) |       |      |       |        |      |      |
| Lane Group Flow (vph)   | 871   | 0    | 14    | 1383   | 0    | 0    |
| Turn Type               | NA    |      | pm+pt | NA     |      |      |
| Protected Phases        | 2     |      | 1     | 6      |      |      |
| Permitted Phases        |       |      | 6     |        |      |      |
| Detector Phase          | 2     |      | 1     | 6      |      |      |
| Switch Phase            |       |      |       |        |      |      |
| Minimum Initial (s)     | 15.0  |      | 3.0   | 15.0   |      |      |
| Minimum Split (s)       | 34.0  |      | 8.0   | 20.0   |      |      |
| Total Split (s)         | 121.0 |      | 14.0  | 135.0  |      |      |
| Total Split (%)         | 89.6% |      | 10.4% | 100.0% |      |      |
| Yellow Time (s)         | 4.0   |      | 4.0   | 4.0    |      |      |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0    |      |      |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0    |      |      |
| Total Lost Time (s)     | 5.0   |      | 5.0   | 5.0    |      |      |
| Lead/Lag                | Lead  |      | Lag   |        |      |      |
| Lead-Lag Optimize?      | Yes   |      | Yes   |        |      |      |
| Recall Mode             | C-Max |      | None  | C-Max  |      |      |
| Act Effect Green (s)    | 127.4 |      | 133.0 | 135.0  |      |      |
| Actuated g/C Ratio      | 0.94  |      | 0.99  | 1.00   |      |      |
| v/c Ratio               | 0.26  |      | 0.02  | 0.39   |      |      |
| Control Delay           | 0.7   |      | 0.1   | 0.4    |      |      |
| Queue Delay             | 0.0   |      | 0.0   | 0.0    |      |      |
| Total Delay             | 0.7   |      | 0.1   | 0.4    |      |      |
| LOS                     | A     |      | A     | A      |      |      |
| Approach Delay          | 0.7   |      |       | 0.4    |      |      |
| Approach LOS            | A     |      |       | A      |      |      |
| Queue Length 50th (ft)  | 0     |      | 0     | 3      |      |      |
| Queue Length 95th (ft)  | 41    |      | m0    | 0      |      |      |
| Internal Link Dist (ft) | 366   |      |       | 377    | 331  |      |
| Turn Bay Length (ft)    |       |      | 115   |        |      |      |
| Base Capacity (vph)     | 3339  |      | 650   | 3539   |      |      |
| Starvation Cap Reductn  | 0     |      | 0     | 0      |      |      |
| Spillback Cap Reductn   | 0     |      | 0     | 0      |      |      |
| Storage Cap Reductn     | 0     |      | 0     | 0      |      |      |
| Reduced v/c Ratio       | 0.26  |      | 0.02  | 0.39   |      |      |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 45

MS

Synchro 9 Report  
Page 5

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.39

Intersection Signal Delay: 0.5

Intersection LOS: A

Intersection Capacity Utilization 40.1%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: N. Congress Ave & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 6

6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

|                         | ←     | →     | ↖    | ↗     | ←     | →     | ↖     | ↗     | ←     | →     | ↖     | ↗     |
|-------------------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL   | EBT   | EBR  | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     | ↖     | ↖     |      | ↖     | ↖     | ↖     |       | ↖     | ↖     |       | ↖     | ↖     |
| Traffic Volume (vph)    | 91    | 813   | 32   | 45    | 916   | 136   | 125   | 24    | 306   | 100   | 26    | 253   |
| Future Volume (vph)     | 91    | 813   | 32   | 45    | 916   | 136   | 125   | 24    | 306   | 100   | 26    | 253   |
| Confl. Peds. (#/hr)     | 44    |       | 7    | 7     |       | 44    | 22    |       | 23    | 23    |       | 22    |
| Confl. Bikes (#/hr)     |       |       | 4    |       |       | 3     |       |       |       |       |       |       |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  |
| Adj. Flow (vph)         | 94    | 838   | 33   | 46    | 944   | 140   | 129   | 25    | 315   | 103   | 27    | 261   |
| Shared Lane Traffic (%) |       |       |      |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)   | 94    | 871   | 0    | 46    | 944   | 140   | 0     | 154   | 315   | 0     | 130   | 261   |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    | Perm  | Perm  | NA    | Perm  | Perm  | NA    | Perm  |
| Protected Phases        | 5     | 2     |      | 1     | 6     |       |       | 8     |       |       | 4     |       |
| Permitted Phases        | 2     |       |      | 6     |       | 6     | 8     |       | 8     | 4     |       | 4     |
| Detector Phase          | 5     | 2     |      | 1     | 6     | 6     | 8     | 8     | 8     | 4     | 4     | 4     |
| Switch Phase            |       |       |      |       |       |       |       |       |       |       |       |       |
| Minimum Initial (s)     | 3.0   | 10.0  |      | 3.0   | 10.0  | 10.0  | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       | 8.0   | 22.0  |      | 8.0   | 28.0  | 28.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  |
| Total Split (s)         | 15.0  | 89.0  |      | 15.0  | 89.0  | 89.0  | 31.0  | 31.0  | 31.0  | 31.0  | 31.0  | 31.0  |
| Total Split (%)         | 11.1% | 65.9% |      | 11.1% | 65.9% | 65.9% | 23.0% | 23.0% | 23.0% | 23.0% | 23.0% | 23.0% |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   | 5.0   |       | 5.0   | 5.0   |       | 5.0   | 5.0   |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   | Lag   |       |       |       |       |       |       |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   | Yes   |       |       |       |       |       |       |
| Recall Mode             | None  | C-Max |      | None  | C-Max | C-Max | Max   | Max   | Max   | Max   | Max   | Max   |
| Act Effect Green (s)    | 96.0  | 89.7  |      | 92.9  | 86.5  | 86.5  |       | 26.0  | 26.0  |       | 26.0  | 26.0  |
| Actuated g/C Ratio      | 0.71  | 0.66  |      | 0.69  | 0.64  | 0.64  |       | 0.19  | 0.19  |       | 0.19  | 0.19  |
| v/c Ratio               | 0.24  | 0.37  |      | 0.11  | 0.42  | 0.16  |       | 0.75  | 0.61  |       | 0.69  | 0.55  |
| Control Delay           | 5.3   | 7.7   |      | 2.3   | 5.7   | 2.0   |       | 75.0  | 13.9  |       | 70.8  | 14.2  |
| Queue Delay             | 0.0   | 0.3   |      | 0.0   | 0.3   | 0.0   |       | 0.0   | 0.3   |       | 0.0   | 0.0   |
| Total Delay             | 5.3   | 7.9   |      | 2.3   | 6.0   | 2.0   |       | 75.0  | 14.2  |       | 70.8  | 14.2  |
| LOS                     | A     | A     |      | A     | A     | A     |       | E     | B     |       | E     | B     |
| Approach Delay          |       | 7.7   |      |       | 5.3   |       |       | 34.2  |       |       | 33.0  |       |
| Approach LOS            |       | A     |      |       | A     |       |       | C     |       |       | C     |       |
| Queue Length 50th (ft)  | 15    | 115   |      | 2     | 121   | 10    |       | 129   | 27    |       | 107   | 26    |
| Queue Length 95th (ft)  | 25    | 128   |      | 6     | 161   | 28    |       | #238  | 124   |       | #200  | 113   |
| Internal Link Dist (ft) |       | 377   |      |       | 273   |       |       | 135   |       |       | 212   |       |
| Turn Bay Length (ft)    | 160   |       |      | 100   |       | 100   |       |       | 100   |       |       |       |
| Base Capacity (vph)     | 425   | 2334  |      | 479   | 2267  | 899   |       | 204   | 514   |       | 188   | 472   |
| Starvation Cap Reductn  | 0     | 737   |      | 0     | 613   | 0     |       | 0     | 0     |       | 0     | 0     |
| Spillback Cap Reductn   | 0     | 316   |      | 0     | 0     | 0     |       | 0     | 24    |       | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Reduced v/c Ratio       | 0.22  | 0.55  |      | 0.10  | 0.57  | 0.16  |       | 0.75  | 0.64  |       | 0.69  | 0.55  |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 70

MS

Synchro 9 Report  
Page 7

6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 14.3

Intersection LOS: B

Intersection Capacity Utilization 79.5%

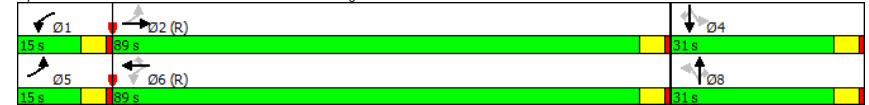
ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: Brazos St & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 8

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑    |      | ↓     | ↑↑    |      |      |      |      | ↓     | ↑↑    | ↑     |
| Traffic Volume (vph)    | 0    | 1156  | 30   | 369   | 1152  | 0    | 0    | 0    | 0    | 39    | 204   | 144   |
| Future Volume (vph)     | 0    | 1156  | 30   | 369   | 1152  | 0    | 0    | 0    | 0    | 39    | 204   | 144   |
| Confl. Peds. (#/hr)     |      |       | 37   | 37    |       |      |      |      |      | 73    |       | 17    |
| Confl. Bikes (#/hr)     |      |       | 8    |       |       |      |      |      |      |       |       | 14    |
| Peak Hour Factor        | 0.93 | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93 | 0.93 | 0.93 | 0.93  | 0.93  | 0.93  |
| Adj. Flow (vph)         | 0    | 1243  | 32   | 397   | 1239  | 0    | 0    | 0    | 0    | 42    | 219   | 155   |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 1275  | 0    | 397   | 1239  | 0    | 0    | 0    | 0    | 42    | 219   | 155   |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      | 3.0   | 10.0  |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       |      | 32.0  |      | 8.0   | 30.0  |      |      |      |      | 30.0  | 30.0  | 30.0  |
| Total Split (s)         |      | 78.0  |      | 25.0  | 103.0 |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (%)         |      | 57.8% |      | 18.5% | 76.3% |      |      |      |      | 23.7% | 23.7% | 23.7% |
| Yellow Time (s)         |      | 4.0   |      | 4.0   | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      | 1.0   | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      | 0.0   | 0.0   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      | 5.0   | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      | Lead  |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      | Yes   |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      | None  | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effect Green (s)    |      | 73.0  |      | 98.0  | 98.0  |      |      |      |      | 27.0  | 27.0  | 27.0  |
| Actuated g/C Ratio      |      | 0.54  |      | 0.73  | 0.73  |      |      |      |      | 0.20  | 0.20  | 0.20  |
| v/c Ratio               |      | 0.67  |      | 1.03  | 0.48  |      |      |      |      | 0.13  | 0.31  | 0.40  |
| Control Delay           |      | 17.6  |      | 93.8  | 4.2   |      |      |      |      | 45.9  | 47.5  | 17.7  |
| Queue Delay             |      | 0.5   |      | 9.1   | 0.3   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             |      | 18.1  |      | 102.9 | 4.5   |      |      |      |      | 45.9  | 47.5  | 17.7  |
| LOS                     |      | B     |      | F     | A     |      |      |      |      | D     | D     | B     |
| Approach Delay          |      | 18.1  |      |       | 28.4  |      |      |      |      |       | 36.2  |       |
| Approach LOS            |      | B     |      |       | C     |      |      |      |      |       | D     |       |
| Queue Length 50th (ft)  |      | 349   |      | ~281  | 122   |      |      |      |      | 31    | 86    | 30    |
| Queue Length 95th (ft)  |      | 422   |      | m#472 | m130  |      |      |      |      | 65    | 127   | 96    |
| Internal Link Dist (ft) |      | 273   |      |       | 321   |      |      | 343  |      |       | 244   |       |
| Turn Bay Length (ft)    |      |       |      | 120   |       |      |      |      |      | 100   |       | 100   |
| Base Capacity (vph)     |      | 1904  |      | 385   | 2569  |      |      |      |      | 312   | 707   | 390   |
| Starvation Cap Reductn  |      | 260   |      | 10    | 639   |      |      |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       |      | 0.78  |      | 1.06  | 0.64  |      |      |      |      | 0.13  | 0.31  | 0.40  |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 90

MS

Synchro 9 Report  
Page 9

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.03

Intersection Signal Delay: 25.4

Intersection LOS: C

Intersection Capacity Utilization 86.8%

ICU Level of Service E

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: San Jacinto Blvd & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 10

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↰     | ↰↰    |      |      | ↰↰    |      | ↰     | ↰     | ↰     |      | ↓    | ↰    |
| Traffic Volume (vph)    | 87    | 1188  | 0    | 0    | 1253  | 53   | 217   | 327   | 595   | 0    | 0    | 0    |
| Future Volume (vph)     | 87    | 1188  | 0    | 0    | 1253  | 53   | 217   | 327   | 595   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     |       |       | 34   |      |       | 90   | 17    |       | 153   |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       | 4    |       |       | 13    |      |      |      |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97 | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph)         | 90    | 1225  | 0    | 0    | 1292  | 55   | 224   | 337   | 613   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       | 10%  |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 90    | 1225  | 0    | 0    | 1347  | 0    | 202   | 359   | 613   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 26.0  |      |      | 26.0  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (s)         | 15.0  | 104.0 |      |      | 89.0  |      | 31.0  | 31.0  | 31.0  |      |      |      |
| Total Split (%)         | 11.1% | 77.0% |      |      | 65.9% |      | 23.0% | 23.0% | 23.0% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 99.0  | 99.0  |      |      | 86.6  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Actuated g/C Ratio      | 0.73  | 0.73  |      |      | 0.64  |      | 0.19  | 0.19  | 0.19  |      |      |      |
| v/c Ratio               | 0.34  | 0.47  |      |      | 0.60  |      | 0.65  | 1.06  | 2.07  |      |      |      |
| Control Delay           | 8.1   | 1.4   |      |      | 7.5   |      | 69.4  | 123.7 | 518.5 |      |      |      |
| Queue Delay             | 0.0   | 0.1   |      |      | 0.8   |      | 3.6   | 16.7  | 0.0   |      |      |      |
| Total Delay             | 8.1   | 1.5   |      |      | 8.3   |      | 72.9  | 140.4 | 518.5 |      |      |      |
| LOS                     | A     | A     |      |      | A     |      | E     | F     | F     |      |      |      |
| Approach Delay          |       | 1.9   |      |      | 8.3   |      |       | 326.2 |       |      |      |      |
| Approach LOS            |       | A     |      |      | A     |      |       | F     |       |      |      |      |
| Queue Length 50th (ft)  | 3     | 23    |      |      | 116   |      | 181   | -366  | -778  |      |      |      |
| Queue Length 95th (ft)  | m18   | 25    |      |      | 132   |      | 273   | #580  | #1018 |      |      |      |
| Internal Link Dist (ft) |       | 321   |      |      | 699   |      |       | 350   |       |      | 106  |      |
| Turn Bay Length (ft)    | 120   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 294   | 2595  |      |      | 2230  |      | 313   | 339   | 296   |      |      |      |
| Starvation Cap Reductn  | 0     | 216   |      |      | 528   |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 51    |      | 52    | 56    | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.31  | 0.51  |      |      | 0.79  |      | 0.77  | 1.27  | 2.07  |      |      |      |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green  
Natural Cycle: 75

MS

Synchro 9 Report  
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8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 2.07

Intersection Signal Delay: 103.4

Intersection LOS: F

Intersection Capacity Utilization 86.8%

ICU Level of Service E

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

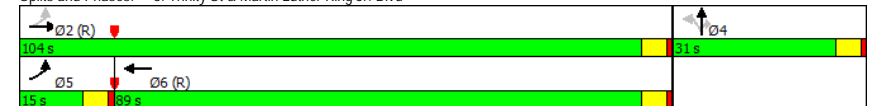
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Trinity St & Martin Luther King Jr. Blvd




















MS

Synchro 9 Report  
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18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

|  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group   | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations  |   |  |  |   |  |   |   |   |   |   |  |  |
| Traffic Volume (vph)                                       | 0   | 21  | 12  | 166   | 97  | 0   | 0   | 0   | 0   | 48  | 1199  | 23  |
| Future Volume (vph)  | 0   | 21  | 12  | 166   | 97  | 0   | 0   | 0   | 0   | 48  | 1199  | 23  |
| Confl. Peds. (#/hr)  |   |   | 69  |   |   |   |   |   |   |   | 44  |   |
| Confl. Bikes (#/hr)  |   |   |   |   |   |   |   |   | 2   |   |   |   |
| Peak Hour Factor   | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  |
| Parking (#/hr)   |   | 0   |   |   |   |   |   |   |   |   |   |   |
| Adj. Flow (vph)  | 0   | 22  | 13  | 173   | 101   | 0   | 0   | 0   | 0   | 50  | 1249  | 24  |
| Shared Lane Traffic (%)                                    |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)                                      | 0   | 22  | 13  | 0   | 274   | 0   | 0   | 0   | 0   | 0   | 1323  | 0   |
| Turn Type  | NA  | Perm  | Perm  | NA  |   |   |   |   |   | Perm  | NA  |   |
| Protected Phases   | 4 12  |   |   | 4 12  |   |   |   |   |   |   | 2 10  |   |
| Permitted Phases   |   |   | 4 12  | 4 12  |   |   |   |   |   | 2 10  |   |   |
| Detector Phase   |   | 4 12  | 4 12  | 4 12  | 4 12  |   |   |   |   | 2 10  | 2 10  |   |
| Switch Phase   |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (%)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Yellow Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| All-Red Time (s)   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lost Time Adjust (s)                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Lost Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead/Lag   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?   |   |   |   |   |   |   |   |   |   |   |   |   |
| Recall Mode  |   |   |   |   |   |   |   |   |   |   |   |   |
| Act Effct Green (s)  |   | 31.9  | 31.9  |   | 31.9  |   |   |   |   |   | 79.1  |   |
| Actuated g/C Ratio   |   | 0.24  | 0.24  |   | 0.24  |   |   |   |   |   | 0.59  |   |
| v/c Ratio  |   | 0.06  | 0.03  |   | 0.79  |   |   |   |   |   | 0.64  |   |
| Control Delay  |   | 21.6  | 0.2   |   | 34.8  |   |   |   |   |   | 13.3  |   |
| Queue Delay  |   | 0.0   | 0.0   |   | 0.0   |   |   |   |   |   | 0.0   |   |
| Total Delay  |   | 21.6  | 0.2   |   | 34.8  |   |   |   |   |   | 13.3  |   |
| LOS  |   | C   | A   |   | C   |   |   |   |   |   | B   |   |
| Approach Delay   |   | 13.6  |   |   | 34.8  |   |   |   |   |   | 13.3  |   |
| Approach LOS   |   | B   |   |   | C   |   |   |   |   |   | B   |   |
| Queue Length 50th (ft)                                     |   | 10  | 0   |   | 89  |   |   |   |   |   | 213   |   |
| Queue Length 95th (ft)                                     |   | 24  | 0   |   | 128   |   |   |   |   |   | 294   |   |
| Internal Link Dist (ft)                                    |   | 177   |   |   | 244   |   |   | 271   |   |   | 262   |   |
| Turn Bay Length (ft)                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Base Capacity (vph)  |   | 533   | 508   |   | 471   |   |   |   |   |   | 2061  |   |
| Starvation Cap Reductn                                     |   | 0   | 0   |   | 1   |   |   |   |   |   | 0   |   |
| Spillback Cap Reductn                                      |   | 0   | 0   |   | 0   |   |   |   |   |   | 0   |   |
| Storage Cap Reductn  |   | 0   | 0   |   | 0   |   |   |   |   |   | 0   |   |
| Reduced v/c Ratio  |   | 0.04  | 0.03  |   | 0.58  |   |   |   |   |   | 0.64  |   |
| Intersection Summary                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Cycle Length: 135  |   |   |   |   |   |   |   |   |   |   |   |   |
| Actuated Cycle Length: 135                                 |   |   |   |   |   |   |   |   |   |   |   |   |
| Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green |   |   |   |   |   |   |   |   |   |   |   |   |

MS

Synchro 9 Report  
Page 13

18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Confl. Bikes (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 21.0  | 21.0 | 22.5 | 22.5 |
| Total Split (s)         | 56.0  | 29.0 | 24.0 | 26.0 |
| Total Split (%)         | 41%   | 21%  | 18%  | 19%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effct Green (s)     |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

MS

Synchro 9 Report  
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18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 16.9

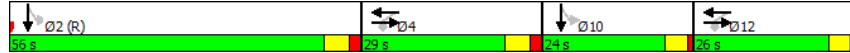
Intersection LOS: B

Intersection Capacity Utilization 77.1%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 18: Guadalupe St & E. 17th St



19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Lane Group              | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations     |      |      |      |      |      |      |      |      |      |      |      |      |
| Traffic Volume (vph)    | 11   | 65   | 0    | 0    | 134  | 124  | 66   | 1182 | 70   | 0    | 0    | 0    |
| Future Volume (vph)     | 11   | 65   | 0    | 0    | 134  | 124  | 66   | 1182 | 70   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 34   |      |      |      |      |      |      |      | 47   |      |      |      |
| Peak Hour Factor        | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Parking (#/hr)          |      | 0    |      |      |      |      |      |      |      |      |      |      |
| Adj. Flow (vph)         | 12   | 71   | 0    | 0    | 146  | 135  | 72   | 1285 | 76   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |      |      |      |      |      |      |      |      |      |      |      |      |
| Lane Group Flow (vph)   | 0    | 83   | 0    | 0    | 281  | 0    | 0    | 1357 | 76   | 0    | 0    | 0    |
| Turn Type               | Perm | NA   |      |      | NA   |      | Perm | NA   | Perm |      |      |      |
| Protected Phases        |      | 4 12 |      |      | 4 12 |      |      | 2 10 |      |      |      |      |
| Permitted Phases        | 4 12 |      |      |      |      |      | 2 10 |      | 2 10 |      |      |      |
| Detector Phase          | 4 12 | 4 12 |      |      | 4 12 |      | 2 10 | 2 10 | 2 10 |      |      |      |
| Switch Phase            |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Initial (s)     |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Split (s)       |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (s)         |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (%)         |      |      |      |      |      |      |      |      |      |      |      |      |
| Yellow Time (s)         |      |      |      |      |      |      |      |      |      |      |      |      |
| All-Red Time (s)        |      |      |      |      |      |      |      |      |      |      |      |      |
| Lost Time Adjust (s)    |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Lost Time (s)     |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead/Lag                |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead-Lag Optimize?      |      |      |      |      |      |      |      |      |      |      |      |      |
| Recall Mode             |      |      |      |      |      |      |      |      |      |      |      |      |
| Act Effct Green (s)     | 31.4 |      |      | 31.4 |      |      | 79.6 | 79.6 |      |      |      |      |
| Actuated g/C Ratio      | 0.23 |      |      | 0.23 |      |      | 0.59 | 0.59 |      |      |      |      |
| v/c Ratio               | 0.23 |      |      | 0.66 |      |      | 0.45 | 0.10 |      |      |      |      |
| Control Delay           | 21.3 |      |      | 31.7 |      |      | 9.9  | 4.2  |      |      |      |      |
| Queue Delay             | 0.0  |      |      | 0.0  |      |      | 0.0  | 0.0  |      |      |      |      |
| Total Delay             | 21.3 |      |      | 31.7 |      |      | 9.9  | 4.2  |      |      |      |      |
| LOS                     | C    |      |      | C    |      |      | A    | A    |      |      |      |      |
| Approach Delay          | 21.3 |      |      | 31.7 |      |      | 9.6  |      |      |      |      |      |
| Approach LOS            | C    |      |      | C    |      |      | A    |      |      |      |      |      |
| Queue Length 50th (ft)  | 33   |      |      | 128  |      |      | 141  | 10   |      |      |      |      |
| Queue Length 95th (ft)  | m62  |      |      | 192  |      |      | 152  | m18  |      |      |      |      |
| Internal Link Dist (ft) | 244  |      |      | 319  |      |      | 272  |      |      | 254  |      |      |
| Turn Bay Length (ft)    |      |      |      |      |      |      |      | 100  |      |      |      |      |
| Base Capacity (vph)     | 509  |      |      | 584  |      |      | 3005 | 799  |      |      |      |      |
| Starvation Cap Reductn  | 0    |      |      | 0    |      |      | 249  | 0    |      |      |      |      |
| Spillback Cap Reductn   | 0    |      |      | 7    |      |      | 0    | 0    |      |      |      |      |
| Storage Cap Reductn     | 0    |      |      | 0    |      |      | 0    | 0    |      |      |      |      |
| Reduced v/c Ratio       | 0.16 |      |      | 0.49 |      |      | 0.49 | 0.10 |      |      |      |      |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green

Natural Cycle: 100

19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 26.0  | 28.0 | 22.5 | 22.5 |
| Total Split (s)         | 54.0  | 28.0 | 25.0 | 28.0 |
| Total Split (%)         | 40%   | 21%  | 19%  | 21%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effect Green (s)    |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update


















2024 Background  
Timing Plan: PM

|   |                        |
|---|------------------------|
| Control Type: Actuated-Coordinated                                |                        |
| Maximum v/c Ratio: 0.66   |                        |
| Intersection Signal Delay: 13.6                                   | Intersection LOS: B    |
| Intersection Capacity Utilization 48.8%                           | ICU Level of Service A |
| Analysis Period (min) 15  |                        |
| m Volume for 95th percentile queue is metered by upstream signal. |                        |



28: Lavaca St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

|  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group   | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations  |   |  |   |   |  |   |   |  |  |  |   |   |
| Traffic Volume (vph)                                       | 11  | 66  | 0   | 0   | 93  | 149   | 65  | 1145  | 61  | 0   | 0   | 0   |
| Future Volume (vph)  | 11  | 66  | 0   | 0   | 93  | 149   | 65  | 1145  | 61  | 0   | 0   | 0   |
| Confl. Peds. (#/hr)  |   |   |   |   |   | 170   |   | 88  |   |   |   |   |
| Confl. Bikes (#/hr)  |   |   |   |   |   | 2   |   |   |   |   |   |   |
| Peak Hour Factor   | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  |
| Parking (#/hr)   |   |   |   |   | 0   |   |   |   |   |   |   |   |
| Adj. Flow (vph)  | 12  | 69  | 0   | 0   | 98  | 157   | 68  | 1205  | 64  | 0   | 0   | 0   |
| Shared Lane Traffic (%)                                    |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)                                      | 0   | 81  | 0   | 0   | 255   | 0   | 0   | 1273  | 64  | 0   | 0   | 0   |
| Turn Type  | Perm  | NA  |   |   | NA  |   | Perm  | NA  | Perm  |   |   |   |
| Protected Phases   |   | 4 12  |   |   | 4 12  |   |   | 2 10  |   |   |   |   |
| Permitted Phases   | 4 12  |   |   |   |   |   | 2 10  |   | 2 10  |   |   |   |
| Detector Phase   | 4 12  | 4 12  |   |   | 4 12  |   | 2 10  | 2 10  | 2 10  |   |   |   |
| Switch Phase   |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (%)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Yellow Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| All-Red Time (s)   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lost Time Adjust (s)                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Lost Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead/Lag   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?   |   |   |   |   |   |   |   |   |   |   |   |   |
| Recall Mode  |   |   |   |   |   |   |   |   |   |   |   |   |
| Act Effct Green (s)  |   | 31.6  |   |   | 31.6  |   |   | 79.4  | 79.4  |   |   |   |
| Actuated g/C Ratio   |   | 0.23  |   |   | 0.23  |   |   | 0.59  | 0.59  |   |   |   |
| v/c Ratio  |   | 0.20  |   |   | 0.77  |   |   | 0.43  | 0.07  |   |   |   |
| Control Delay  |   | 22.6  |   |   | 38.1  |   |   | 11.6  | 3.5   |   |   |   |
| Queue Delay  |   | 0.0   |   |   | 0.0   |   |   | 0.4   | 0.0   |   |   |   |
| Total Delay  |   | 22.6  |   |   | 38.1  |   |   | 12.0  | 3.5   |   |   |   |
| LOS  |   | C   |   |   | D   |   |   | B   | A   |   |   |   |
| Approach Delay   |   | 22.6  |   |   | 38.1  |   |   | 11.6  |   |   |   |   |
| Approach LOS   |   | C   |   |   | D   |   |   | B   |   |   |   |   |
| Queue Length 50th (ft)                                     |   | 37  |   |   | 114   |   |   | 113   | 1   |   |   |   |
| Queue Length 95th (ft)                                     |   | m67   |   |   | 170   |   |   | m247  | m7  |   |   |   |
| Internal Link Dist (ft)                                    |   | 233   |   |   | 60  |   |   | 281   |   |   | 272   |   |
| Turn Bay Length (ft)                                       |   |   |   |   |   |   |   |   | 100   |   |   |   |
| Base Capacity (vph)  |   | 569   |   |   | 445   |   |   | 2955  | 961   |   |   |   |
| Starvation Cap Reductn                                     |   | 0   |   |   | 0   |   |   | 1042  | 0   |   |   |   |
| Spillback Cap Reductn                                      |   | 0   |   |   | 0   |   |   | 0   | 0   |   |   |   |
| Storage Cap Reductn  |   | 0   |   |   | 0   |   |   | 0   | 0   |   |   |   |
| Reduced v/c Ratio  |   | 0.14  |   |   | 0.57  |   |   | 0.67  | 0.07  |   |   |   |
| Intersection Summary                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Cycle Length: 135  |   |   |   |   |   |   |   |   |   |   |   |   |
| Actuated Cycle Length: 135                                 |   |   |   |   |   |   |   |   |   |   |   |   |
| Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green |   |   |   |   |   |   |   |   |   |   |   |   |

MS

Synchro 9 Report  
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28: Lavaca St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Confl. Bikes (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 28.0  | 32.0 | 21.0 | 20.0 |
| Total Split (s)         | 55.0  | 32.0 | 24.0 | 24.0 |
| Total Split (%)         | 41%   | 24%  | 18%  | 18%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effct Green (s)     |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

MS

Synchro 9 Report  
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28: Lavaca St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

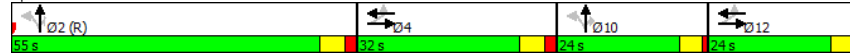
Intersection Signal Delay: 16.2 Intersection LOS: B

Intersection Capacity Utilization 55.1% ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 28: Lavaca St & E. 16th St



34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

|                         | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑↑   |      | ↑     | ↑↑↑   |      |      |      |      |       | ↑↑↑   | ↑     |
| Traffic Volume (vph)    | 0    | 952   | 99   | 237   | 1828  | 0    | 0    | 0    | 0    | 155   | 934   | 450   |
| Future Volume (vph)     | 0    | 952   | 99   | 237   | 1828  | 0    | 0    | 0    | 0    | 155   | 934   | 450   |
| Confl. Peds. (#/hr)     |      |       | 18   | 18    |       |      |      |      |      | 20    |       |       |
| Confl. Bikes (#/hr)     |      |       |      |       |       |      |      |      |      |       |       | 28    |
| Peak Hour Factor        | 0.86 | 0.86  | 0.86 | 0.86  | 0.86  | 0.86 | 0.86 | 0.86 | 0.86 | 0.86  | 0.86  | 0.86  |
| Adj. Flow (vph)         | 0    | 1107  | 115  | 276   | 2126  | 0    | 0    | 0    | 0    | 180   | 1086  | 523   |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 1222  | 0    | 276   | 2126  | 0    | 0    | 0    | 0    | 0     | 1266  | 523   |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1 3   | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1 3   | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      |       | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       |      | 25.0  |      |       | 25.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (s)         |      | 58.0  |      |       | 88.0  |      |      |      |      | 47.0  | 47.0  | 47.0  |
| Total Split (%)         |      | 43.0% |      |       | 65.2% |      |      |      |      | 34.8% | 34.8% | 34.8% |
| Yellow Time (s)         |      | 4.0   |      |       | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      |       | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      |       | 0.0   |      |      |      |      |       | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      |       | 5.0   |      |      |      |      |       | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      |       |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      |       |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      |       | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effct Green (s)     |      | 53.0  |      | 83.0  | 83.0  |      |      |      |      |       | 42.0  | 42.0  |
| Actuated g/C Ratio      |      | 0.39  |      | 0.61  | 0.61  |      |      |      |      |       | 0.31  | 0.31  |
| v/c Ratio               |      | 0.62  |      | 0.75  | 0.68  |      |      |      |      |       | 0.81  | 1.00  |
| Control Delay           |      | 34.2  |      | 32.3  | 7.0   |      |      |      |      |       | 45.4  | 72.6  |
| Queue Delay             |      | 0.0   |      | 22.9  | 0.4   |      |      |      |      |       | 0.0   | 0.0   |
| Total Delay             |      | 34.2  |      | 55.2  | 7.3   |      |      |      |      |       | 45.4  | 72.6  |
| LOS                     |      | C     |      | E     | A     |      |      |      |      |       | D     | E     |
| Approach Delay          |      | 34.2  |      |       | 12.8  |      |      |      |      |       | 53.4  |       |
| Approach LOS            |      | C     |      |       | B     |      |      |      |      |       | D     |       |
| Queue Length 50th (ft)  |      | 308   |      | 113   | 139   |      |      |      |      |       | 331   | 317   |
| Queue Length 95th (ft)  |      | 337   |      | m153  | 142   |      |      |      |      |       | 377   | #577  |
| Internal Link Dist (ft) |      | 262   |      |       | 240   |      |      | 197  |      |       | 285   |       |
| Turn Bay Length (ft)    |      |       |      | 50    |       |      |      |      |      |       |       | 100   |
| Base Capacity (vph)     |      | 1968  |      | 370   | 3126  |      |      |      |      |       | 1564  | 524   |
| Starvation Cap Reductn  |      | 0     |      | 91    | 416   |      |      |      |      |       | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      |       | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      |       | 0     | 0     |
| Reduced v/c Ratio       |      | 0.62  |      | 0.99  | 0.78  |      |      |      |      |       | 0.81  | 1.00  |

Intersection Summary

Cycle Length: 135

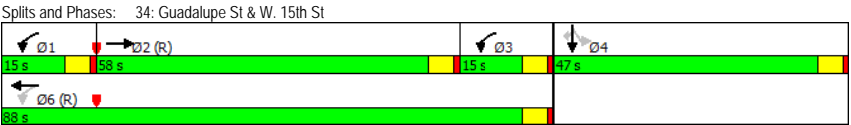
Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 80

| Lane Group              | Ø1   | Ø3   |
|-------------------------|------|------|
| Lane Configurations     |      |      |
| Traffic Volume (vph)    |      |      |
| Future Volume (vph)     |      |      |
| Confl. Peds. (#/hr)     |      |      |
| Confl. Bikes (#/hr)     |      |      |
| Peak Hour Factor        |      |      |
| Adj. Flow (vph)         |      |      |
| Shared Lane Traffic (%) |      |      |
| Lane Group Flow (vph)   |      |      |
| Turn Type               |      |      |
| Protected Phases        | 1    | 3    |
| Permitted Phases        |      |      |
| Detector Phase          |      |      |
| Switch Phase            |      |      |
| Minimum Initial (s)     | 5.0  | 8.0  |
| Minimum Split (s)       | 10.0 | 13.0 |
| Total Split (s)         | 15.0 | 15.0 |
| Total Split (%)         | 11%  | 11%  |
| Yellow Time (s)         | 4.0  | 4.0  |
| All-Red Time (s)        | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |
| Total Lost Time (s)     |      |      |
| Lead/Lag                | Lead |      |
| Lead-Lag Optimize?      | Yes  |      |
| Recall Mode             | Min  | None |
| Act Effect Green (s)    |      |      |
| Actuated g/C Ratio      |      |      |
| v/c Ratio               |      |      |
| Control Delay           |      |      |
| Queue Delay             |      |      |
| Total Delay             |      |      |
| LOS                     |      |      |
| Approach Delay          |      |      |
| Approach LOS            |      |      |
| Queue Length 50th (ft)  |      |      |
| Queue Length 95th (ft)  |      |      |
| Internal Link Dist (ft) |      |      |
| Turn Bay Length (ft)    |      |      |
| Base Capacity (vph)     |      |      |
| Starvation Cap Reductn  |      |      |
| Spillback Cap Reductn   |      |      |
| Storage Cap Reductn     |      |      |
| Reduced v/c Ratio       |      |      |
| Intersection Summary    |      |      |

|   |                        |
|---|------------------------|
| Control Type: Actuated-Coordinated                                |                        |
| Maximum v/c Ratio: 1.00   |                        |
| Intersection Signal Delay: 31.1                                   | Intersection LOS: C    |
| Intersection Capacity Utilization 81.3%                           | ICU Level of Service D |
| Analysis Period (min) 15  |                        |
| # 95th percentile volume exceeds capacity, queue may be longer.   |                        |
| Queue shown is maximum after two cycles.                          |                        |
| m Volume for 95th percentile queue is metered by upstream signal. |                        |



35: Lavaca St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

|                         | ↖     | →     | ↘    | ↙    | ←     | ↖    | ↙     | ↗     | ↘     | ↓    | ↘    | ↙    |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
| Lane Configurations     | ↖     | ↖↖↖   |      |      | ↖↖↖   |      |       | ↖↖↖   | ↖     |      |      |      |
| Traffic Volume (vph)    | 127   | 947   | 0    | 0    | 1739  | 68   | 401   | 909   | 167   | 0    | 0    | 0    |
| Future Volume (vph)     | 127   | 947   | 0    | 0    | 1739  | 68   | 401   | 909   | 167   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 48    |       |      |      |       | 48   | 31    |       | 18    |      |      |      |
| Confl. Bikes (#/hr)     |       |       | 2    |      |       |      |       |       | 28    |      |      |      |
| Peak Hour Factor        | 0.90  | 0.90  | 0.90 | 0.90 | 0.90  | 0.90 | 0.90  | 0.90  | 0.90  | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph)         | 141   | 1052  | 0    | 0    | 1932  | 76   | 446   | 1010  | 186   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 141   | 1052  | 0    | 0    | 2008  | 0    | 0     | 1456  | 186   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 28.0  |      |      | 28.0  |      | 33.0  | 33.0  | 33.0  |      |      |      |
| Total Split (s)         | 20.0  | 86.0  |      |      | 66.0  |      | 49.0  | 49.0  | 49.0  |      |      |      |
| Total Split (%)         | 14.8% | 63.7% |      |      | 48.9% |      | 36.3% | 36.3% | 36.3% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 2.0   | 2.0   | 2.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 6.0   | 6.0   | 6.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 81.0  | 81.0  |      |      | 64.7  |      |       | 43.0  | 43.0  |      |      |      |
| Actuated g/C Ratio      | 0.60  | 0.60  |      |      | 0.48  |      |       | 0.32  | 0.32  |      |      |      |
| v/c Ratio               | 0.70  | 0.34  |      |      | 0.83  |      |       | 0.93  | 0.34  |      |      |      |
| Control Delay           | 72.0  | 3.1   |      |      | 15.0  |      |       | 55.5  | 16.7  |      |      |      |
| Queue Delay             | 0.3   | 0.1   |      |      | 0.0   |      |       | 4.5   | 0.0   |      |      |      |
| Total Delay             | 72.3  | 3.3   |      |      | 15.0  |      |       | 60.0  | 16.7  |      |      |      |
| LOS                     | E     | A     |      |      | B     |      |       | E     | B     |      |      |      |
| Approach Delay          |       | 11.4  |      |      | 15.0  |      |       | 55.1  |       |      |      |      |
| Approach LOS            |       | B     |      |      | B     |      |       | E     |       |      |      |      |
| Queue Length 50th (ft)  | 90    | 45    |      |      | 137   |      |       | 451   | 50    |      |      |      |
| Queue Length 95th (ft)  | m158  | 49    |      |      | 135   |      |       | #543  | 115   |      |      |      |
| Internal Link Dist (ft) |       | 240   |      |      | 335   |      |       | 116   |       |      | 281  |      |
| Turn Bay Length (ft)    | 50    |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 248   | 3051  |      |      | 2416  |      |       | 1572  | 548   |      |      |      |
| Starvation Cap Reductn  | 8     | 873   |      |      | 0     |      |       | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      |       | 81    | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      |       | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.59  | 0.48  |      |      | 0.83  |      |       | 0.98  | 0.34  |      |      |      |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green  
Natural Cycle: 80

MS

Synchro 9 Report  
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35: Lavaca St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 27.7

Intersection LOS: C

Intersection Capacity Utilization 81.3%

ICU Level of Service D

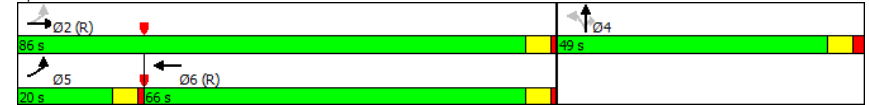
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 35: Lavaca St & W. 15th St



MS

Synchro 9 Report  
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36: Colorado St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

|                         | ←     | →     | ↙    | ↘     | ←     | ↙    | ↘     | →     | ↙    | ↘     | →     | ↙      | ↘ |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|--------|---|
| Lane Group              | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR  | SBL   | SBT   | SBR    |   |
| Lane Configurations     | ↙     | ↙↘    | ↘    | ↙     | ↙↘    | ↘    | ↙↘    | ↘     | ↙↘   | ↘     | ↙     | ↙↘     | ↘ |
| Traffic Volume (vph)    | 42    | 1103  | 22   | 23    | 1429  | 35   | 9     | 27    | 113  | 263   | 6     | 347    |   |
| Future Volume (vph)     | 42    | 1103  | 22   | 23    | 1429  | 35   | 9     | 27    | 113  | 263   | 6     | 347    |   |
| Confl. Peds. (#/hr)     | 33    |       | 35   | 35    |       | 33   | 99    |       | 6    | 6     |       | 99     |   |
| Confl. Bikes (#/hr)     |       |       | 1    |       |       | 2    |       |       | 2    |       |       | 1      |   |
| Peak Hour Factor        | 0.87  | 0.87  | 0.87 | 0.87  | 0.87  | 0.87 | 0.87  | 0.87  | 0.87 | 0.87  | 0.87  | 0.87   |   |
| Adj. Flow (vph)         | 48    | 1268  | 25   | 26    | 1643  | 40   | 10    | 31    | 130  | 302   | 7     | 399    |   |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |      |       |       |        |   |
| Lane Group Flow (vph)   | 48    | 1293  | 0    | 26    | 1683  | 0    | 0     | 171   | 0    | 0     | 309   | 399    |   |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | Perm  | NA    |      | Perm  | NA    | custom |   |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |       | 4     |      |       | 8     |        |   |
| Permitted Phases        | 2     |       |      | 6     |       |      | 4     |       |      | 8     |       | 6      |   |
| Detector Phase          | 5     | 2     |      | 1     | 6     |      | 4     | 4     |      | 8     | 8     | 6      |   |
| Switch Phase            |       |       |      |       |       |      |       |       |      |       |       |        |   |
| Minimum Initial (s)     | 5.0   | 15.0  |      | 5.0   | 15.0  |      | 5.0   | 5.0   |      | 5.0   | 5.0   | 15.0   |   |
| Minimum Split (s)       | 10.0  | 20.0  |      | 10.0  | 22.0  |      | 36.0  | 36.0  |      | 10.0  | 10.0  | 22.0   |   |
| Total Split (s)         | 10.0  | 79.0  |      | 10.0  | 79.0  |      | 46.0  | 46.0  |      | 46.0  | 46.0  | 79.0   |   |
| Total Split (%)         | 7.4%  | 58.5% |      | 7.4%  | 58.5% |      | 34.1% | 34.1% |      | 34.1% | 34.1% | 58.5%  |   |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0    |   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0    |   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      |       | 0.0   |      |       | 0.0   | 0.0    |   |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      |       | 5.0   |      |       | 5.0   | 5.0    |   |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   |      |       |       |      |       | Lag   |        |   |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |       |       |      |       | Yes   |        |   |
| Recall Mode             | None  | C-Max |      | None  | C-Max |      | Max   | Max   |      | Max   | Max   | C-Max  |   |
| Act Effect Green (s)    | 81.0  | 78.0  |      | 80.0  | 76.0  |      |       | 41.0  |      |       | 41.0  | 76.0   |   |
| Actuated g/C Ratio      | 0.60  | 0.58  |      | 0.59  | 0.56  |      |       | 0.30  |      |       | 0.30  | 0.56   |   |
| v/c Ratio               | 0.31  | 0.44  |      | 0.11  | 0.59  |      |       | 0.31  |      |       | 1.03  | 0.47   |   |
| Control Delay           | 11.9  | 6.8   |      | 5.3   | 9.8   |      |       | 15.6  |      |       | 105.9 | 3.9    |   |
| Queue Delay             | 0.0   | 0.2   |      | 0.0   | 0.1   |      |       | 0.0   |      |       | 0.0   | 0.1    |   |
| Total Delay             | 11.9  | 7.0   |      | 5.3   | 9.9   |      |       | 15.6  |      |       | 105.9 | 3.9    |   |
| LOS                     | B     | A     |      | A     | A     |      |       | B     |      |       | F     | A      |   |
| Approach Delay          |       | 7.2   |      |       | 9.9   |      |       | 15.6  |      |       | 48.4  |        |   |
| Approach LOS            |       | A     |      |       | A     |      |       | B     |      |       | D     |        |   |
| Queue Length 50th (ft)  | 0     | 108   |      | 3     | 367   |      |       | 41    |      |       | -289  | 7      |   |
| Queue Length 95th (ft)  | 13    | 123   |      | 6     | 163   |      |       | 94    |      |       | #451  | 48     |   |
| Internal Link Dist (ft) |       | 335   |      |       | 362   |      |       | 155   |      |       | 114   |        |   |
| Turn Bay Length (ft)    | 90    |       |      | 90    |       |      |       |       |      |       |       | 100    |   |
| Base Capacity (vph)     | 155   | 2927  |      | 229   | 2843  |      |       | 559   |      |       | 300   | 840    |   |
| Starvation Cap Reductn  | 0     | 647   |      | 0     | 268   |      |       | 0     |      |       | 0     | 0      |   |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 111   |      |       | 0     |      |       | 0     | 26     |   |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      |       | 0     |      |       | 0     | 0      |   |
| Reduced v/c Ratio       | 0.31  | 0.57  |      | 0.11  | 0.65  |      |       | 0.31  |      |       | 1.03  | 0.49   |   |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green  
Natural Cycle: 75

MS

Synchro 9 Report  
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36: Colorado St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.03

Intersection Signal Delay: 16.1

Intersection LOS: B

Intersection Capacity Utilization 94.2%

ICU Level of Service F

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 36: Colorado St & W. 15th St



MS

Synchro 9 Report  
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37: N. Congress Ave & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

|                         | →     | ↖    | ↗     | ←     | ↖    | ↗     |
|-------------------------|-------|------|-------|-------|------|-------|
| Lane Group              | EBT   | EBR  | WBL   | WBT   | NBL  | NBR   |
| Lane Configurations     | ↑↑↑   |      | ↖     | ↑↑↑   |      | ↗     |
| Traffic Volume (vph)    | 1539  | 0    | 0     | 1244  | 0    | 1     |
| Future Volume (vph)     | 1539  | 0    | 0     | 1244  | 0    | 1     |
| Confl. Peds. (#/hr)     |       | 49   | 49    |       | 41   | 14    |
| Confl. Bikes (#/hr)     |       |      |       |       |      | 4     |
| Peak Hour Factor        | 0.86  | 0.86 | 0.86  | 0.86  | 0.86 | 0.86  |
| Adj. Flow (vph)         | 1790  | 0    | 0     | 1447  | 0    | 1     |
| Shared Lane Traffic (%) |       |      |       |       |      |       |
| Lane Group Flow (vph)   | 1790  | 0    | 0     | 1447  | 0    | 1     |
| Turn Type               | NA    |      | pm+pt | NA    |      | Perm  |
| Protected Phases        | 2     |      | 1     | 6     |      |       |
| Permitted Phases        |       |      | 6     |       |      | 4     |
| Detector Phase          | 2     |      | 1     | 6     |      | 4     |
| Switch Phase            |       |      |       |       |      |       |
| Minimum Initial (s)     | 5.0   |      | 5.0   | 5.0   |      | 5.0   |
| Minimum Split (s)       | 25.0  |      | 10.0  | 25.0  |      | 33.0  |
| Total Split (s)         | 92.0  |      | 10.0  | 102.0 |      | 33.0  |
| Total Split (%)         | 68.1% |      | 7.4%  | 75.6% |      | 24.4% |
| Yellow Time (s)         | 4.0   |      | 4.0   | 4.0   |      | 4.0   |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0   |      | 1.0   |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0   |      | 0.0   |
| Total Lost Time (s)     | 5.0   |      | 5.0   | 5.0   |      | 5.0   |
| Lead/Lag                | Lag   |      | Lead  |       |      |       |
| Lead-Lag Optimize?      | Yes   |      | Yes   |       |      |       |
| Recall Mode             | C-Max |      | None  | C-Max |      | Max   |
| Act Effect Green (s)    | 97.0  |      |       | 97.0  |      | 28.0  |
| Actuated g/C Ratio      | 0.72  |      |       | 0.72  |      | 0.21  |
| v/c Ratio               | 0.49  |      |       | 0.40  |      | 0.00  |
| Control Delay           | 6.1   |      |       | 7.8   |      | 0.0   |
| Queue Delay             | 0.0   |      |       | 0.1   |      | 0.0   |
| Total Delay             | 6.1   |      |       | 8.0   |      | 0.0   |
| LOS                     | A     |      |       | A     |      | A     |
| Approach Delay          | 6.1   |      |       | 8.0   |      |       |
| Approach LOS            | A     |      |       | A     |      |       |
| Queue Length 50th (ft)  | 139   |      |       | 182   |      | 0     |
| Queue Length 95th (ft)  | m149  |      |       | 80    |      | 0     |
| Internal Link Dist (ft) | 362   |      |       | 356   | 125  |       |
| Turn Bay Length (ft)    |       |      |       |       |      |       |
| Base Capacity (vph)     | 3653  |      |       | 3653  |      | 383   |
| Starvation Cap Reductn  | 326   |      |       | 953   |      | 0     |
| Spillback Cap Reductn   | 0     |      |       | 293   |      | 0     |
| Storage Cap Reductn     | 0     |      |       | 0     |      | 0     |
| Reduced v/c Ratio       | 0.54  |      |       | 0.54  |      | 0.00  |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 75

MS

Synchro 9 Report  
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37: N. Congress Ave & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.49

Intersection Signal Delay: 7.0

Intersection LOS: A

Intersection Capacity Utilization 61.4%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 37: N. Congress Ave & W. 15th St



MS

Synchro 9 Report  
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## 38: Brazos St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2024 Background

Timing Plan: PM

| Lane Group              | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR   | SBL   | SBT   | SBR  |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|-------|-------|-------|------|
| Lane Configurations     | ↰     | ↰↰↰   |      | ↰     | ↰↰↰   |      |       | ↰     | ↰     |       | ↰↰    |      |
| Traffic Volume (vph)    | 5     | 1527  | 39   | 10    | 1098  | 11   | 135   | 3     | 119   | 66    | 3     | 89   |
| Future Volume (vph)     | 5     | 1527  | 39   | 10    | 1098  | 11   | 135   | 3     | 119   | 66    | 3     | 89   |
| Confl. Peds. (#/hr)     | 8     |       | 9    | 9     |       | 8    | 5     |       | 19    | 19    |       | 5    |
| Confl. Bikes (#/hr)     |       |       |      |       |       | 1    |       |       |       |       |       | 1    |
| Peak Hour Factor        | 0.93  | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93 |
| Adj. Flow (vph)         | 5     | 1642  | 42   | 11    | 1181  | 12   | 145   | 3     | 128   | 71    | 3     | 96   |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |       |       |       |      |
| Lane Group Flow (vph)   | 5     | 1684  | 0    | 11    | 1193  | 0    | 0     | 148   | 128   | 0     | 170   | 0    |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | Perm  | NA    | Perm  | Perm  | NA    |      |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |       | 4     |       |       | 8     |      |
| Permitted Phases        | 2     |       |      | 6     |       |      | 4     |       | 4     | 8     |       |      |
| Detector Phase          | 5     | 2     |      | 1     | 6     |      | 4     | 4     | 4     | 8     | 8     |      |
| Switch Phase            |       |       |      |       |       |      |       |       |       |       |       |      |
| Minimum Initial (s)     | 5.0   | 15.0  |      | 5.0   | 15.0  |      | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  |      |
| Minimum Split (s)       | 10.0  | 22.0  |      | 10.0  | 22.0  |      | 32.0  | 32.0  | 32.0  | 32.0  | 32.0  |      |
| Total Split (s)         | 12.0  | 77.0  |      | 12.0  | 77.0  |      | 46.0  | 46.0  | 46.0  | 46.0  | 46.0  |      |
| Total Split (%)         | 8.9%  | 57.0% |      | 8.9%  | 57.0% |      | 34.1% | 34.1% | 34.1% | 34.1% | 34.1% |      |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |      |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      |       | 0.0   | 0.0   |       | 0.0   |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      |       | 5.0   | 5.0   |       | 5.0   |      |
| Lead/Lag                | Lead  | Lead  |      | Lag   | Lag   |      |       |       |       |       |       |      |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |       |       |       |       |       |      |
| Recall Mode             | None  | C-Max |      | None  | C-Max |      | None  | None  | None  | None  | None  |      |
| Act Effect Green (s)    | 96.2  | 96.2  |      | 98.8  | 98.8  |      | 24.0  | 24.0  |       |       | 24.0  |      |
| Actuated g/C Ratio      | 0.71  | 0.71  |      | 0.73  | 0.73  |      | 0.18  | 0.18  |       |       | 0.18  |      |
| v/c Ratio               | 0.02  | 0.47  |      | 0.05  | 0.32  |      | 0.85  | 0.36  |       |       | 0.74  |      |
| Control Delay           | 6.6   | 4.5   |      | 6.5   | 5.1   |      | 89.9  | 15.8  |       |       | 54.5  |      |
| Queue Delay             | 0.0   | 0.0   |      | 0.0   | 0.1   |      | 0.0   | 0.0   |       |       | 0.0   |      |
| Total Delay             | 6.6   | 4.6   |      | 6.5   | 5.2   |      | 89.9  | 15.8  |       |       | 54.5  |      |
| LOS                     | A     | A     |      | A     | A     |      | F     | B     |       |       | D     |      |
| Approach Delay          |       | 4.6   |      |       | 5.3   |      |       | 55.5  |       |       | 54.5  |      |
| Approach LOS            |       | A     |      |       | A     |      |       | E     |       |       | D     |      |
| Queue Length 50th (ft)  | 0     | 43    |      | 2     | 84    |      |       | 127   | 22    |       | 102   |      |
| Queue Length 95th (ft)  | m2    | 106   |      | m7    | 220   |      |       | 193   | 74    |       | 173   |      |
| Internal Link Dist (ft) |       | 356   |      |       | 297   |      |       | 199   |       |       | 273   |      |
| Turn Bay Length (ft)    | 100   |       |      | 40    |       |      |       |       | 50    |       |       |      |
| Base Capacity (vph)     | 328   | 3605  |      | 240   | 3711  |      |       | 298   | 530   |       | 358   |      |
| Starvation Cap Reductn  | 0     | 173   |      | 0     | 1233  |      |       | 0     | 0     |       | 0     |      |
| Spillback Cap Reductn   | 0     | 269   |      | 0     | 0     |      |       | 0     | 4     |       | 2     |      |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      |       | 0     | 0     |       | 0     |      |
| Reduced v/c Ratio       | 0.02  | 0.50  |      | 0.05  | 0.48  |      |       | 0.50  | 0.24  |       | 0.48  |      |

## Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 70

MS

Synchro 9 Report  
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## 38: Brazos St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2024 Background

Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 11.6

Intersection LOS: B

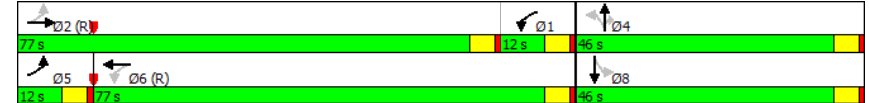
Intersection Capacity Utilization 69.9%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 38: Brazos St &amp; W. 15th St



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Synchro 9 Report  
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39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑↑   |      | ↓     | ↑↑↑   |      |      |      |      |       | ↓↑↑   | ↑     |
| Traffic Volume (vph)    | 0    | 1830  | 117  | 67    | 902   | 0    | 0    | 0    | 0    | 522   | 648   | 315   |
| Future Volume (vph)     | 0    | 1830  | 117  | 67    | 902   | 0    | 0    | 0    | 0    | 522   | 648   | 315   |
| Confl. Peds. (#/hr)     |      |       | 11   | 11    |       |      |      |      |      | 32    |       | 5     |
| Confl. Bikes (#/hr)     |      |       |      |       |       |      |      |      |      |       |       | 2     |
| Peak Hour Factor        | 0.93 | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93 | 0.93 | 0.93 | 0.93  | 0.93  | 0.93  |
| Adj. Flow (vph)         | 0    | 1968  | 126  | 72    | 970   | 0    | 0    | 0    | 0    | 561   | 697   | 339   |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 2094  | 0    | 72    | 970   | 0    | 0    | 0    | 0    | 0     | 1258  | 339   |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      | 3.0   | 10.0  |      |      |      |      | 7.0   | 7.0   | 7.0   |
| Minimum Split (s)       |      | 28.0  |      | 8.0   | 28.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (s)         |      | 80.0  |      | 15.0  | 95.0  |      |      |      |      | 40.0  | 40.0  | 40.0  |
| Total Split (%)         |      | 59.3% |      | 11.1% | 70.4% |      |      |      |      | 29.6% | 29.6% | 29.6% |
| Yellow Time (s)         |      | 4.0   |      | 4.0   | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      | 1.0   | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      | 0.0   | 0.0   |      |      |      |      |       | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      | 5.0   | 5.0   |      |      |      |      |       | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      | Lead  |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      | Yes   |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      | None  | C-Max |      |      |      |      | None  | None  | None  |
| Act Effect Green (s)    |      | 79.6  |      | 90.0  | 90.0  |      |      |      |      |       | 35.0  | 35.0  |
| Actuated g/C Ratio      |      | 0.59  |      | 0.67  | 0.67  |      |      |      |      |       | 0.26  | 0.26  |
| v/c Ratio               |      | 0.71  |      | 0.47  | 0.29  |      |      |      |      | 1.25  | dl    | 0.74  |
| Control Delay           |      | 9.9   |      | 41.8  | 6.2   |      |      |      |      |       | 74.5  | 45.5  |
| Queue Delay             |      | 0.1   |      | 0.0   | 0.2   |      |      |      |      |       | 0.0   | 0.0   |
| Total Delay             |      | 10.1  |      | 41.8  | 6.4   |      |      |      |      |       | 74.5  | 45.5  |
| LOS                     |      | B     |      | D     | A     |      |      |      |      |       | E     | D     |
| Approach Delay          |      | 10.1  |      |       | 8.8   |      |      |      |      |       | 68.4  |       |
| Approach LOS            |      | B     |      |       | A     |      |      |      |      |       | E     |       |
| Queue Length 50th (ft)  |      | 150   |      | 24    | 87    |      |      |      |      |       | 405   | 213   |
| Queue Length 95th (ft)  |      | 353   |      | m72   | 101   |      |      |      |      |       | #514  | 332   |
| Internal Link Dist (ft) |      | 297   |      |       | 282   |      |      | 125  |      |       | 272   |       |
| Turn Bay Length (ft)    |      |       |      | 70    |       |      |      |      |      |       |       | 50    |
| Base Capacity (vph)     |      | 2969  |      | 183   | 3390  |      |      |      |      |       | 1261  | 460   |
| Starvation Cap Reductn  |      | 167   |      | 0     | 1301  |      |      |      |      |       | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      |       | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      |       | 0     | 0     |
| Reduced v/c Ratio       |      | 0.75  |      | 0.39  | 0.46  |      |      |      |      |       | 1.00  | 0.74  |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 80

39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 29.5

Intersection LOS: C

Intersection Capacity Utilization 77.4%

ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 39: San Jacinto Blvd & W. 15th St



## 40: Trinity St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2024 Background

Timing Plan: PM

| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     |       |       |      |      |       |      |       |       |       |      |      |      |
| Traffic Volume (vph)    | 89    | 2032  | 0    | 0    | 791   | 147  | 183   | 315   | 289   | 0    | 0    | 0    |
| Future Volume (vph)     | 89    | 2032  | 0    | 0    | 791   | 147  | 183   | 315   | 289   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 2     |       |      |      |       | 2    | 7     |       | 8     |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       |      |       |       | 9     |      |      |      |
| Peak Hour Factor        | 0.96  | 0.96  | 0.96 | 0.96 | 0.96  | 0.96 | 0.96  | 0.96  | 0.96  | 0.96 | 0.96 | 0.96 |
| Adj. Flow (vph)         | 93    | 2117  | 0    | 0    | 824   | 153  | 191   | 328   | 301   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 93    | 2117  | 0    | 0    | 977   | 0    | 0     | 519   | 301   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 28.0  |      |      | 28.0  |      | 35.0  | 35.0  | 35.0  |      |      |      |
| Total Split (s)         | 10.0  | 100.0 |      |      | 90.0  |      | 35.0  | 35.0  | 35.0  |      |      |      |
| Total Split (%)         | 7.4%  | 74.1% |      |      | 66.7% |      | 25.9% | 25.9% | 25.9% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 5.0   | 5.0   |       |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 95.0  | 95.0  |      |      | 85.0  |      | 30.0  | 30.0  |       |      |      |      |
| Actuated g/C Ratio      | 0.70  | 0.70  |      |      | 0.63  |      | 0.22  | 0.22  |       |      |      |      |
| v/c Ratio               | 0.25  | 0.59  |      |      | 0.31  |      | 0.67  | 0.78  |       |      |      |      |
| Control Delay           | 5.9   | 6.8   |      |      | 15.3  |      | 53.1  | 55.2  |       |      |      |      |
| Queue Delay             | 0.0   | 0.3   |      |      | 0.0   |      | 0.0   | 0.2   |       |      |      |      |
| Total Delay             | 5.9   | 7.1   |      |      | 15.3  |      | 53.1  | 55.4  |       |      |      |      |
| LOS                     | A     | A     |      |      | B     |      | D     | E     |       |      |      |      |
| Approach Delay          |       | 7.0   |      |      | 15.3  |      | 54.0  |       |       |      |      |      |
| Approach LOS            |       | A     |      |      | B     |      | D     |       |       |      |      |      |
| Queue Length 50th (ft)  | 19    | 162   |      |      | 188   |      | 221   | 206   |       |      |      |      |
| Queue Length 95th (ft)  | m25   | m170  |      |      | 201   |      | 285   | #342  |       |      |      |      |
| Internal Link Dist (ft) |       | 282   |      |      | 641   |      | 149   |       |       | 621  |      |      |
| Turn Bay Length (ft)    | 100   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 365   | 3578  |      |      | 3140  |      | 769   | 384   |       |      |      |      |
| Starvation Cap Reductn  | 0     | 683   |      |      | 0     |      | 0     | 0     |       |      |      |      |
| Spillback Cap Reductn   | 0     | 326   |      |      | 0     |      | 0     | 3     |       |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     |       |      |      |      |
| Reduced v/c Ratio       | 0.25  | 0.73  |      |      | 0.31  |      | 0.67  | 0.79  |       |      |      |      |

## Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 75

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Synchro 9 Report  
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## 40: Trinity St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2024 Background

Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 18.6

Intersection LOS: B

Intersection Capacity Utilization 77.4%

ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 40: Trinity St &amp; W. 15th St



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Synchro 9 Report  
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11: Colorado St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 27.4 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | D    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |      |      | ↕    |      |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 6    | 106  | 14   | 0    | 65   | 202  | 10   | 0    | 15   | 156  | 262  |
| Future Vol, veh/h   | 0    | 6    | 106  | 14   | 0    | 65   | 202  | 10   | 0    | 15   | 156  | 262  |
| Peak Hour Factor    | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 8    | 136  | 18   | 0    | 83   | 259  | 13   | 0    | 19   | 200  | 336  |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB   | NB   |
|----------------------------|------|------|------|
| Opposing Approach          | WB   | EB   | SB   |
| Opposing Lanes             | 1    | 1    | 1    |
| Conflicting Approach Left  | SB   | NB   | EB   |
| Conflicting Lanes Left     | 1    | 1    | 1    |
| Conflicting Approach Right | NB   | SB   | WB   |
| Conflicting Lanes Right    | 1    | 1    | 1    |
| HCM Control Delay          | 13.7 | 21.9 | 39.7 |
| HCM LOS                    | B    | C    | E    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 3%    | 5%    | 23%   | 12%   |
| Vol Thru, %            | 36%   | 84%   | 73%   | 61%   |
| Vol Right, %           | 61%   | 11%   | 4%    | 28%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 433   | 126   | 277   | 152   |
| LT Vol                 | 15    | 6     | 65    | 18    |
| Through Vol            | 156   | 106   | 202   | 92    |
| RT Vol                 | 262   | 14    | 10    | 42    |
| Lane Flow Rate         | 555   | 162   | 355   | 195   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.897 | 0.325 | 0.658 | 0.373 |
| Departure Headway (Hd) | 5.814 | 7.245 | 6.675 | 6.883 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 616   | 499   | 536   | 526   |
| Service Time           | 3.897 | 5.258 | 4.774 | 4.883 |
| HCM Lane V/C Ratio     | 0.901 | 0.325 | 0.662 | 0.371 |
| HCM Control Delay      | 39.7  | 13.7  | 21.9  | 13.9  |
| HCM Lane LOS           | E     | B     | C     | B     |
| HCM 95th-tile Q        | 10.9  | 1.4   | 4.8   | 1.7   |

11: Colorado St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 18   | 92   | 42   |
| Future Vol, veh/h   | 0    | 18   | 92   | 42   |
| Peak Hour Factor    | 0.78 | 0.78 | 0.78 | 0.78 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 23   | 118  | 54   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 13.9 |
| HCM LOS                    | B    |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection              |    |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 12 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B  |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↶    |      |      |      | ↷    |      |      |      | ↶    |      |
| Traffic Vol, veh/h  | 0    | 0    | 389  | 0    | 0    | 0    | 338  | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h   | 0    | 0    | 389  | 0    | 0    | 0    | 338  | 0    | 0    | 0    | 0    | 0    |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 452  | 0    | 0    | 0    | 393  | 0    | 0    | 0    | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB   | NB |
|----------------------------|------|------|----|
| Opposing Approach          | WB   | EB   | SB |
| Opposing Lanes             | 1    | 1    | 1  |
| Conflicting Approach Left  | SB   | NB   | EB |
| Conflicting Lanes Left     | 1    | 1    | 1  |
| Conflicting Approach Right | NB   | SB   | WB |
| Conflicting Lanes Right    | 1    | 1    | 1  |
| HCM Control Delay          | 12.6 | 11.5 | 0  |
| HCM LOS                    | B    | B    | -  |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 0%    | 0%    | 0%    | 0%    |
| Vol Thru, %            | 100%  | 100%  | 100%  | 0%    |
| Vol Right, %           | 0%    | 0%    | 0%    | 100%  |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 0     | 389   | 338   | 13    |
| LT Vol                 | 0     | 0     | 0     | 0     |
| Through Vol            | 0     | 389   | 338   | 0     |
| RT Vol                 | 0     | 0     | 0     | 13    |
| Lane Flow Rate         | 0     | 452   | 393   | 15    |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0     | 0.549 | 0.483 | 0.021 |
| Departure Headway (Hd) | 5.758 | 4.368 | 4.423 | 5.113 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 0     | 828   | 817   | 698   |
| Service Time           | 3.807 | 2.382 | 2.437 | 3.159 |
| HCM Lane V/C Ratio     | 0     | 0.546 | 0.481 | 0.021 |
| HCM Control Delay      | 8.8   | 12.6  | 11.5  | 8.3   |
| HCM Lane LOS           | N     | B     | B     | A     |
| HCM 95th-tile Q        | 0     | 3.4   | 2.7   | 0.1   |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      |      | ↶    |
| Traffic Vol, veh/h  | 0    | 0    | 0    | 13   |
| Future Vol, veh/h   | 0    | 0    | 0    | 13   |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 0    | 15   |
| Number of Lanes     | 0    | 0    | 0    | 1    |

| Approach                   | SB  |
|----------------------------|-----|
| Opposing Approach          | NB  |
| Opposing Lanes             | 1   |
| Conflicting Approach Left  | WB  |
| Conflicting Lanes Left     | 1   |
| Conflicting Approach Right | EB  |
| Conflicting Lanes Right    | 1   |
| HCM Control Delay          | 8.3 |
| HCM LOS                    | A   |

14: Brazos St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 44.8 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | E    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |      |      | ↕    |      |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 40   | 383  | 26   | 0    | 11   | 65   | 25   | 0    | 191  | 167  | 0    |
| Future Vol, veh/h   | 0    | 40   | 383  | 26   | 0    | 11   | 65   | 25   | 0    | 191  | 167  | 0    |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 47   | 445  | 30   | 0    | 13   | 76   | 29   | 0    | 222  | 194  | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB   | NB   |
|----------------------------|------|------|------|
| Opposing Approach          | WB   | EB   | SB   |
| Opposing Lanes             | 1    | 1    | 1    |
| Conflicting Approach Left  | SB   | NB   | EB   |
| Conflicting Lanes Left     | 1    | 1    | 1    |
| Conflicting Approach Right | NB   | SB   | WB   |
| Conflicting Lanes Right    | 1    | 1    | 1    |
| HCM Control Delay          | 68.6 | 14.5 | 39.9 |
| HCM LOS                    | F    | B    | E    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 53%   | 9%    | 11%   | 36%   |
| Vol Thru, %            | 47%   | 85%   | 64%   | 21%   |
| Vol Right, %           | 0%    | 6%    | 25%   | 43%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 358   | 449   | 101   | 273   |
| LT Vol                 | 191   | 40    | 11    | 97    |
| Through Vol            | 167   | 383   | 65    | 58    |
| RT Vol                 | 0     | 26    | 25    | 118   |
| Lane Flow Rate         | 416   | 522   | 117   | 317   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.851 | 1.009 | 0.27  | 0.651 |
| Departure Headway (Hd) | 7.361 | 6.957 | 8.402 | 7.379 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 491   | 522   | 430   | 486   |
| Service Time           | 5.439 | 5.024 | 6.402 | 5.465 |
| HCM Lane V/C Ratio     | 0.847 | 1     | 0.272 | 0.652 |
| HCM Control Delay      | 39.9  | 68.6  | 14.5  | 23.3  |
| HCM Lane LOS           | E     | F     | B     | C     |
| HCM 95th-tile Q        | 8.7   | 14.2  | 1.1   | 4.6   |

14: Brazos St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 97   | 58   | 118  |
| Future Vol, veh/h   | 0    | 97   | 58   | 118  |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 113  | 67   | 137  |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 23.3 |
| HCM LOS                    | C    |

16: San Jacinto Blvd & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 25.9 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | D    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↶    |      |      |      | ↷    |      |      |      |      |      |
| Traffic Vol, veh/h  | 0    | 0    | 203  | 306  | 0    | 37   | 54   | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h   | 0    | 0    | 203  | 306  | 0    | 37   | 54   | 0    | 0    | 0    | 0    | 0    |
| Peak Hour Factor    | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 214  | 322  | 0    | 39   | 57   | 0    | 0    | 0    | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    |

| Approach                   |  | EB   | WB   |
|----------------------------|--|------|------|
| Opposing Approach          |  | WB   | EB   |
| Opposing Lanes             |  | 1    | 1    |
| Conflicting Approach Left  |  | SB   |      |
| Conflicting Lanes Left     |  | 3    | 0    |
| Conflicting Approach Right |  |      | SB   |
| Conflicting Lanes Right    |  | 0    | 3    |
| HCM Control Delay          |  | 39.6 | 11.9 |
| HCM LOS                    |  | E    | B    |

| Lane                   | EBLn1 | WBLn1 | SBLn1 | SBLn2 | SBLn3 |
|------------------------|-------|-------|-------|-------|-------|
| Vol Left, %            | 0%    | 41%   | 0%    | 0%    | 0%    |
| Vol Thru, %            | 40%   | 59%   | 100%  | 100%  | 0%    |
| Vol Right, %           | 60%   | 0%    | 0%    | 0%    | 100%  |
| Sign Control           | Stop  | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 509   | 91    | 285   | 285   | 23    |
| LT Vol                 | 0     | 37    | 0     | 0     | 0     |
| Through Vol            | 203   | 54    | 285   | 285   | 0     |
| RT Vol                 | 306   | 0     | 0     | 0     | 23    |
| Lane Flow Rate         | 536   | 96    | 299   | 299   | 24    |
| Geometry Grp           | 7     | 7     | 7     | 7     | 7     |
| Degree of Util (X)     | 0.893 | 0.195 | 0.54  | 0.54  | 0.027 |
| Departure Headway (Hd) | 6.002 | 7.328 | 6.494 | 6.494 | 4.019 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 600   | 488   | 554   | 554   | 884   |
| Service Time           | 3.757 | 5.105 | 4.251 | 4.251 | 1.775 |
| HCM Lane V/C Ratio     | 0.893 | 0.197 | 0.54  | 0.54  | 0.027 |
| HCM Control Delay      | 39.6  | 11.9  | 16.7  | 16.7  | 6.9   |
| HCM Lane LOS           | E     | B     | C     | C     | A     |
| HCM 95th-tile Q        | 10.7  | 0.7   | 3.2   | 3.2   | 0.1   |

16: San Jacinto Blvd & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↶↷   | ↷    |
| Traffic Vol, veh/h  | 0    | 0    | 569  | 23   |
| Future Vol, veh/h   | 0    | 0    | 569  | 23   |
| Peak Hour Factor    | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 599  | 24   |
| Number of Lanes     | 0    | 0    | 2    | 1    |

| Approach                   |  | SB   |
|----------------------------|--|------|
| Opposing Approach          |  |      |
| Opposing Lanes             |  | 0    |
| Conflicting Approach Left  |  | WB   |
| Conflicting Lanes Left     |  | 1    |
| Conflicting Approach Right |  | EB   |
| Conflicting Lanes Right    |  | 1    |
| HCM Control Delay          |  | 16.3 |
| HCM LOS                    |  | C    |

20: Colorado St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 13.3 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ⬆    |      |      |      | ⬆    |      |      |      | ⬆    |      |
| Traffic Vol, veh/h  | 0    | 80   | 36   | 15   | 0    | 0    | 174  | 0    | 0    | 15   | 302  | 0    |
| Future Vol, veh/h   | 0    | 80   | 36   | 15   | 0    | 0    | 174  | 0    | 0    | 15   | 302  | 0    |
| Peak Hour Factor    | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 98   | 44   | 18   | 0    | 0    | 212  | 0    | 0    | 18   | 368  | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB   | NB   |
|----------------------------|------|------|------|
| Opposing Approach          | WB   | EB   | SB   |
| Opposing Lanes             | 1    | 1    | 1    |
| Conflicting Approach Left  | SB   | NB   | EB   |
| Conflicting Lanes Left     | 1    | 1    | 1    |
| Conflicting Approach Right | NB   | SB   | WB   |
| Conflicting Lanes Right    | 1    | 1    | 1    |
| HCM Control Delay          | 11.4 | 12.1 | 15.9 |
| HCM LOS                    | B    | B    | C    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 5%    | 61%   | 0%    | 0%    |
| Vol Thru, %            | 95%   | 27%   | 100%  | 51%   |
| Vol Right, %           | 0%    | 11%   | 0%    | 49%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 317   | 131   | 174   | 182   |
| LT Vol                 | 15    | 80    | 0     | 0     |
| Through Vol            | 302   | 36    | 174   | 93    |
| RT Vol                 | 0     | 15    | 0     | 89    |
| Lane Flow Rate         | 387   | 160   | 212   | 222   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.583 | 0.269 | 0.348 | 0.333 |
| Departure Headway (Hd) | 5.428 | 6.069 | 5.907 | 5.407 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 661   | 588   | 605   | 661   |
| Service Time           | 3.486 | 4.144 | 3.978 | 3.475 |
| HCM Lane V/C Ratio     | 0.585 | 0.272 | 0.35  | 0.336 |
| HCM Control Delay      | 15.9  | 11.4  | 12.1  | 11.2  |
| HCM Lane LOS           | C     | B     | B     | B     |
| HCM 95th-tile Q        | 3.8   | 1.1   | 1.6   | 1.5   |

20: Colorado St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ⬆    |      |
| Traffic Vol, veh/h  | 0    | 0    | 93   | 89   |
| Future Vol, veh/h   | 0    | 0    | 93   | 89   |
| Peak Hour Factor    | 0.82 | 0.82 | 0.82 | 0.82 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 113  | 109  |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 11.2 |
| HCM LOS                    | B    |

| Intersection              |     |  |  |  |  |  |  |  |  |
|---------------------------|-----|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 8.7 |  |  |  |  |  |  |  |  |
| Intersection LOS          | A   |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | WBU  | WBT  | WBR  | SBU  | SBL  | SBR  |
|---------------------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↱    |      | ↱    |      |      | ↱↲   |      |
| Traffic Vol, veh/h  | 0    | 0    | 193  | 0    | 40   | 52   | 0    | 97   | 0    |
| Future Vol, veh/h   | 0    | 0    | 193  | 0    | 40   | 52   | 0    | 97   | 0    |
| Peak Hour Factor    | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 238  | 0    | 49   | 64   | 0    | 120  | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 1    | 0    | 0    | 1    | 0    |

| Approach                   | EB  | WB  | SB  |
|----------------------------|-----|-----|-----|
| Opposing Approach          | WB  | EB  |     |
| Opposing Lanes             | 1   | 1   | 0   |
| Conflicting Approach Left  | SB  |     | WB  |
| Conflicting Lanes Left     | 1   | 0   | 1   |
| Conflicting Approach Right |     | SB  | EB  |
| Conflicting Lanes Right    | 0   | 1   | 1   |
| HCM Control Delay          | 9.1 | 7.8 | 8.9 |
| HCM LOS                    | A   | A   | A   |

| Lane                   | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, %            | 0%    | 0%    | 100%  |
| Vol Thru, %            | 100%  | 43%   | 0%    |
| Vol Right, %           | 0%    | 57%   | 0%    |
| Sign Control           | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 193   | 92    | 97    |
| LT Vol                 | 0     | 0     | 97    |
| Through Vol            | 193   | 40    | 0     |
| RT Vol                 | 0     | 52    | 0     |
| Lane Flow Rate         | 238   | 114   | 120   |
| Geometry Grp           | 1     | 1     | 1     |
| Degree of Util (X)     | 0.288 | 0.131 | 0.163 |
| Departure Headway (Hd) | 4.357 | 4.155 | 4.904 |
| Convergence, Y/N       | Yes   | Yes   | Yes   |
| Cap                    | 827   | 864   | 733   |
| Service Time           | 2.374 | 2.174 | 2.928 |
| HCM Lane V/C Ratio     | 0.288 | 0.132 | 0.164 |
| HCM Control Delay      | 9.1   | 7.8   | 8.9   |
| HCM Lane LOS           | A     | A     | A     |
| HCM 95th-tile Q        | 1.2   | 0.5   | 0.6   |

4: Colorado St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 1.8  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑↑   |      | ↓    | ↑↑   | ↓    |      |
| Traffic Vol, veh/h       | 672  | 40   | 44   | 1365 | 13   | 173  |
| Future Vol, veh/h        | 672  | 40   | 44   | 1365 | 13   | 173  |
| Conflicting Peds, #/hr   | 0    | 8    | 8    | 0    | 0    | 11   |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | 40   | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 94   | 94   | 94   | 94   | 94   | 94   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 715  | 43   | 47   | 1452 | 14   | 184  |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |      |
|----------------------|--------|---|--------|---|--------|------|
| Conflicting Flow All | 0      | 0 | 765    | 0 | 1564   | 398  |
| Stage 1              | -      | - | -      | - | 744    | -    |
| Stage 2              | -      | - | -      | - | 820    | -    |
| Critical Hdwy        | -      | - | 4.14   | - | 6.84   | 6.94 |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.84   | -    |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.84   | -    |
| Follow-up Hdwy       | -      | - | 2.22   | - | 3.52   | 3.32 |
| Pot Cap-1 Maneuver   | -      | - | 844    | - | 102    | 601  |
| Stage 1              | -      | - | -      | - | 431    | -    |
| Stage 2              | -      | - | -      | - | 393    | -    |
| Platoon blocked, %   | -      | - | -      | - | -      | -    |
| Mov Cap-1 Maneuver   | -      | - | 835    | - | 96     | 590  |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 96     | -    |
| Stage 1              | -      | - | -      | - | 428    | -    |
| Stage 2              | -      | - | -      | - | 371    | -    |

| Approach             | EB |  | WB  |  | NB   |  |
|----------------------|----|--|-----|--|------|--|
| HCM Control Delay, s | 0  |  | 0.3 |  | 20.1 |  |
| HCM LOS              |    |  |     |  | C    |  |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 434   | -   | -   | 835   | -   |
| HCM Lane V/C Ratio    | 0.456 | -   | -   | 0.056 | -   |
| HCM Control Delay (s) | 20.1  | -   | -   | 9.6   | -   |
| HCM Lane LOS          | C     | -   | -   | A     | -   |
| HCM 95th %tile Q(veh) | 2.3   | -   | -   | 0.2   | -   |

9: Guadalupe St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 42.4 |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    | ↑    |      | ↑    |      |      |      |      | ↑↑   |      |      |
| Traffic Vol, veh/h       | 0    | 21   | 12   | 204  | 97   | 0    | 0    | 0    | 0    | 37   | 1044 | 23   |
| Future Vol, veh/h        | 0    | 21   | 12   | 204  | 97   | 0    | 0    | 0    | 0    | 37   | 1044 | 23   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 56   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 42   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 0    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 22   | 12   | 210  | 100  | 0    | 0    | 0    | 0    | 38   | 1076 | 24   |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |   |
|----------------------|--------|------|--------|------|--------|---|
| Conflicting Flow All | -      | 1206 | 648    | 681  | 1218   | - |
| Stage 1              | -      | 1206 | -      | 0    | 0      | - |
| Stage 2              | -      | 0    | -      | 681  | 1218   | - |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | - |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | - |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | - |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | - |
| Pot Cap-1 Maneuver   | 0      | 182  | 413    | 336  | 179    | 0 |
| Stage 1              | 0      | 255  | -      | -    | -      | 0 |
| Stage 2              | 0      | -    | -      | 407  | 251    | 0 |
| Platoon blocked, %   | -      | -    | -      | -    | -      | - |
| Mov Cap-1 Maneuver   | -      | 175  | 396    | 295  | 172    | - |
| Mov Cap-2 Maneuver   | -      | 175  | -      | 295  | 172    | - |
| Stage 1              | -      | 245  | -      | -    | -      | - |
| Stage 2              | -      | -    | -      | 359  | 241    | - |

| Approach             | EB   |  | WB    |  | SB |  |
|----------------------|------|--|-------|--|----|--|
| HCM Control Delay, s | 23.4 |  | 200.2 |  |    |  |
| HCM LOS              | C    |  | F     |  |    |  |

| Minor Lane/Major Mvmt | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-------|-------|-----|-----|-----|
| Capacity (veh/h)      | 175   | 396   | 240   | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.124 | 0.031 | 1.293 | -   | -   | -   |
| HCM Control Delay (s) | 28.5  | 14.4  | 200.2 | -   | -   | -   |
| HCM Lane LOS          | D     | B     | F     | -   | -   | -   |
| HCM 95th %tile Q(veh) | 0.4   | 0.1   | 16    | -   | -   | -   |

10: Lavaca St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |       |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|-------|------|------|------|------|------|
| Int Delay, s/veh         | 59.8 |      |      |      |      |      |       |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL   | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      | ↕ ↕ ↕ |      |      |      |      |      |
| Traffic Vol, veh/h       | 11   | 54   | 0    | 0    | 172  | 75   | 66    | 1154 | 78   | 0    | 0    | 0    |
| Future Vol, veh/h        | 11   | 54   | 0    | 0    | 172  | 75   | 66    | 1154 | 78   | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 21   | 25    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free  | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -     | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 0     | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | -    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 95   | 95   | 95   | 95   | 95   | 95   | 95    | 95   | 95   | 95   | 95   | 95   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2     | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 12   | 57   | 0    | 0    | 181  | 79   | 69    | 1215 | 82   | 0    | 0    | 0    |

| Major/Minor          | Minor2 |      | Minor1 |   | Major1 |      |          |
|----------------------|--------|------|--------|---|--------|------|----------|
| Conflicting Flow All | 761    | 1461 | -      | - | 1420   | 669  | 25 0 0   |
| Stage 1              | 25     | 25   | -      | - | 1395   | -    | - - -    |
| Stage 2              | 736    | 1436 | -      | - | 25     | -    | - - -    |
| Critical Hdwy        | 6.44   | 6.54 | -      | - | 6.54   | 7.14 | 5.34 - - |
| Critical Hdwy Stg 1  | -      | -    | -      | - | 5.54   | -    | - - -    |
| Critical Hdwy Stg 2  | 6.74   | 5.54 | -      | - | -      | -    | - - -    |
| Follow-up Hdwy       | 3.82   | 4.02 | -      | - | 4.02   | 3.92 | 3.12 - - |
| Pot Cap-1 Maneuver   | 352    | 128  | 0      | 0 | ~ 135  | 343  | 1124 - - |
| Stage 1              | -      | -    | 0      | 0 | 207    | -    | - - -    |
| Stage 2              | 342    | 197  | 0      | 0 | -      | -    | - - -    |
| Platoon blocked, %   | -      | -    | -      | - | -      | -    | - - -    |
| Mov Cap-1 Maneuver   | -      | 117  | -      | - | ~ 124  | 343  | 1124 - - |
| Mov Cap-2 Maneuver   | -      | 117  | -      | - | ~ 124  | -    | - - -    |
| Stage 1              | -      | -    | -      | - | 194    | -    | - - -    |
| Stage 2              | 16     | 185  | -      | - | -      | -    | - - -    |

| Approach             | EB | WB       | NB  |
|----------------------|----|----------|-----|
| HCM Control Delay, s |    | \$ 387.6 | 0.4 |
| HCM LOS              | -  | F        |     |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1 | WBLn1    |
|-----------------------|-------|-----|-----|-------|----------|
| Capacity (veh/h)      | 1124  | -   | -   | -     | 154      |
| HCM Lane V/C Ratio    | 0.062 | -   | -   | -     | 1.688    |
| HCM Control Delay (s) | 8.4   | -   | -   | -     | \$ 387.6 |
| HCM Lane LOS          | A     | -   | -   | -     | F        |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | -     | 18.5     |

| Notes                      |                        |                            |                                |  |
|----------------------------|------------------------|----------------------------|--------------------------------|--|
| -: Volume exceeds capacity | \$: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |  |

13: W. 18th St & Parking Dr. 2  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 5    |      |      |      |      |      |
| Movement                 | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
| Lane Configurations      |      | ↕    |      | ↕    | ↕    | ↕    |
| Traffic Vol, veh/h       | 24   | 394  | 354  | 20   | 97   | 116  |
| Future Vol, veh/h        | 24   | 394  | 354  | 20   | 97   | 116  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | -    | 0    | 0    | -    | 0    | -    |
| Grade, %                 | -    | 0    | 0    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 26   | 428  | 385  | 22   | 105  | 126  |

| Major/Minor          | Major1 |   | Major2 |   | Minor2 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 407    | 0 | -      | 0 | 876    | 396   |
| Stage 1              | -      | - | -      | - | 396    | -     |
| Stage 2              | -      | - | -      | - | 480    | -     |
| Critical Hdwy        | 4.12   | - | -      | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | 2.218  | - | -      | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | 1152   | - | -      | - | 319    | 653   |
| Stage 1              | -      | - | -      | - | 680    | -     |
| Stage 2              | -      | - | -      | - | 622    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | 1152   | - | -      | - | 309    | 653   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 309    | -     |
| Stage 1              | -      | - | -      | - | 680    | -     |
| Stage 2              | -      | - | -      | - | 603    | -     |

| Approach             | EB  | WB | SB   |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.5 | 0  | 22.5 |
| HCM LOS              |     |    | C    |

| Minor Lane/Major Mvmt | EBL   | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h)      | 1152  | -   | -   | -   | 433   |
| HCM Lane V/C Ratio    | 0.023 | -   | -   | -   | 0.535 |
| HCM Control Delay (s) | 8.2   | 0   | -   | -   | 22.5  |
| HCM Lane LOS          | A     | A   | -   | -   | C     |
| HCM 95th %tile Q(veh) | 0.1   | -   | -   | -   | 3.1   |

15: Brazos St & Parking Dr. 1  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 9.4  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | ↑    |      |      | ↑    | ↑    |      |
| Traffic Vol, veh/h       | 242  | 145  | 30   | 202  | 53   | 50   |
| Future Vol, veh/h        | 242  | 145  | 30   | 202  | 53   | 50   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 263  | 158  | 33   | 220  | 58   | 54   |

| Major/Minor          | Minor2 | Major1 |       | Major2 |     |
|----------------------|--------|--------|-------|--------|-----|
| Conflicting Flow All | 370    | 85     | 112   | 0      | - 0 |
| Stage 1              | 85     | -      | -     | -      | -   |
| Stage 2              | 285    | -      | -     | -      | -   |
| Critical Hdwy        | 6.42   | 6.22   | 4.12  | -      | -   |
| Critical Hdwy Stg 1  | 5.42   | -      | -     | -      | -   |
| Critical Hdwy Stg 2  | 5.42   | -      | -     | -      | -   |
| Follow-up Hdwy       | 3.518  | 3.318  | 2.218 | -      | -   |
| Pot Cap-1 Maneuver   | 630    | 974    | 1478  | -      | -   |
| Stage 1              | 938    | -      | -     | -      | -   |
| Stage 2              | 763    | -      | -     | -      | -   |
| Platoon blocked, %   |        |        |       | -      | -   |
| Mov Cap-1 Maneuver   | 614    | 974    | 1478  | -      | -   |
| Mov Cap-2 Maneuver   | 614    | -      | -     | -      | -   |
| Stage 1              | 938    | -      | -     | -      | -   |
| Stage 2              | 744    | -      | -     | -      | -   |

| Approach             | EB | NB | SB |
|----------------------|----|----|----|
| HCM Control Delay, s | 17 | 1  | 0  |
| HCM LOS              | C  |    |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1478  | -   | 713   | -   | -   |
| HCM Lane V/C Ratio    | 0.022 | -   | 0.59  | -   | -   |
| HCM Control Delay (s) | 7.5   | 0   | 17    | -   | -   |
| HCM Lane LOS          | A     | A   | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.1   | -   | 3.9   | -   | -   |

17: Trinity St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 23.1 |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    |      |      | ↑    |      | ↑    | ↑↑↑  |      |      |      |      |
| Traffic Vol, veh/h       | 288  | 0    | 0    | 0    | 0    | 0    | 176  | 605  | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 288  | 0    | 0    | 0    | 0    | 0    | 176  | 605  | 0    | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 18   | 0    | 0    | 0    | 21   | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 115  | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | -    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 339  | 0    | 0    | 0    | 0    | 0    | 207  | 712  | 0    | 0    | 0    | 0    |

| Major/Minor          | Minor2 | Major2 |   |       | Major1 |   |   |
|----------------------|--------|--------|---|-------|--------|---|---|
| Conflicting Flow All | 721    | 1148   | - | - - 0 | 22     | 0 | - |
| Stage 1              | 22     | 22     | - | - - - | -      | - | - |
| Stage 2              | 699    | 1126   | - | - - - | -      | - | - |
| Critical Hdwy        | 6.08   | 6.53   | - | - - - | 4.13   | - | - |
| Critical Hdwy Stg 1  | 5.43   | 5.53   | - | - - - | -      | - | - |
| Critical Hdwy Stg 2  | 6.03   | 5.53   | - | - - - | -      | - | - |
| Follow-up Hdwy       | 3.669  | 4.019  | - | - - - | 2.219  | - | - |
| Pot Cap-1 Maneuver   | 410    | 198    | 0 | 0 - - | 1593   | - | 0 |
| Stage 1              | 960    | 877    | 0 | 0 - - | -      | - | 0 |
| Stage 2              | 425    | 279    | 0 | 0 - - | -      | - | 0 |
| Platoon blocked, %   |        |        |   | - - - | -      | - | - |
| Mov Cap-1 Maneuver   | 343    | 0      | - | - - - | 1593   | - | - |
| Mov Cap-2 Maneuver   | 343    | 0      | - | - - - | -      | - | - |
| Stage 1              | 941    | 0      | - | - - - | -      | - | - |
| Stage 2              | 362    | 0      | - | - - - | -      | - | - |

| Approach             | EB   | WB | NB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 81.1 | 0  | 1.7 |
| HCM LOS              | F    |    |     |

| Minor Lane/Major Mvmt | NBL  | NBT | EBLn1 | WBT | WBR |
|-----------------------|------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1593 | -   | 343   | -   | -   |
| HCM Lane V/C Ratio    | 0.13 | -   | 0.988 | -   | -   |
| HCM Control Delay (s) | 7.6  | -   | 81.1  | -   | -   |
| HCM Lane LOS          | A    | -   | F     | -   | -   |
| HCM 95th %tile Q(veh) | 0.4  | -   | 11    | -   | -   |

25: San Jacinto Blvd & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 80.3 |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    | ↑    |      | ↑    |      |      |      |      | ↑↑   | ↑    | ↑    |
| Traffic Vol, veh/h       | 0    | 148  | 161  | 37   | 44   | 0    | 0    | 0    | 0    | 108  | 1052 | 20   |
| Future Vol, veh/h        | 0    | 148  | 161  | 37   | 44   | 0    | 0    | 0    | 0    | 108  | 1052 | 20   |
| Conflicting Peds, #/hr   | 0    | 0    | 19   | 0    | 0    | 0    | 0    | 0    | 0    | 97   | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 40   | -    | -    | -    | -    | -    | -    | -    | -    | 50   |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 174  | 189  | 44   | 52   | 0    | 0    | 0    | 0    | 127  | 1238 | 24   |

| Major/Minor          | Minor2 |       |      | Minor1 |      |   | Major2 |   |   |
|----------------------|--------|-------|------|--------|------|---|--------|---|---|
| Conflicting Flow All | -      | 1589  | 638  | 1076   | 1589 | - | 97     | 0 | 0 |
| Stage 1              | -      | 1492  | -    | 97     | 97   | - | -      | - | - |
| Stage 2              | -      | 97    | -    | 979    | 1492 | - | -      | - | - |
| Critical Hdwy        | -      | 6.54  | 6.94 | 7.54   | 6.54 | - | 4.14   | - | - |
| Critical Hdwy Stg 1  | -      | 5.54  | -    | -      | -    | - | -      | - | - |
| Critical Hdwy Stg 2  | -      | -     | -    | 6.54   | 5.54 | - | -      | - | - |
| Follow-up Hdwy       | -      | 4.02  | 3.32 | 3.52   | 4.02 | - | 2.22   | - | - |
| Pot Cap-1 Maneuver   | 0      | ~ 107 | 419  | 174    | 107  | 0 | 1494   | - | - |
| Stage 1              | 0      | 185   | -    | -      | -    | 0 | -      | - | - |
| Stage 2              | 0      | -     | -    | 268    | 185  | 0 | -      | - | - |
| Platoon blocked, %   | -      | -     | -    | -      | -    | - | -      | - | - |
| Mov Cap-1 Maneuver   | -      | ~ 69  | 419  | -      | 69   | - | 1494   | - | - |
| Mov Cap-2 Maneuver   | -      | ~ 69  | -    | -      | 69   | - | -      | - | - |
| Stage 1              | -      | ~ 132 | -    | -      | -    | - | -      | - | - |
| Stage 2              | -      | -     | -    | -      | 132  | - | -      | - | - |

| Approach             | EB       |  |  | WB |  |  | SB  |  |  |
|----------------------|----------|--|--|----|--|--|-----|--|--|
| HCM Control Delay, s | \$ 403.6 |  |  |    |  |  | 1.2 |  |  |
| HCM LOS              | F        |  |  |    |  |  |     |  |  |

| Minor Lane/Major Mvmt | EBLn1    | EBLn2 | WBLn1 | SBL   | SBT | SBR |
|-----------------------|----------|-------|-------|-------|-----|-----|
| Capacity (veh/h)      | 69       | 419   | -     | 1494  | -   | -   |
| HCM Lane V/C Ratio    | 2.523    | 0.452 | -     | 0.085 | -   | -   |
| HCM Control Delay (s) | \$ 820.4 | 20.5  | -     | 7.6   | 0.6 | -   |
| HCM Lane LOS          | F        | C     | -     | A     | A   | -   |
| HCM 95th %tile Q(veh) | 17       | 2.3   | -     | 0.3   | -   | -   |

| Notes                      |                        |                            |                                |
|----------------------------|------------------------|----------------------------|--------------------------------|
| -: Volume exceeds capacity | \$: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

26: Trinity St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 4.1  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | ↓    |      | ↑↑↑  | ↑↑↑  |      |      |
| Traffic Vol, veh/h       | 231  | 0    | 20   | 551  | 0    | 0    |
| Future Vol, veh/h        | 231  | 0    | 20   | 551  | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | -    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 83   | 83   | 83   | 83   | 83   | 83   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 278  | 0    | 24   | 664  | 0    | 0    |

| Major/Minor          | Minor2 |   | Major1 |   |
|----------------------|--------|---|--------|---|
| Conflicting Flow All | 314    | - | 0      | 0 |
| Stage 1              | 0      | - | -      | - |
| Stage 2              | 314    | - | -      | - |
| Critical Hdwy        | 5.74   | - | 5.34   | - |
| Critical Hdwy Stg 1  | -      | - | -      | - |
| Critical Hdwy Stg 2  | 6.04   | - | -      | - |
| Follow-up Hdwy       | 3.82   | - | 3.12   | - |
| Pot Cap-1 Maneuver   | 672    | 0 | -      | - |
| Stage 1              | -      | 0 | -      | - |
| Stage 2              | 654    | 0 | -      | - |
| Platoon blocked, %   | -      | - | -      | - |
| Mov Cap-1 Maneuver   | 672    | - | -      | - |
| Mov Cap-2 Maneuver   | 672    | - | -      | - |
| Stage 1              | -      | - | -      | - |
| Stage 2              | 654    | - | -      | - |

| Approach             | EB   |  | NB |  |
|----------------------|------|--|----|--|
| HCM Control Delay, s | 14.1 |  |    |  |
| HCM LOS              | B    |  |    |  |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 |
|-----------------------|-----|-----|-------|
| Capacity (veh/h)      | -   | -   | 672   |
| HCM Lane V/C Ratio    | -   | -   | 0.414 |
| HCM Control Delay (s) | -   | -   | 14.1  |
| HCM Lane LOS          | -   | -   | B     |
| HCM 95th %tile Q(veh) | -   | -   | 2     |

27: Guadalupe St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 70.7 |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↱    |      |      | ↱    |      |      |      |      | ↱↱   | ↱    | ↱    |
| Traffic Vol, veh/h       | 0    | 21   | 12   | 126  | 97   | 0    | 0    | 0    | 0    | 48   | 1289 | 24   |
| Future Vol, veh/h        | 0    | 21   | 12   | 126  | 97   | 0    | 0    | 0    | 0    | 48   | 1289 | 24   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 24   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 43   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 24   | 14   | 145  | 111  | 0    | 0    | 0    | 0    | 55   | 1482 | 28   |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |   |
|----------------------|--------|------|--------|------|--------|---|
| Conflicting Flow All | -      | 1635 | 808    | 887  | 1635   | - |
| Stage 1              | -      | 1635 | -      | 0    | 0      | - |
| Stage 2              | -      | 0    | -      | 887  | 1635   | - |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | - |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | - |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | - |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | - |
| Pot Cap-1 Maneuver   | 0      | 100  | 324    | 239  | ~ 100  | 0 |
| Stage 1              | 0      | 157  | -      | -    | -      | 0 |
| Stage 2              | 0      | -    | -      | 305  | 157    | 0 |
| Platoon blocked, %   | -      | -    | -      | -    | -      | - |
| Mov Cap-1 Maneuver   | -      | 96   | 311    | 184  | ~ 96   | - |
| Mov Cap-2 Maneuver   | -      | 96   | -      | 184  | ~ 96   | - |
| Stage 1              | -      | 151  | -      | -    | -      | - |
| Stage 2              | -      | -    | -      | 245  | 151    | - |

| Approach             | EB   |  | WB    |  | SB |  |
|----------------------|------|--|-------|--|----|--|
| HCM Control Delay, s | 44.6 |  | 506.4 |  |    |  |
| HCM LOS              | E    |  | F     |  |    |  |

| Minor Lane/Major Mvmt | EBLn1WBLn1  | SBL | SBT | SBR |
|-----------------------|-------------|-----|-----|-----|
| Capacity (veh/h)      | 128 132     | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.296 1.942 | -   | -   | -   |
| HCM Control Delay (s) | 44.6 506.4  | -   | -   | -   |
| HCM Lane LOS          | E F         | -   | -   | -   |
| HCM 95th %tile Q(veh) | 1.1 20.3    | -   | -   | -   |

| Notes  |  |  |  |
|--|--|--|--|
| -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |  |  |  |

29: Colorado St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 34.6 |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↱    |      |      | ↱    |      |      | ↱    |      |      | ↱    |      |
| Traffic Vol, veh/h       | 38   | 71   | 53   | 37   | 45   | 9    | 56   | 205  | 42   | 10   | 388  | 45   |
| Future Vol, veh/h        | 38   | 71   | 53   | 37   | 45   | 9    | 56   | 205  | 42   | 10   | 388  | 45   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 15   | 88   | 0    | 0    | 0    | 0    | 88   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 49   | 91   | 68   | 47   | 58   | 12   | 72   | 263  | 54   | 13   | 497  | 58   |

| Major/Minor          | Minor2 |       | Minor1 |       | Major1 |       | Major2 |   |
|----------------------|--------|-------|--------|-------|--------|-------|--------|---|
| Conflicting Flow All | 1123   | 1100  | 614    | 1064  | 1102   | 305   | 643    | 0 |
| Stage 1              | 640    | 640   | -      | 433   | 433    | -     | -      | - |
| Stage 2              | 483    | 460   | -      | 631   | 669    | -     | -      | - |
| Critical Hdwy        | 7.12   | 6.52  | 6.22   | 7.12  | 6.52   | 6.22  | 4.12   | - |
| Critical Hdwy Stg 1  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -      | - |
| Critical Hdwy Stg 2  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -      | - |
| Follow-up Hdwy       | 3.518  | 4.018 | 3.318  | 3.518 | 4.018  | 3.318 | 2.218  | - |
| Pot Cap-1 Maneuver   | 183    | 212   | 492    | 201   | 212    | 735   | 942    | - |
| Stage 1              | 464    | 470   | -      | 601   | 582    | -     | -      | - |
| Stage 2              | 565    | 566   | -      | 469   | 456    | -     | -      | - |
| Platoon blocked, %   | -      | -     | -      | -     | -      | -     | -      | - |
| Mov Cap-1 Maneuver   | 112    | 174   | 451    | 93    | 174    | 725   | 942    | - |
| Mov Cap-2 Maneuver   | 112    | 174   | -      | 93    | 174    | -     | -      | - |
| Stage 1              | 386    | 424   | -      | 545   | 528    | -     | -      | - |
| Stage 2              | 443    | 513   | -      | 308   | 412    | -     | -      | - |

| Approach             | EB    |  | WB    |  | NB  |  | SB  |  |
|----------------------|-------|--|-------|--|-----|--|-----|--|
| HCM Control Delay, s | 150.3 |  | 105.5 |  | 1.7 |  | 0.2 |  |
| HCM LOS              | F     |  | F     |  |     |  |     |  |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1WBLn1  | SBL  | SBT | SBR |
|-----------------------|-------|-----|-----|-------------|------|-----|-----|
| Capacity (veh/h)      | 942   | -   | -   | 187 136     | 1225 | -   | -   |
| HCM Lane V/C Ratio    | 0.076 | -   | -   | 1.111 0.858 | 0.01 | -   | -   |
| HCM Control Delay (s) | 9.1   | 0   | -   | 150.3 105.5 | 8    | 0   | -   |
| HCM Lane LOS          | A     | A   | -   | F F         | A A  | -   | -   |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | 10.2 5.5    | 0    | -   | -   |

30: N. Congress Ave  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 10   |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    |      |      | ↑    |      |      | ↑    |      |      | ↑    |      |
| Traffic Vol, veh/h       | 0    | 127  | 0    | 0    | 155  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 0    | 127  | 0    | 0    | 155  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 59   | 0    | 25   | 21   | 0    | 0    | 0    | 0    | 21   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 157  | 0    | 0    | 191  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |

| Major/Minor          | Minor2 |       | Minor1 |   | Major1 |   | Major2 |   |
|----------------------|--------|-------|--------|---|--------|---|--------|---|
| Conflicting Flow All | -      | 1     | -      | - | 1      | - | -      | 0 |
| Stage 1              | -      | 1     | -      | - | 0      | - | -      | - |
| Stage 2              | -      | 0     | -      | - | 1      | - | -      | - |
| Critical Hdwy        | -      | 6.52  | -      | - | 6.52   | - | -      | - |
| Critical Hdwy Stg 1  | -      | 5.52  | -      | - | 5.52   | - | -      | - |
| Critical Hdwy Stg 2  | -      | 5.52  | -      | - | 5.52   | - | -      | - |
| Follow-up Hdwy       | -      | 4.018 | -      | - | 4.018  | - | -      | - |
| Pot Cap-1 Maneuver   | 0      | 895   | 0      | 0 | 895    | 0 | 0      | - |
| Stage 1              | 0      | 895   | 0      | 0 | -      | 0 | 0      | - |
| Stage 2              | 0      | -     | 0      | 0 | 895    | 0 | 0      | - |
| Platoon blocked, %   | -      | -     | -      | - | -      | - | -      | - |
| Mov Cap-1 Maneuver   | -      | 895   | -      | - | 895    | - | -      | - |
| Mov Cap-2 Maneuver   | -      | 895   | -      | - | 895    | - | -      | - |
| Stage 1              | -      | 895   | -      | - | -      | - | -      | - |
| Stage 2              | -      | -     | -      | - | 895    | - | -      | - |

| Approach             | EB  |  | WB   |  | NB |  | SB |  |
|----------------------|-----|--|------|--|----|--|----|--|
| HCM Control Delay, s | 9.9 |  | 10.1 |  | 0  |  | 0  |  |
| HCM LOS              | A   |  | B    |  |    |  |    |  |

| Minor Lane/Major Mvmt | NBT | EBLn1 | WBLn1 | SBT |
|-----------------------|-----|-------|-------|-----|
| Capacity (veh/h)      | -   | 895   | 895   | -   |
| HCM Lane V/C Ratio    | -   | 0.175 | 0.214 | -   |
| HCM Control Delay (s) | -   | 9.9   | 10.1  | -   |
| HCM Lane LOS          | -   | A     | B     | -   |
| HCM 95th %tile Q(veh) | -   | 0.6   | 0.8   | -   |

MS

Synchro 9 Report  
Page 11

31: Brazos St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.9  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑    |      |      | ↑    | ↑    |      |
| Traffic Vol, veh/h       | 82   | 0    | 15   | 67   | 43   | 0    |
| Future Vol, veh/h        | 82   | 0    | 15   | 67   | 43   | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 1    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 58   | 58   | 58   | 58   | 58   | 58   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 141  | 0    | 26   | 116  | 74   | 0    |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 0      | 0 | 142    | 0 | 309    | 142   |
| Stage 1              | -      | - | -      | - | 142    | -     |
| Stage 2              | -      | - | -      | - | 167    | -     |
| Critical Hdwy        | -      | - | 4.12   | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | -      | - | 2.218  | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | -      | - | 1441   | - | 683    | 906   |
| Stage 1              | -      | - | -      | - | 885    | -     |
| Stage 2              | -      | - | -      | - | 863    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | -      | - | 1441   | - | 669    | 905   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 669    | -     |
| Stage 1              | -      | - | -      | - | 884    | -     |
| Stage 2              | -      | - | -      | - | 847    | -     |

| Approach             | EB |  | WB  |  | NB   |  |
|----------------------|----|--|-----|--|------|--|
| HCM Control Delay, s | 0  |  | 1.4 |  | 11.1 |  |
| HCM LOS              |    |  |     |  | B    |  |






| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 669   | -   | -   | 1441  | -   |
| HCM Lane V/C Ratio    | 0.111 | -   | -   | 0.018 | -   |
| HCM Control Delay (s) | 11.1  | -   | -   | 7.5   | 0   |
| HCM Lane LOS          | B     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 0.4   | -   | -   | 0.1   | -   |

MS

Synchro 9 Report  
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32: San Jacinto Blvd & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection             |        |   |        |      |   |   |
|--------------------------|--------|---|--------|------|---|---|
| Int Delay, s/veh         |        | 0.9   |        |      |   |   |
| Movement                 | EBL    | EBR   | NBL    | NBT  | SBT   | SBR   |
| Lane Configurations      |        |  |        |      |    |  |
| Traffic Vol, veh/h       | 0      | 63  | 0      | 0    | 1298  | 53  |
| Future Vol, veh/h        | 0      | 63  | 0      | 0    | 1298  | 53  |
| Conflicting Peds, #/hr   | 0      | 0   | 0      | 0    | 0   | 15  |
| Sign Control             | Stop   | Stop  | Free   | Free | Free  | Free  |
| RT Channelized           | -      | None  | -      | None | -   | None  |
| Storage Length           | -      | 0   | -      | -    | -   | 50  |
| Veh in Median Storage, # | 0      | -   | -      | -    | 0   | -   |
| Grade, %                 | 0      | -   | -      | 0    | 0   | -   |
| Peak Hour Factor         | 89     | 89  | 89     | 89   | 89  | 89  |
| Heavy Vehicles, %        | 2      | 2   | 2      | 2    | 2   | 2   |
| Mvmt Flow                | 0      | 71  | 0      | 0    | 1458  | 60  |
| Major/Minor              |        |   |        |      |   |   |
|                          | Minor2 |   | Major2 |      |   |   |
| Conflicting Flow All     | -      | 744   |        |      | -   | 0   |
| Stage 1                  | -      | -   |        |      | -   | -   |
| Stage 2                  | -      | -   |        |      | -   | -   |
| Critical Hdwy            | -      | 7.14  |        |      | -   | -   |
| Critical Hdwy Stg 1      | -      | -   |        |      | -   | -   |
| Critical Hdwy Stg 2      | -      | -   |        |      | -   | -   |
| Follow-up Hdwy           | -      | 3.92  |        |      | -   | -   |
| Pot Cap-1 Maneuver       | 0      | 306   |        |      | -   | -   |
| Stage 1                  | 0      | -   |        |      | -   | -   |
| Stage 2                  | 0      | -   |        |      | -   | -   |
| Platoon blocked, %       |        |   |        |      | -   | -   |
| Mov Cap-1 Maneuver       | -      | 302   |        |      | -   | -   |
| Mov Cap-2 Maneuver       | -      | -   |        |      | -   | -   |
| Stage 1                  | -      | -   |        |      | -   | -   |
| Stage 2                  | -      | -   |        |      | -   | -   |
|                          |        |   |        |      |   |   |
| Approach                 | EB     |   | SB     |      |   |   |
| HCM Control Delay, s     | 20.5   |   | 0      |      |   |   |
| HCM LOS                  | C      |   |        |      |   |   |
|                          |        |   |        |      |   |   |
| Minor Lane/Major Mvmt    | EBLn1  | SBT   | SBR    |      |   |   |
| Capacity (veh/h)         | 302    | -   | -      |      |   |   |
| HCM Lane V/C Ratio       | 0.234  | -   | -      |      |   |   |
| HCM Control Delay (s)    | 20.5   | -   | -      |      |   |   |
| HCM Lane LOS             | C      | -   | -      |      |   |   |
| HCM 95th %tile Q(veh)    | 0.9    | -   | -      |      |   |   |




33: Colorado St & Parking Dr. 3  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection             |   |          |   |      |        |   |
|--------------------------|---|----------|---|------|--------|---|
| Int Delay, s/veh         | 3.5   |          |   |      |        |   |
| Movement                 | WBL   | WBR      | NBT   | NBR  | SBL    | SBT   |
| Lane Configurations      |  |          |  |      |        |  |
| Traffic Vol, veh/h       | 89  | 95       | 89  | 16   | 21     | 517   |
| Future Vol, veh/h        | 89  | 95       | 89  | 16   | 21     | 517   |
| Conflicting Peds, #/hr   | 0   | 0        | 0   | 0    | 0      | 0   |
| Sign Control             | Stop  | Stop     | Free  | Free | Free   | Free  |
| RT Channelized           | -   | None     | -   | None | -      | None  |
| Storage Length           | 0   | -        | -   | -    | -      | -   |
| Veh in Median Storage, # | 0   | -        | 0   | -    | -      | 0   |
| Grade, %                 | 0   | -        | 0   | -    | -      | 0   |
| Peak Hour Factor         | 92  | 92       | 92  | 92   | 92     | 92  |
| Heavy Vehicles, %        | 2   | 2        | 2   | 2    | 2      | 2   |
| Mvmt Flow                | 97  | 103      | 97  | 17   | 23     | 562   |
| Major/Minor              |   |          |   |      |        |   |
|                          | Minor1  |          | Major1  |      | Major2 |   |
| Conflicting Flow All     | 713   | 105      | 0   | 0    | 114    | 0   |
| Stage 1                  | 105   | -        | -   | -    | -      | -   |
| Stage 2                  | 608   | -        | -   | -    | -      | -   |
| Critical Hdwy            | 6.42  | 6.22     | -   | -    | 4.12   | -   |
| Critical Hdwy Stg 1      | 5.42  | -        | -   | -    | -      | -   |
| Critical Hdwy Stg 2      | 5.42  | -        | -   | -    | -      | -   |
| Follow-up Hdwy           | 3.518   | 3.318    | -   | -    | 2.218  | -   |
| Pot Cap-1 Maneuver       | 398   | 949      | -   | -    | 1475   | -   |
| Stage 1                  | 919   | -        | -   | -    | -      | -   |
| Stage 2                  | 543   | -        | -   | -    | -      | -   |
| Platoon blocked, %       |   |          | -   | -    |        | -   |
| Mov Cap-1 Maneuver       | 389   | 949      | -   | -    | 1475   | -   |
| Mov Cap-2 Maneuver       | 389   | -        | -   | -    | -      | -   |
| Stage 1                  | 919   | -        | -   | -    | -      | -   |
| Stage 2                  | 531   | -        | -   | -    | -      | -   |
| Approach                 |   |          |   |      |        |   |
|                          | WB  |          | NB  |      | SB     |   |
| HCM Control Delay, s     | 15  |          | 0   |      | 0.3    |   |
| HCM LOS                  | C   |          |   |      |        |   |
| Minor Lane/Major Mvmt    |   |          |   |      |        |   |
|                          | NBT   | NBRWBLn1 | SBL   | SBT  |        |   |
| Capacity (veh/h)         | -   | - 559    | 1475  | -    |        |   |
| HCM Lane V/C Ratio       | -   | - 0.358  | 0.015   | -    |        |   |
| HCM Control Delay (s)    | -   | - 15     | 7.5   | 0    |        |   |
| HCM Lane LOS             | -   | - C      | A   | A    |        |   |
| HCM 95th %tile Q(veh)    | -   | - 1.6    | 0   | -    |        |   |

62: Colorado St & Parking Dr. 4  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection             |   |      |      |   |   |      |
|--------------------------|---|------|------|---|---|------|
| Int Delay, s/veh         | 3.5   |      |      |   |   |      |
| Movement                 | EBL   | EBR  | NBL  | NBT   | SBT   | SBR  |
| Lane Configurations      |  |      |      |  |  |      |
| Traffic Vol, veh/h       | 79  | 79   | 15   | 168   | 460   | 17   |
| Future Vol, veh/h        | 79  | 79   | 15   | 168   | 460   | 17   |
| Conflicting Peds, #/hr   | 0   | 0    | 0    | 0   | 0   | 0    |
| Sign Control             | Stop  | Stop | Free | Free  | Free  | Free |
| RT Channelized           | -   | None | -    | None  | -   | None |
| Storage Length           | 0   | -    | -    | -   | -   | -    |
| Veh in Median Storage, # | 0   | -    | -    | 0   | 0   | -    |
| Grade, %                 | 0   | -    | -    | 0   | 0   | -    |
| Peak Hour Factor         | 92  | 92   | 92   | 92  | 92  | 92   |
| Heavy Vehicles, %        | 2   | 2    | 2    | 2   | 2   | 2    |
| Mvmt Flow                | 86  | 86   | 16   | 183   | 500   | 18   |




| Major/Minor          | Minor2 | Major1 |       | Major2 |     |
|----------------------|--------|--------|-------|--------|-----|
| Conflicting Flow All | 724    | 509    | 518   | 0      | - 0 |
| Stage 1              | 509    | -      | -     | -      | -   |
| Stage 2              | 215    | -      | -     | -      | -   |
| Critical Hdwy        | 6.42   | 6.22   | 4.12  | -      | -   |
| Critical Hdwy Stg 1  | 5.42   | -      | -     | -      | -   |
| Critical Hdwy Stg 2  | 5.42   | -      | -     | -      | -   |
| Follow-up Hdwy       | 3.518  | 3.318  | 2.218 | -      | -   |
| Pot Cap-1 Maneuver   | 393    | 564    | 1048  | -      | -   |
| Stage 1              | 604    | -      | -     | -      | -   |
| Stage 2              | 821    | -      | -     | -      | -   |
| Platoon blocked, %   | -      | -      | -     | -      | -   |
| Mov Cap-1 Maneuver   | 386    | 564    | 1048  | -      | -   |
| Mov Cap-2 Maneuver   | 386    | -      | -     | -      | -   |
| Stage 1              | 604    | -      | -     | -      | -   |
| Stage 2              | 807    | -      | -     | -      | -   |

| Approach             | EB   | NB  | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 17.5 | 0.7 | 0  |
| HCM LOS              | C    |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1048  | -   | 458   | -   | -   |
| HCM Lane V/C Ratio    | 0.016 | -   | 0.375 | -   | -   |
| HCM Control Delay (s) | 8.5   | 0   | 17.5  | -   | -   |
| HCM Lane LOS          | A     | A   | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0     | -   | 1.7   | -   | -   |

69: Parking Dr. 5 & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background  
Timing Plan: PM

| Intersection             |   |      |      |   |   |      |
|--------------------------|---|------|------|---|---|------|
| Int Delay, s/veh         | 4.9   |      |      |   |   |      |
| Movement                 | EBT   | EBR  | WBL  | WBT   | NBL   | NBR  |
| Lane Configurations      |  |      |      |  |  |      |
| Traffic Vol, veh/h       | 105   | 21   | 16   | 131   | 121   | 63   |
| Future Vol, veh/h        | 105   | 21   | 16   | 131   | 121   | 63   |
| Conflicting Peds, #/hr   | 0   | 0    | 0    | 0   | 0   | 0    |
| Sign Control             | Free  | Free | Free | Free  | Stop  | Stop |
| RT Channelized           | -   | None | -    | None  | -   | None |
| Storage Length           | -   | -    | -    | -   | 0   | -    |
| Veh in Median Storage, # | 0   | -    | -    | 0   | 0   | -    |
| Grade, %                 | 0   | -    | -    | 0   | 0   | -    |
| Peak Hour Factor         | 92  | 92   | 92   | 92  | 92  | 92   |
| Heavy Vehicles, %        | 2   | 2    | 2    | 2   | 2   | 2    |
| Mvmt Flow                | 114   | 23   | 17   | 142   | 132   | 68   |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 0      | 0 | 137    | 0 | 303    | 126   |
| Stage 1              | -      | - | -      | - | 126    | -     |
| Stage 2              | -      | - | -      | - | 177    | -     |
| Critical Hdwy        | -      | - | 4.12   | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | -      | - | 2.218  | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | -      | - | 1447   | - | 689    | 924   |
| Stage 1              | -      | - | -      | - | 900    | -     |
| Stage 2              | -      | - | -      | - | 854    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | -      | - | 1447   | - | 680    | 924   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 680    | -     |
| Stage 1              | -      | - | -      | - | 900    | -     |
| Stage 2              | -      | - | -      | - | 843    | -     |

| Approach             | EB | WB  | NB   |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0  | 0.8 | 11.6 |
| HCM LOS              |    |     | B    |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 748   | -   | -   | 1447  | -   |
| HCM Lane V/C Ratio    | 0.267 | -   | -   | 0.012 | -   |
| HCM Control Delay (s) | 11.6  | -   | -   | 7.5   | 0   |
| HCM Lane LOS          | B     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 1.1   | -   | -   | 0     | -   |

1: Martin Luther King Jr. Blvd & Guadalupe St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

|                         | ←     | →     | ↖    | ↗    | ←     | ↖     | ↗    | →    | ↖    | ↗     | →     | ↖     | ↗ |
|-------------------------|-------|-------|------|------|-------|-------|------|------|------|-------|-------|-------|---|
| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR   | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |   |
| Lane Configurations     | ↖     | ↖↗    |      |      | ↖↗    | ↖     |      |      |      | ↖     | ↖↗    | ↖     |   |
| Traffic Volume (vph)    | 68    | 837   | 500  | 0    | 580   | 339   | 0    | 0    | 0    | 294   | 769   | 134   |   |
| Future Volume (vph)     | 68    | 837   | 500  | 0    | 580   | 339   | 0    | 0    | 0    | 294   | 769   | 134   |   |
| Confl. Peds. (#/hr)     | 28    |       | 19   | 19   |       | 28    |      |      |      | 29    |       | 19    |   |
| Confl. Bikes (#/hr)     |       |       | 1    |      |       | 1     |      |      |      |       |       | 13    |   |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94 | 0.94 | 0.94  | 0.94  | 0.94 | 0.94 | 0.94 | 0.94  | 0.94  | 0.94  |   |
| Adj. Flow (vph)         | 72    | 890   | 532  | 0    | 617   | 361   | 0    | 0    | 0    | 313   | 818   | 143   |   |
| Shared Lane Traffic (%) |       |       |      |      |       |       |      |      |      |       |       |       |   |
| Lane Group Flow (vph)   | 72    | 1422  | 0    | 0    | 617   | 361   | 0    | 0    | 0    | 313   | 818   | 143   |   |
| Turn Type               | Prot  | NA    |      |      | NA    | pm+ov |      |      |      | pm+pt | NA    | Perm  |   |
| Protected Phases        | 5     | 2     |      |      | 6     | 7     |      |      |      | 7     | 4     |       |   |
| Permitted Phases        |       |       |      |      | 6     |       |      |      |      | 4     |       | 4     |   |
| Detector Phase          | 5     | 2     |      |      | 6     | 7     |      |      |      | 7     | 4     | 4     |   |
| Switch Phase            |       |       |      |      |       |       |      |      |      |       |       |       |   |
| Minimum Initial (s)     | 2.0   | 15.0  |      |      | 15.0  | 10.0  |      |      |      | 10.0  | 5.0   | 5.0   |   |
| Minimum Split (s)       | 7.0   | 27.0  |      |      | 34.0  | 15.0  |      |      |      | 15.0  | 32.0  | 32.0  |   |
| Total Split (s)         | 18.0  | 75.0  |      |      | 57.0  | 45.0  |      |      |      | 45.0  | 45.0  | 45.0  |   |
| Total Split (%)         | 15.0% | 62.5% |      |      | 47.5% | 37.5% |      |      |      | 37.5% | 37.5% | 37.5% |   |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   | 4.0   |      |      |      | 4.0   | 4.0   | 4.0   |   |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   | 1.0   |      |      |      | 1.0   | 1.0   | 1.0   |   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   | 0.0   |      |      |      | 0.0   | 0.0   | 0.0   |   |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   | 5.0   |      |      |      | 5.0   | 5.0   | 5.0   |   |
| Lead/Lag                | Lag   |       |      |      | Lead  |       |      |      |      |       |       |       |   |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |       |      |      |      |       |       |       |   |
| Recall Mode             | None  | C-Max |      |      | C-Max | None  |      |      |      | None  | Max   | Max   |   |
| Act Effect Green (s)    | 11.6  | 70.0  |      |      | 55.6  | 95.6  |      |      |      | 40.0  | 40.0  | 40.0  |   |
| Actuated g/C Ratio      | 0.10  | 0.58  |      |      | 0.46  | 0.80  |      |      |      | 0.33  | 0.33  | 0.33  |   |
| v/c Ratio               | 0.42  | 0.74  |      |      | 0.38  | 0.28  |      |      |      | 0.53  | 0.69  | 0.25  |   |
| Control Delay           | 58.1  | 20.7  |      |      | 26.7  | 1.6   |      |      |      | 36.4  | 38.4  | 13.5  |   |
| Queue Delay             | 0.0   | 0.0   |      |      | 0.0   | 0.1   |      |      |      | 0.0   | 0.0   | 0.0   |   |
| Total Delay             | 58.1  | 20.7  |      |      | 26.7  | 1.6   |      |      |      | 36.4  | 38.4  | 13.5  |   |
| LOS                     | E     | C     |      |      | C     | A     |      |      |      | D     | D     | B     |   |
| Approach Delay          |       | 22.5  |      |      | 17.4  |       |      |      |      |       | 35.1  |       |   |
| Approach LOS            |       | C     |      |      | B     |       |      |      |      |       | D     |       |   |
| Queue Length 50th (ft)  | 53    | 392   |      |      | 181   | 12    |      |      |      | 195   | 287   | 30    |   |
| Queue Length 95th (ft)  | 101   | 481   |      |      | 274   | 38    |      |      |      | 287   | 360   | 80    |   |
| Internal Link Dist (ft) |       | 228   |      |      | 45    |       | 159  |      |      |       | 210   |       |   |
| Turn Bay Length (ft)    | 160   |       |      |      |       |       |      |      |      | 130   |       | 120   |   |
| Base Capacity (vph)     | 191   | 1931  |      |      | 1639  | 1278  |      |      |      | 590   | 1179  | 562   |   |
| Starvation Cap Reductn  | 0     | 0     |      |      | 0     | 135   |      |      |      | 0     | 0     | 0     |   |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     | 0     |      |      |      | 0     | 0     | 0     |   |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     | 0     |      |      |      | 0     | 0     | 0     |   |
| Reduced v/c Ratio       | 0.38  | 0.74  |      |      | 0.38  | 0.32  |      |      |      | 0.53  | 0.69  | 0.25  |   |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green  
Natural Cycle: 75

MS

Synchro 9 Report  
Page 1

1: Martin Luther King Jr. Blvd & Guadalupe St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 25.5

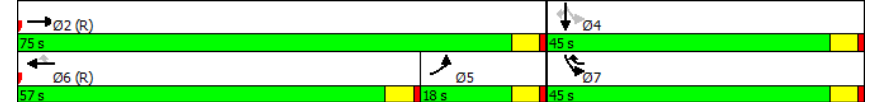
Intersection LOS: C

Intersection Capacity Utilization 70.7%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Martin Luther King Jr. Blvd & Guadalupe St



MS

Synchro 9 Report  
Page 2

3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

|                         | →     | ↗    | ↖    | ←     | ↙     | ↘     |
|-------------------------|-------|------|------|-------|-------|-------|
| Lane Group              | EBT   | EBR  | WBL  | WBT   | NBL   | NBR   |
| Lane Configurations     | ↑↑    |      |      | ↑↑    | ↗↘    | ↖↗    |
| Traffic Volume (vph)    | 1131  | 0    | 0    | 744   | 387   | 227   |
| Future Volume (vph)     | 1131  | 0    | 0    | 744   | 387   | 227   |
| Confl. Peds. (#/hr)     |       |      |      |       |       | 11    |
| Peak Hour Factor        | 0.86  | 0.86 | 0.86 | 0.86  | 0.86  | 0.86  |
| Adj. Flow (vph)         | 1315  | 0    | 0    | 865   | 450   | 264   |
| Shared Lane Traffic (%) |       |      |      |       |       |       |
| Lane Group Flow (vph)   | 1315  | 0    | 0    | 865   | 450   | 264   |
| Turn Type               | NA    |      |      | NA    | Prot  | Perm  |
| Protected Phases        | 2     |      |      | 6     | 8     |       |
| Permitted Phases        |       |      |      |       |       | 3     |
| Detector Phase          | 2     |      |      | 6     | 8     | 3     |
| Switch Phase            |       |      |      |       |       |       |
| Minimum Initial (s)     | 10.0  |      |      | 10.0  | 5.0   | 5.0   |
| Minimum Split (s)       | 30.0  |      |      | 15.0  | 10.0  | 29.0  |
| Total Split (s)         | 87.0  |      |      | 87.0  | 33.0  | 33.0  |
| Total Split (%)         | 72.5% |      |      | 72.5% | 27.5% | 27.5% |
| Yellow Time (s)         | 4.0   |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |       |      |      |       |       |       |
| Lead-Lag Optimize?      |       |      |      |       |       |       |
| Recall Mode             | C-Max |      |      | C-Max | Max   | Max   |
| Act Effct Green (s)     | 82.0  |      |      | 82.0  | 28.0  | 28.0  |
| Actuated g/C Ratio      | 0.68  |      |      | 0.68  | 0.23  | 0.23  |
| v/c Ratio               | 0.54  |      |      | 0.36  | 0.56  | 0.62  |
| Control Delay           | 8.2   |      |      | 5.7   | 58.2  | 49.9  |
| Queue Delay             | 0.5   |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             | 8.7   |      |      | 5.7   | 58.2  | 49.9  |
| LOS                     | A     |      |      | A     | E     | D     |
| Approach Delay          | 8.7   |      |      | 5.7   | 55.1  |       |
| Approach LOS            | A     |      |      | A     | E     |       |
| Queue Length 50th (ft)  | 159   |      |      | 61    | 187   | 139   |
| Queue Length 95th (ft)  | 170   |      |      | 69    | 208   | 176   |
| Internal Link Dist (ft) | 272   |      |      | 277   | 337   |       |
| Turn Bay Length (ft)    |       |      |      |       |       |       |
| Base Capacity (vph)     | 2418  |      |      | 2418  | 801   | 423   |
| Starvation Cap Reductn  | 604   |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   | 0     |      |      | 0     | 0     | 0     |
| Storage Cap Reductn     | 0     |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       | 0.72  |      |      | 0.36  | 0.56  | 0.62  |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green  
Natural Cycle: 60  
Control Type: Actuated-Coordinated

MS

Synchro 9 Report  
Page 3

3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 19.3

Intersection LOS: B

Intersection Capacity Utilization 59.6%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 3: Lavaca St & Martin Luther King Jr. Blvd

|          |      |
|----------|------|
| → Ø2 (R) | ↖ Ø3 |
| 87 s     | 33 s |
| ← Ø6 (R) | ↗ Ø8 |
| 87 s     | 33 s |

MS

Synchro 9 Report  
Page 4

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

|                         | →     | ↖    | ↗     | ←      | ↖    | ↗    |
|-------------------------|-------|------|-------|--------|------|------|
| Lane Group              | EBT   | EBR  | WBL   | WBT    | NBL  | NBR  |
| Lane Configurations     | ↕↕    |      | ↖     | ↕↕     |      |      |
| Traffic Volume (vph)    | 1158  | 0    | 9     | 1176   | 0    | 0    |
| Future Volume (vph)     | 1158  | 0    | 9     | 1176   | 0    | 0    |
| Confl. Peds. (#/hr)     |       | 6    | 6     |        | 1    |      |
| Confl. Bikes (#/hr)     |       | 1    |       |        |      |      |
| Peak Hour Factor        | 0.89  | 0.89 | 0.89  | 0.89   | 0.89 | 0.89 |
| Adj. Flow (vph)         | 1301  | 0    | 10    | 1321   | 0    | 0    |
| Shared Lane Traffic (%) |       |      |       |        |      |      |
| Lane Group Flow (vph)   | 1301  | 0    | 10    | 1321   | 0    | 0    |
| Turn Type               | NA    |      | pm+pt | NA     |      |      |
| Protected Phases        | 2     |      | 1     | 6      |      |      |
| Permitted Phases        |       |      | 6     |        |      |      |
| Detector Phase          | 2     |      | 1     | 6      |      |      |
| Switch Phase            |       |      |       |        |      |      |
| Minimum Initial (s)     | 15.0  |      | 1.0   | 5.0    |      |      |
| Minimum Split (s)       | 34.0  |      | 5.5   | 29.0   |      |      |
| Total Split (s)         | 108.0 |      | 12.0  | 120.0  |      |      |
| Total Split (%)         | 90.0% |      | 10.0% | 100.0% |      |      |
| Yellow Time (s)         | 4.0   |      | 3.5   | 4.0    |      |      |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0    |      |      |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0    |      |      |
| Total Lost Time (s)     | 5.0   |      | 4.5   | 5.0    |      |      |
| Lead/Lag                | Lead  |      | Lag   |        |      |      |
| Lead-Lag Optimize?      | Yes   |      | Yes   |        |      |      |
| Recall Mode             | C-Max |      | None  | C-Max  |      |      |
| Act Effect Green (s)    | 116.6 |      | 119.1 | 120.0  |      |      |
| Actuated g/C Ratio      | 0.97  |      | 0.99  | 1.00   |      |      |
| v/c Ratio               | 0.38  |      | 0.02  | 0.37   |      |      |
| Control Delay           | 0.5   |      | 0.1   | 0.2    |      |      |
| Queue Delay             | 0.0   |      | 0.0   | 0.0    |      |      |
| Total Delay             | 0.5   |      | 0.1   | 0.2    |      |      |
| LOS                     | A     |      | A     | A      |      |      |
| Approach Delay          | 0.5   |      |       | 0.2    |      |      |
| Approach LOS            | A     |      |       | A      |      |      |
| Queue Length 50th (ft)  | 0     |      | 0     | 0      |      |      |
| Queue Length 95th (ft)  | 46    |      | m0    | 0      |      |      |
| Internal Link Dist (ft) | 366   |      |       | 377    | 331  |      |
| Turn Bay Length (ft)    |       |      | 115   |        |      |      |
| Base Capacity (vph)     | 3439  |      | 460   | 3539   |      |      |
| Starvation Cap Reductn  | 0     |      | 0     | 0      |      |      |
| Spillback Cap Reductn   | 0     |      | 0     | 0      |      |      |
| Storage Cap Reductn     | 0     |      | 0     | 0      |      |      |
| Reduced v/c Ratio       | 0.38  |      | 0.02  | 0.37   |      |      |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 40

MS

Synchro 9 Report  
Page 5

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.38

Intersection Signal Delay: 0.4

Intersection LOS: A

Intersection Capacity Utilization 36.7%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: N. Congress Ave & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 6

6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

|                         | ↖     | →     | ↘    | ↙     | ←     | ↖     | ↙     | ↘     | ↗     | ↘     | ↙     | ↗     |
|-------------------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL   | EBT   | EBR  | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     | ↖     | ↖↗    |      | ↖     | ↖↗    | ↖     |       | ↖     | ↖↗    | ↖     | ↖     | ↖     |
| Traffic Volume (vph)    | 143   | 792   | 231  | 293   | 1168  | 141   | 20    | 0     | 39    | 43    | 1     | 11    |
| Future Volume (vph)     | 143   | 792   | 231  | 293   | 1168  | 141   | 20    | 0     | 39    | 43    | 1     | 11    |
| Confl. Peds. (#/hr)     | 18    |       | 9    | 9     |       | 18    | 24    |       | 8     | 8     |       | 24    |
| Confl. Bikes (#/hr)     |       |       | 3    |       |       | 3     |       |       |       |       |       | 1     |
| Peak Hour Factor        | 0.84  | 0.84  | 0.84 | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  | 0.84  |
| Adj. Flow (vph)         | 170   | 943   | 275  | 349   | 1390  | 168   | 24    | 0     | 46    | 51    | 1     | 13    |
| Shared Lane Traffic (%) |       |       |      |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)   | 170   | 1218  | 0    | 349   | 1390  | 168   | 0     | 24    | 46    | 0     | 52    | 13    |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    | Perm  | Perm  | NA    | Perm  | Perm  | NA    | Perm  |
| Protected Phases        | 5     | 2     |      | 1     | 6     |       |       | 8     |       |       | 4     |       |
| Permitted Phases        | 2     |       |      | 6     |       | 6     | 8     |       | 8     | 4     |       | 4     |
| Detector Phase          | 5     | 2     |      | 1     | 6     | 6     | 8     | 8     | 8     | 4     | 4     | 4     |
| Switch Phase            |       |       |      |       |       |       |       |       |       |       |       |       |
| Minimum Initial (s)     | 1.0   | 10.0  |      | 1.0   | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  |
| Minimum Split (s)       | 5.5   | 22.0  |      | 5.5   | 28.0  | 28.0  | 22.0  | 22.0  | 22.0  | 28.0  | 28.0  | 28.0  |
| Total Split (s)         | 20.0  | 70.0  |      | 20.0  | 70.0  | 70.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  |
| Total Split (%)         | 16.7% | 58.3% |      | 16.7% | 58.3% | 58.3% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% |
| Yellow Time (s)         | 3.5   | 4.0   |      | 3.5   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Total Lost Time (s)     | 4.5   | 5.0   |      | 4.5   | 5.0   | 5.0   |       | 5.0   | 5.0   |       | 5.0   | 5.0   |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   | Lag   |       |       |       |       |       |       |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   | Yes   |       |       |       |       |       |       |
| Recall Mode             | None  | C-Max |      | None  | C-Max | C-Max | Max   | Max   | Max   | Max   | Max   | Max   |
| Act Effect Green (s)    | 76.3  | 65.1  |      | 84.3  | 69.8  | 69.8  |       | 25.0  | 25.0  |       | 25.0  | 25.0  |
| Actuated g/C Ratio      | 0.64  | 0.54  |      | 0.70  | 0.58  | 0.58  |       | 0.21  | 0.21  |       | 0.21  | 0.21  |
| v/c Ratio               | 0.61  | 0.66  |      | 0.95  | 0.68  | 0.19  |       | 0.09  | 0.13  |       | 0.18  | 0.04  |
| Control Delay           | 24.9  | 16.8  |      | 62.3  | 13.4  | 5.0   |       | 39.5  | 7.6   |       | 41.2  | 0.2   |
| Queue Delay             | 0.0   | 0.5   |      | 0.0   | 0.7   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Total Delay             | 24.9  | 17.3  |      | 62.3  | 14.2  | 5.0   |       | 39.5  | 7.6   |       | 41.2  | 0.2   |
| LOS                     | C     | B     |      | E     | B     | A     |       | D     | A     |       | D     | A     |
| Approach Delay          |       | 18.2  |      |       | 22.2  |       |       | 18.6  |       |       | 33.0  |       |
| Approach LOS            |       | B     |      |       | C     |       |       | B     |       |       | C     |       |
| Queue Length 50th (ft)  | 53    | 240   |      | 158   | 237   | 13    |       | 15    | 0     |       | 33    | 0     |
| Queue Length 95th (ft)  | 104   | 216   |      | #297  | 251   | 22    |       | 37    | 20    |       | 65    | 0     |
| Internal Link Dist (ft) |       | 377   |      |       | 273   |       |       | 135   |       |       | 212   |       |
| Turn Bay Length (ft)    | 160   |       |      | 100   |       | 100   |       |       | 100   |       |       |       |
| Base Capacity (vph)     | 350   | 1855  |      | 369   | 2058  | 889   |       | 270   | 367   |       | 283   | 360   |
| Starvation Cap Reductn  | 0     | 242   |      | 0     | 330   | 0     |       | 0     | 0     |       | 0     | 0     |
| Spillback Cap Reductn   | 0     | 4     |      | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Reduced v/c Ratio       | 0.49  | 0.76  |      | 0.95  | 0.80  | 0.19  |       | 0.09  | 0.13  |       | 0.18  | 0.04  |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

MS

Synchro 9 Report  
Page 7

6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 20.7

Intersection LOS: C

Intersection Capacity Utilization 78.1%

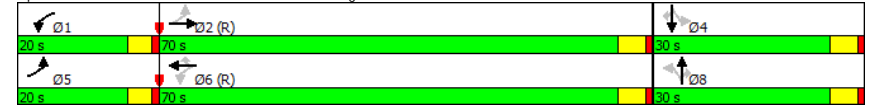
ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 6: Brazos St & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 8

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑    |      | ↓     | ↑↑    |      |      |      |      | ↓     | ↑↑    | ↓     |
| Traffic Volume (vph)    | 0    | 769   | 172  | 685   | 1591  | 0    | 0    | 0    | 0    | 37    | 52    | 56    |
| Future Volume (vph)     | 0    | 769   | 172  | 685   | 1591  | 0    | 0    | 0    | 0    | 37    | 52    | 56    |
| Confl. Peds. (#/hr)     |      |       | 54   | 54    |       |      |      |      |      | 8     |       | 49    |
| Confl. Bikes (#/hr)     |      |       | 2    |       |       |      |      |      |      |       |       | 29    |
| Peak Hour Factor        | 0.93 | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93 | 0.93 | 0.93 | 0.93  | 0.93  | 0.93  |
| Adj. Flow (vph)         | 0    | 827   | 185  | 737   | 1711  | 0    | 0    | 0    | 0    | 40    | 56    | 60    |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 1012  | 0    | 737   | 1711  | 0    | 0    | 0    | 0    | 40    | 56    | 60    |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 5.0   |      |       | 10.0  |      |      |      |      | 10.0  | 10.0  | 10.0  |
| Minimum Split (s)       |      | 30.0  |      |       | 30.0  |      |      |      |      | 28.0  | 28.0  | 28.0  |
| Total Split (s)         |      | 62.0  |      |       | 92.0  |      |      |      |      | 28.0  | 28.0  | 28.0  |
| Total Split (%)         |      | 51.7% |      |       | 76.7% |      |      |      |      | 23.3% | 23.3% | 23.3% |
| Yellow Time (s)         |      | 4.0   |      |       | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      |       | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      |       | 0.0   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      |       | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      |       |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      |       |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      |       | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effect Green (s)    |      | 57.0  |      | 87.5  | 87.0  |      |      |      |      | 23.0  | 23.0  | 23.0  |
| Actuated g/C Ratio      |      | 0.48  |      | 0.73  | 0.72  |      |      |      |      | 0.19  | 0.19  | 0.19  |
| v/c Ratio               |      | 0.62  |      | 1.51  | 0.67  |      |      |      |      | 0.12  | 0.08  | 0.17  |
| Control Delay           |      | 14.2  |      | 256.2 | 5.5   |      |      |      |      | 41.4  | 40.3  | 2.2   |
| Queue Delay             |      | 0.5   |      | 1.3   | 1.6   |      |      |      |      | 0.0   | 0.0   | 0.1   |
| Total Delay             |      | 14.7  |      | 257.5 | 7.2   |      |      |      |      | 41.4  | 40.3  | 2.4   |
| LOS                     |      | B     |      | F     | A     |      |      |      |      | D     | D     | A     |
| Approach Delay          |      | 14.7  |      |       | 82.6  |      |      |      |      |       | 26.0  |       |
| Approach LOS            |      | B     |      |       | F     |      |      |      |      |       | C     |       |
| Queue Length 50th (ft)  |      | 106   |      | -512  | 134   |      |      |      |      | 26    | 18    | 0     |
| Queue Length 95th (ft)  |      | 117   |      | m#366 | m117  |      |      |      |      | 58    | 37    | 8     |
| Internal Link Dist (ft) |      | 273   |      |       | 321   |      |      | 343  |      |       | 244   |       |
| Turn Bay Length (ft)    |      |       |      | 120   |       |      |      |      |      | 100   |       | 100   |
| Base Capacity (vph)     |      | 1625  |      | 488   | 2565  |      |      |      |      | 334   | 678   | 353   |
| Starvation Cap Reductn  |      | 242   |      | 65    | 632   |      |      |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 167   |      |      |      |      | 0     | 0     | 47    |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       |      | 0.73  |      | 1.74  | 0.89  |      |      |      |      | 0.12  | 0.08  | 0.20  |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 130

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Lane Group              | 01   | 09   |
|-------------------------|------|------|
| Lane Configurations     |      |      |
| Traffic Volume (vph)    |      |      |
| Future Volume (vph)     |      |      |
| Confl. Peds. (#/hr)     |      |      |
| Confl. Bikes (#/hr)     |      |      |
| Peak Hour Factor        |      |      |
| Adj. Flow (vph)         |      |      |
| Shared Lane Traffic (%) |      |      |
| Lane Group Flow (vph)   |      |      |
| Turn Type               |      |      |
| Protected Phases        | 1    | 9    |
| Permitted Phases        |      |      |
| Detector Phase          |      |      |
| Switch Phase            |      |      |
| Minimum Initial (s)     | 1.0  | 5.0  |
| Minimum Split (s)       | 5.5  | 9.5  |
| Total Split (s)         | 15.0 | 15.0 |
| Total Split (%)         | 13%  | 13%  |
| Yellow Time (s)         | 3.5  | 3.5  |
| All-Red Time (s)        | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |
| Total Lost Time (s)     |      |      |
| Lead/Lag                | Lead |      |
| Lead-Lag Optimize?      | Yes  |      |
| Recall Mode             | None | None |
| Act Effect Green (s)    |      |      |
| Actuated g/C Ratio      |      |      |
| v/c Ratio               |      |      |
| Control Delay           |      |      |
| Queue Delay             |      |      |
| Total Delay             |      |      |
| LOS                     |      |      |
| Approach Delay          |      |      |
| Approach LOS            |      |      |
| Queue Length 50th (ft)  |      |      |
| Queue Length 95th (ft)  |      |      |
| Internal Link Dist (ft) |      |      |
| Turn Bay Length (ft)    |      |      |
| Base Capacity (vph)     |      |      |
| Starvation Cap Reductn  |      |      |
| Spillback Cap Reductn   |      |      |
| Storage Cap Reductn     |      |      |
| Reduced v/c Ratio       |      |      |

Intersection Summary

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.51

Intersection Signal Delay: 61.1

Intersection LOS: E

Intersection Capacity Utilization 100.5%

ICU Level of Service G

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

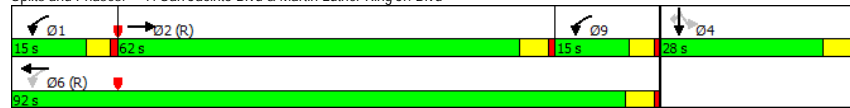
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: San Jacinto Blvd & Martin Luther King Jr. Blvd



8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↰     | ↱     |      |      | ↱     | ↰    | ↰     | ↱     | ↱     |      |      |      |
| Traffic Volume (vph)    | 155   | 577   | 0    | 0    | 2198  | 60   | 68    | 86    | 126   | 0    | 0    | 0    |
| Future Volume (vph)     | 155   | 577   | 0    | 0    | 2198  | 60   | 68    | 86    | 126   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     |       |       | 36   |      |       | 60   | 35    |       | 28    |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       | 4    |       |       | 4     |      |      |      |
| Peak Hour Factor        | 0.89  | 0.89  | 0.89 | 0.89 | 0.89  | 0.89 | 0.89  | 0.89  | 0.89  | 0.89 | 0.89 | 0.89 |
| Adj. Flow (vph)         | 174   | 648   | 0    | 0    | 2470  | 67   | 76    | 97    | 142   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       | 10%  |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 174   | 648   | 0    | 0    | 2537  | 0    | 68    | 105   | 142   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 1.0   | 10.0  |      |      | 1.0   |      | 10.0  | 10.0  | 10.0  |      |      |      |
| Minimum Split (s)       | 5.5   | 26.0  |      |      | 5.5   |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (s)         | 15.0  | 94.0  |      |      | 79.0  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (%)         | 12.5% | 78.3% |      |      | 65.8% |      | 21.7% | 21.7% | 21.7% |      |      |      |
| Yellow Time (s)         | 3.5   | 4.0   |      |      | 3.5   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 4.5   | 5.0   |      |      | 4.5   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 89.5  | 89.0  |      |      | 75.0  |      | 21.0  | 21.0  | 21.0  |      |      |      |
| Actuated g/C Ratio      | 0.75  | 0.74  |      |      | 0.62  |      | 0.18  | 0.18  | 0.18  |      |      |      |
| v/c Ratio               | 0.83  | 0.25  |      |      | 1.15  |      | 0.25  | 0.34  | 0.38  |      |      |      |
| Control Delay           | 76.6  | 1.0   |      |      | 87.1  |      | 41.2  | 42.5  | 8.4   |      |      |      |
| Queue Delay             | 0.0   | 0.1   |      |      | 0.5   |      | 3.1   | 0.0   | 0.0   |      |      |      |
| Total Delay             | 76.6  | 1.1   |      |      | 87.6  |      | 44.3  | 42.5  | 8.4   |      |      |      |
| LOS                     | E     | A     |      |      | F     |      | D     | D     | A     |      |      |      |
| Approach Delay          |       | 17.1  |      |      | 87.6  |      |       | 27.5  |       |      |      |      |
| Approach LOS            |       | B     |      |      | F     |      |       | C     |       |      |      |      |
| Queue Length 50th (ft)  | 101   | 14    |      |      | -1197 |      | 46    | 73    | 5     |      |      |      |
| Queue Length 95th (ft)  | #202  | 16    |      |      | m127  |      | m66   | m100  | m24   |      |      |      |
| Internal Link Dist (ft) |       | 321   |      |      | 675   |      |       | 350   |       |      | 106  |      |
| Turn Bay Length (ft)    | 120   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 217   | 2624  |      |      | 2201  |      | 276   | 306   | 376   |      |      |      |
| Starvation Cap Reductn  | 0     | 912   |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 408   |      | 138   | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.80  | 0.38  |      |      | 1.41  |      | 0.49  | 0.34  | 0.38  |      |      |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 150

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.15

Intersection Signal Delay: 66.7

Intersection LOS: E

Intersection Capacity Utilization 100.5%

ICU Level of Service G

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Trinity St & Martin Luther King Jr. Blvd



18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

|  | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|--|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations  |      | ↑    | ↑    |      | ↑    |      |      |      |      |      | ↑    | ↑    |
| Traffic Volume (vph)                                       | 0    | 14   | 48   | 52   | 10   | 0    | 0    | 0    | 0    | 201  | 1246 | 18   |
| Future Volume (vph)  | 0    | 14   | 48   | 52   | 10   | 0    | 0    | 0    | 0    | 201  | 1246 | 18   |
| Confl. Peds. (#/hr)  |      |      | 18   |      |      |      |      |      |      | 45   |      |      |
| Peak Hour Factor   | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Parking (#/hr)   |      | 0    |      |      |      |      |      |      |      |      |      |      |
| Adj. Flow (vph)  | 0    | 15   | 52   | 57   | 11   | 0    | 0    | 0    | 0    | 218  | 1354 | 20   |
| Shared Lane Traffic (%)                                    |      |      |      |      |      |      |      |      |      |      |      |      |
| Lane Group Flow (vph)                                      | 0    | 15   | 52   | 0    | 68   | 0    | 0    | 0    | 0    | 0    | 1592 | 0    |
| Turn Type  |      | NA   | Perm | Perm | NA   |      |      |      |      | Perm | NA   |      |
| Protected Phases   | 4 12 |      |      |      | 4 12 |      |      |      |      |      | 2 10 |      |
| Permitted Phases   |      |      | 4 12 | 4 12 |      |      |      |      |      | 2 10 |      |      |
| Detector Phase   | 4 12 |      | 4 12 | 4 12 | 4 12 |      |      |      |      | 2 10 | 2 10 |      |
| Switch Phase   |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Initial (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Split (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (%)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Yellow Time (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| All-Red Time (s)   |      |      |      |      |      |      |      |      |      |      |      |      |
| Lost Time Adjust (s)                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Lost Time (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead/Lag   |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead-Lag Optimize?   |      |      |      |      |      |      |      |      |      |      |      |      |
| Recall Mode  |      |      |      |      |      |      |      |      |      |      |      |      |
| Act Effct Green (s)  | 21.8 | 21.8 |      | 21.8 |      |      |      |      |      |      | 82.9 |      |
| Actuated g/C Ratio   | 0.18 | 0.18 |      | 0.18 |      |      |      |      |      |      | 0.69 |      |
| v/c Ratio  | 0.05 | 0.16 |      | 0.27 |      |      |      |      |      |      | 0.67 |      |
| Control Delay  | 20.7 | 4.1  |      | 24.4 |      |      |      |      |      |      | 9.1  |      |
| Queue Delay  | 0.0  | 0.0  |      | 0.0  |      |      |      |      |      |      | 0.0  |      |
| Total Delay  | 20.7 | 4.1  |      | 24.4 |      |      |      |      |      |      | 9.1  |      |
| LOS  | C    | A    |      | C    |      |      |      |      |      |      | A    |      |
| Approach Delay   | 7.8  |      |      | 24.4 |      |      |      |      |      |      | 9.1  |      |
| Approach LOS   | A    |      |      | C    |      |      |      |      |      |      | A    |      |
| Queue Length 50th (ft)                                     | 5    | 0    |      | 33   |      |      |      |      |      |      | 228  |      |
| Queue Length 95th (ft)                                     | 16   | 13   |      | 51   |      |      |      |      |      |      | 276  |      |
| Internal Link Dist (ft)                                    | 177  |      |      | 244  |      |      |      | 271  |      |      | 262  |      |
| Turn Bay Length (ft)                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| Base Capacity (vph)  | 754  | 714  |      | 628  |      |      |      |      |      |      | 2371 |      |
| Starvation Cap Reductn                                     | 0    | 0    |      | 0    |      |      |      |      |      |      | 0    |      |
| Spillback Cap Reductn                                      | 0    | 0    |      | 0    |      |      |      |      |      |      | 0    |      |
| Storage Cap Reductn  | 0    | 0    |      | 0    |      |      |      |      |      |      | 0    |      |
| Reduced v/c Ratio  | 0.02 | 0.07 |      | 0.11 |      |      |      |      |      |      | 0.67 |      |
| Intersection Summary                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| Cycle Length: 120  |      |      |      |      |      |      |      |      |      |      |      |      |
| Actuated Cycle Length: 120                                 |      |      |      |      |      |      |      |      |      |      |      |      |
| Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green |      |      |      |      |      |      |      |      |      |      |      |      |
| Natural Cycle: 95  |      |      |      |      |      |      |      |      |      |      |      |      |

18: Guadalupe St & E. 17th St

2024 Background + Site

TIA for Texas Capitol Complex Master Plan 2018 Update

Timing Plan: AM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 23.0  | 23.0 | 22.5 | 22.5 |
| Total Split (s)         | 26.0  | 43.0 | 28.0 | 23.0 |
| Total Split (%)         | 22%   | 36%  | 23%  | 19%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effect Green (s)    |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

18: Guadalupe St & E. 17th St

2024 Background + Site

TIA for Texas Capitol Complex Master Plan 2018 Update


















Timing Plan: AM

|   |                        |
|---|------------------------|
| Control Type: Actuated-Coordinated      |                        |
| Maximum v/c Ratio: 0.67                 |                        |
| Intersection Signal Delay: 9.7          | Intersection LOS: A    |
| Intersection Capacity Utilization 81.6% | ICU Level of Service D |
| Analysis Period (min) 15                |                        |



19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

|  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group   | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations  |   |  |   |   |  |   |   |  |  |  |   |   |
| Traffic Volume (vph)                                       | 4   | 194   | 0   | 0   | 28  | 32  | 90  | 819   | 132   | 0   | 0   | 0   |
| Future Volume (vph)  | 4   | 194   | 0   | 0   | 28  | 32  | 90  | 819   | 132   | 0   | 0   | 0   |
| Confl. Peds. (#/hr)  | 31  |   |   |   |   |   |   |   | 34  |   |   |   |
| Peak Hour Factor   | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  | 0.83  |
| Parking (#/hr)   |   | 0   |   |   |   |   |   |   |   |   |   |   |
| Adj. Flow (vph)  | 5   | 234   | 0   | 0   | 34  | 39  | 108   | 987   | 159   | 0   | 0   | 0   |
| Shared Lane Traffic (%)                                    |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)                                      | 0   | 239   | 0   | 0   | 73  | 0   | 0   | 1095  | 159   | 0   | 0   | 0   |
| Turn Type  | Perm  | NA  |   |   | NA  |   | Perm  | NA  | Perm  |   |   |   |
| Protected Phases   |   | 4 12  |   |   | 4 12  |   |   | 2 10  |   |   |   |   |
| Permitted Phases   | 4 12  |   |   |   |   |   | 2 10  |   | 2 10  |   |   |   |
| Detector Phase   | 4 12  | 4 12  |   |   | 4 12  |   | 2 10  | 2 10  | 2 10  |   |   |   |
| Switch Phase   |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (%)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Yellow Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| All-Red Time (s)   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lost Time Adjust (s)                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Lost Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead/Lag   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?   |   |   |   |   |   |   |   |   |   |   |   |   |
| Recall Mode  |   |   |   |   |   |   |   |   |   |   |   |   |
| Act Effct Green (s)  | 29.5  |   |   |   | 29.5  |   |   | 66.5  | 66.5  |   |   |   |
| Actuated g/C Ratio   | 0.25  |   |   |   | 0.25  |   |   | 0.55  | 0.55  |   |   |   |
| v/c Ratio  | 0.58  |   |   |   | 0.16  |   |   | 0.39  | 0.19  |   |   |   |
| Control Delay  | 29.0  |   |   |   | 10.3  |   |   | 10.5  | 5.6   |   |   |   |
| Queue Delay  | 0.0   |   |   |   | 0.0   |   |   | 0.0   | 0.0   |   |   |   |
| Total Delay  | 29.0  |   |   |   | 10.3  |   |   | 10.5  | 5.6   |   |   |   |
| LOS  | C   |   |   |   | B   |   |   | B   | A   |   |   |   |
| Approach Delay   | 29.0  |   |   |   | 10.3  |   |   | 9.9   |   |   |   |   |
| Approach LOS   | C   |   |   |   | B   |   |   | A   |   |   |   |   |
| Queue Length 50th (ft)                                     | 89  |   |   |   | 13  |   |   | 141   | 36  |   |   |   |
| Queue Length 95th (ft)                                     | 131   |   |   |   | 29  |   |   | 95  | 32  |   |   |   |
| Internal Link Dist (ft)                                    | 244   |   |   |   | 319   |   |   | 272   |   | 254   |   |   |
| Turn Bay Length (ft)                                       |   |   |   |   |   |   |   | 100   |   |   |   |   |
| Base Capacity (vph)  | 597   |   |   |   | 644   |   |   | 2931  | 851   |   |   |   |
| Starvation Cap Reductn                                     | 0   |   |   |   | 0   |   |   | 294   | 0   |   |   |   |
| Spillback Cap Reductn                                      | 0   |   |   |   | 0   |   |   | 0   | 0   |   |   |   |
| Storage Cap Reductn  | 0   |   |   |   | 0   |   |   | 0   | 0   |   |   |   |
| Reduced v/c Ratio  | 0.40  |   |   |   | 0.11  |   |   | 0.42  | 0.19  |   |   |   |
| Intersection Summary                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Cycle Length: 120  |   |   |   |   |   |   |   |   |   |   |   |   |
| Actuated Cycle Length: 120                                 |   |   |   |   |   |   |   |   |   |   |   |   |
| Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green |   |   |   |   |   |   |   |   |   |   |   |   |
| Natural Cycle: 100   |   |   |   |   |   |   |   |   |   |   |   |   |

19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 26.0  | 28.0 | 22.5 | 22.5 |
| Total Split (s)         | 38.0  | 29.0 | 27.0 | 26.0 |
| Total Split (%)         | 32%   | 24%  | 23%  | 22%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effct Green (s)     |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 12.8

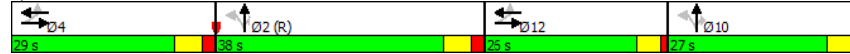
Intersection LOS: B

Intersection Capacity Utilization 41.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 19: Lavaca St & E. 17th St



28: Lavaca St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Lane Group  | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|---|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| Traffic Volume (vph)                                      | 4    | 187  | 0    | 0    | 29   | 40   | 90   | 985  | 135  | 0    | 0    | 0    |
| Future Volume (vph)                                       | 4    | 187  | 0    | 0    | 29   | 40   | 90   | 985  | 135  | 0    | 0    | 0    |
| Confl. Peds. (#/hr)                                       |      |      |      |      |      | 11   | 60   |      |      |      |      |      |
| Confl. Bikes (#/hr)                                       |      |      |      |      |      | 2    |      |      |      |      |      |      |
| Peak Hour Factor  | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 | 0.84 |
| Parking (#/hr)  |      |      |      |      | 0    |      |      |      |      |      |      |      |
| Adj. Flow (vph)   | 5    | 223  | 0    | 0    | 35   | 48   | 107  | 1173 | 161  | 0    | 0    | 0    |
| Shared Lane Traffic (%)                                   |      |      |      |      |      |      |      |      |      |      |      |      |
| Lane Group Flow (vph)                                     | 0    | 228  | 0    | 0    | 83   | 0    | 0    | 1280 | 161  | 0    | 0    | 0    |
| Turn Type   | Perm | NA   |      |      | NA   |      | Perm | NA   | Perm |      |      |      |
| Protected Phases  | 4 12 |      |      |      | 4 12 |      |      | 2 10 |      |      |      |      |
| Permitted Phases  | 4 12 |      |      |      |      |      |      | 2 10 | 2 10 |      |      |      |
| Detector Phase  | 4 12 | 4 12 |      |      | 4 12 |      |      | 2 10 | 2 10 | 2 10 |      |      |
| Switch Phase  |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Initial (s)                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Split (s)   |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (s)   |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (%)   |      |      |      |      |      |      |      |      |      |      |      |      |
| Yellow Time (s)   |      |      |      |      |      |      |      |      |      |      |      |      |
| All-Red Time (s)  |      |      |      |      |      |      |      |      |      |      |      |      |
| Lost Time Adjust (s)                                      |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Lost Time (s)                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead/Lag  |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead-Lag Optimize?  |      |      |      |      |      |      |      |      |      |      |      |      |
| Recall Mode   |      |      |      |      |      |      |      |      |      |      |      |      |
| Act Effct Green (s)                                       | 24.9 |      |      |      | 24.9 |      |      | 71.1 | 71.1 |      |      |      |
| Actuated g/C Ratio  | 0.21 |      |      |      | 0.21 |      |      | 0.59 | 0.59 |      |      |      |
| v/c Ratio   | 0.59 |      |      |      | 0.25 |      |      | 0.43 | 0.17 |      |      |      |
| Control Delay   | 28.8 |      |      |      | 16.0 |      |      | 4.3  | 1.2  |      |      |      |
| Queue Delay   | 0.0  |      |      |      | 0.0  |      |      | 0.2  | 0.0  |      |      |      |
| Total Delay   | 28.8 |      |      |      | 16.0 |      |      | 4.5  | 1.2  |      |      |      |
| LOS   | C    |      |      |      | B    |      |      | A    | A    |      |      |      |
| Approach Delay  | 28.8 |      |      |      | 16.0 |      |      | 4.1  |      |      |      |      |
| Approach LOS  | C    |      |      |      | B    |      |      | A    |      |      |      |      |
| Queue Length 50th (ft)                                    | 86   |      |      |      | 25   |      |      | 34   | 1    |      |      |      |
| Queue Length 95th (ft)                                    | 123  |      |      |      | m42  |      |      | m71  | m11  |      |      |      |
| Internal Link Dist (ft)                                   | 233  |      |      |      | 60   |      |      | 281  |      |      | 272  |      |
| Turn Bay Length (ft)                                      |      |      |      |      |      |      |      |      | 100  |      |      |      |
| Base Capacity (vph)                                       | 694  |      |      |      | 586  |      |      | 2959 | 974  |      |      |      |
| Starvation Cap Reductn                                    | 0    |      |      |      | 0    |      |      | 768  | 0    |      |      |      |
| Spillback Cap Reductn                                     | 0    |      |      |      | 0    |      |      | 0    | 0    |      |      |      |
| Storage Cap Reductn                                       | 0    |      |      |      | 0    |      |      | 0    | 0    |      |      |      |
| Reduced v/c Ratio   | 0.33 |      |      |      | 0.14 |      |      | 0.58 | 0.17 |      |      |      |
| Intersection Summary                                      |      |      |      |      |      |      |      |      |      |      |      |      |
| Cycle Length: 120   |      |      |      |      |      |      |      |      |      |      |      |      |
| Actuated Cycle Length: 120                                |      |      |      |      |      |      |      |      |      |      |      |      |
| Offset: 0 (0%), Referenced to phase 2:NBT, Start of Green |      |      |      |      |      |      |      |      |      |      |      |      |

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Confl. Bikes (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 28.0  | 32.0 | 21.0 | 20.0 |
| Total Split (s)         | 42.0  | 32.0 | 21.0 | 25.0 |
| Total Split (%)         | 35%   | 27%  | 18%  | 21%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effct Green (s)     |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

Natural Cycle: 105  
Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 0.59  
Intersection Signal Delay: 7.9Intersection LOS: A  
Intersection Capacity Utilization 46.2%ICU Level of Service A  
Analysis Period (min) 15  
m Volume for 95th percentile queue is metered by upstream signal.



34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑↑   |      | ↓     | ↑↑↑   |      |      |      |      |       | ↑↑↑   | ↓     |
| Traffic Volume (vph)    | 0    | 1883  | 330  | 207   | 1002  | 0    | 0    | 0    | 0    | 105   | 699   | 84    |
| Future Volume (vph)     | 0    | 1883  | 330  | 207   | 1002  | 0    | 0    | 0    | 0    | 105   | 699   | 84    |
| Confl. Peds. (#/hr)     |      |       | 32   | 32    |       |      |      |      |      | 30    |       | 38    |
| Confl. Bikes (#/hr)     |      |       |      |       |       | 1    |      |      |      |       |       | 21    |
| Peak Hour Factor        | 0.98 | 0.98  | 0.98 | 0.98  | 0.98  | 0.98 | 0.98 | 0.98 | 0.98 | 0.98  | 0.98  | 0.98  |
| Adj. Flow (vph)         | 0    | 1921  | 337  | 211   | 1022  | 0    | 0    | 0    | 0    | 107   | 713   | 86    |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 2258  | 0    | 211   | 1022  | 0    | 0    | 0    | 0    | 0     | 820   | 86    |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1 3   | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1 3   | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      |       | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       |      | 25.0  |      |       | 25.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (s)         |      | 56.0  |      |       | 84.0  |      |      |      |      | 36.0  | 36.0  | 36.0  |
| Total Split (%)         |      | 46.7% |      |       | 70.0% |      |      |      |      | 30.0% | 30.0% | 30.0% |
| Yellow Time (s)         |      | 4.0   |      |       | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      |       | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      |       | 0.0   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      |       | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      |       |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      |       |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      |       | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effect Green (s)    |      | 51.2  |      |       | 79.0  | 79.0 |      |      |      | 31.0  | 31.0  | 31.0  |
| Actuated g/C Ratio      |      | 0.43  |      |       | 0.66  | 0.66 |      |      |      | 0.26  | 0.26  | 0.26  |
| v/c Ratio               |      | 1.07  |      |       | 0.65  | 0.31 |      |      |      | 0.63  | 0.19  | 0.19  |
| Control Delay           |      | 73.0  |      |       | 39.7  | 3.5  |      |      |      | 35.6  | 5.2   | 5.2   |
| Queue Delay             |      | 11.0  |      |       | 16.5  | 0.1  |      |      |      | 0.4   | 0.0   | 0.0   |
| Total Delay             |      | 84.0  |      |       | 56.2  | 3.6  |      |      |      | 36.0  | 5.2   | 5.2   |
| LOS                     |      | F     |      |       | E     | A    |      |      |      | D     | A     | A     |
| Approach Delay          |      | 84.0  |      |       | 12.6  |      |      |      |      | 33.1  |       |       |
| Approach LOS            |      | F     |      |       | B     |      |      |      |      | C     |       |       |
| Queue Length 50th (ft)  |      | ~704  |      |       | 111   | 35   |      |      |      | 190   | 4     | 4     |
| Queue Length 95th (ft)  |      | #800  |      |       | 185   | 40   |      |      |      | 226   | m18   | m18   |
| Internal Link Dist (ft) |      | 262   |      |       | 240   |      |      | 197  |      | 285   |       |       |
| Turn Bay Length (ft)    |      |       |      |       | 50    |      |      |      |      |       |       | 100   |
| Base Capacity (vph)     |      | 2119  |      |       | 327   | 3347 |      |      |      | 1298  | 458   | 458   |
| Starvation Cap Reductn  |      | 0     |      |       | 100   | 927  |      |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   |      | 51    |      |       | 0     | 0    |      |      |      | 144   | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      |       | 0     | 0    |      |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       |      | 1.09  |      |       | 0.93  | 0.42 |      |      |      | 0.71  | 0.19  | 0.19  |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 100

MS

Synchro 9 Report  
Page 23

34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Lane Group              | Ø1   | Ø3   |
|-------------------------|------|------|
| Lane Configurations     |      |      |
| Traffic Volume (vph)    |      |      |
| Future Volume (vph)     |      |      |
| Confl. Peds. (#/hr)     |      |      |
| Confl. Bikes (#/hr)     |      |      |
| Peak Hour Factor        |      |      |
| Adj. Flow (vph)         |      |      |
| Shared Lane Traffic (%) |      |      |
| Lane Group Flow (vph)   |      |      |
| Turn Type               |      |      |
| Protected Phases        | 1    | 3    |
| Permitted Phases        |      |      |
| Detector Phase          |      |      |
| Switch Phase            |      |      |
| Minimum Initial (s)     | 8.0  | 5.0  |
| Minimum Split (s)       | 13.0 | 10.0 |
| Total Split (s)         | 14.0 | 14.0 |
| Total Split (%)         | 12%  | 12%  |
| Yellow Time (s)         | 4.0  | 4.0  |
| All-Red Time (s)        | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |
| Total Lost Time (s)     |      |      |
| Lead/Lag                | Lead |      |
| Lead-Lag Optimize?      | Yes  |      |
| Recall Mode             | Min  | None |
| Act Effect Green (s)    |      |      |
| Actuated g/C Ratio      |      |      |
| v/c Ratio               |      |      |
| Control Delay           |      |      |
| Queue Delay             |      |      |
| Total Delay             |      |      |
| LOS                     |      |      |
| Approach Delay          |      |      |
| Approach LOS            |      |      |
| Queue Length 50th (ft)  |      |      |
| Queue Length 95th (ft)  |      |      |
| Internal Link Dist (ft) |      |      |
| Turn Bay Length (ft)    |      |      |
| Base Capacity (vph)     |      |      |
| Starvation Cap Reductn  |      |      |
| Spillback Cap Reductn   |      |      |
| Storage Cap Reductn     |      |      |
| Reduced v/c Ratio       |      |      |

Intersection Summary

MS

Synchro 9 Report  
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34: Guadalupe St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.07

Intersection Signal Delay: 53.5

Intersection LOS: D

Intersection Capacity Utilization 90.6%

ICU Level of Service E

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

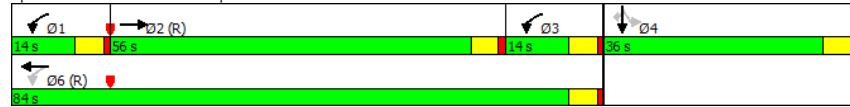
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 34: Guadalupe St & W. 15th St



35: Lavaca St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↩     | ↩↩↩   |      |      | ↩↩↩   |      |       | ↩↩↩   | ↩     |      |      |      |
| Traffic Volume (vph)    | 338   | 1574  | 0    | 0    | 1087  | 132  | 133   | 706   | 198   | 0    | 0    | 0    |
| Future Volume (vph)     | 338   | 1574  | 0    | 0    | 1087  | 132  | 133   | 706   | 198   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 38    |       |      |      |       | 38   | 17    |       | 48    |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       |      |       |       | 11    |      |      |      |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94 | 0.94 | 0.94  | 0.94 | 0.94  | 0.94  | 0.94  | 0.94 | 0.94 | 0.94 |
| Adj. Flow (vph)         | 360   | 1674  | 0    | 0    | 1156  | 140  | 141   | 751   | 211   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 360   | 1674  | 0    | 0    | 1296  | 0    | 0     | 892   | 211   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 28.0  |      |      | 28.0  |      | 33.0  | 33.0  | 33.0  |      |      |      |
| Total Split (s)         | 19.0  | 79.0  |      |      | 60.0  |      | 41.0  | 41.0  | 41.0  |      |      |      |
| Total Split (%)         | 15.8% | 65.8% |      |      | 50.0% |      | 34.2% | 34.2% | 34.2% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 2.0   | 2.0   | 2.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      |       | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      |       | 6.0   | 6.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effct Green (s)     | 74.0  | 74.0  |      |      | 55.0  |      |       | 35.0  | 35.0  |      |      |      |
| Actuated g/C Ratio      | 0.62  | 0.62  |      |      | 0.46  |      |       | 0.29  | 0.29  |      |      |      |
| v/c Ratio               | 1.12  | 0.53  |      |      | 0.57  |      |       | 0.61  | 0.45  |      |      |      |
| Control Delay           | 104.6 | 2.8   |      |      | 11.7  |      |       | 38.7  | 27.2  |      |      |      |
| Queue Delay             | 0.5   | 0.5   |      |      | 0.2   |      |       | 0.0   | 0.0   |      |      |      |
| Total Delay             | 105.1 | 3.3   |      |      | 11.8  |      |       | 38.7  | 27.2  |      |      |      |
| LOS                     | F     | A     |      |      | B     |      |       | D     | C     |      |      |      |
| Approach Delay          |       | 21.3  |      |      | 11.8  |      |       | 36.5  |       |      |      |      |
| Approach LOS            |       | C     |      |      | B     |      |       | D     |       |      |      |      |
| Queue Length 50th (ft)  | ~237  | 49    |      |      | 84    |      |       | 217   | 91    |      |      |      |
| Queue Length 95th (ft)  | m#213 | m46   |      |      | 91    |      |       | 265   | 167   |      |      |      |
| Internal Link Dist (ft) |       | 240   |      |      | 335   |      |       | 116   |       |      | 281  |      |
| Turn Bay Length (ft)    | 50    |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 321   | 3135  |      |      | 2288  |      |       | 1466  | 469   |      |      |      |
| Starvation Cap Reductn  | 13    | 911   |      |      | 271   |      |       | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      |       | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      |       | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 1.17  | 0.75  |      |      | 0.64  |      |       | 0.61  | 0.45  |      |      |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 80

35: Lavaca St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.12

Intersection Signal Delay: 22.3

Intersection LOS: C

Intersection Capacity Utilization 90.6%

ICU Level of Service E

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 35: Lavaca St & W. 15th St



36: Colorado St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR   | SBL   | SBT   | SBR    |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|-------|-------|-------|--------|
| Lane Configurations     | ↩ ↪ ↪ | ↩ ↪ ↪ | ↩    | ↩ ↪ ↪ | ↩ ↪ ↪ | ↩    | ↩ ↪ ↪ | ↩ ↪ ↪ | ↩ ↪ ↪ | ↩ ↪ ↪ | ↩ ↪ ↪ | ↩ ↪ ↪  |
| Traffic Volume (vph)    | 349   | 1407  | 53   | 73    | 1131  | 414  | 1     | 22    | 22    | 47    | 19    | 42     |
| Future Volume (vph)     | 349   | 1407  | 53   | 73    | 1131  | 414  | 1     | 22    | 22    | 47    | 19    | 42     |
| Confl. Peds. (#/hr)     | 6     |       | 83   | 83    |       | 6    | 4     |       | 35    | 35    |       | 4      |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94 | 0.94  | 0.94  | 0.94 | 0.94  | 0.94  | 0.94  | 0.94  | 0.94  | 0.94   |
| Adj. Flow (vph)         | 371   | 1497  | 56   | 78    | 1203  | 440  | 1     | 23    | 23    | 50    | 20    | 45     |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |       |       |       |        |
| Lane Group Flow (vph)   | 371   | 1553  | 0    | 78    | 1643  | 0    | 0     | 47    | 0     | 0     | 70    | 45     |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | Perm  | NA    |       | Perm  | NA    | custom |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |       | 4     |       |       | 8     |        |
| Permitted Phases        | 2     |       |      | 6     |       |      | 4     |       |       | 8     |       | 6      |
| Detector Phase          | 5     | 2     |      | 1     | 6     |      | 4     | 4     |       | 8     | 8     | 6      |
| Switch Phase            |       |       |      |       |       |      |       |       |       |       |       |        |
| Minimum Initial (s)     | 5.0   | 15.0  |      | 5.0   | 15.0  |      | 5.0   | 5.0   |       | 5.0   | 5.0   | 15.0   |
| Minimum Split (s)       | 10.0  | 22.0  |      | 10.0  | 30.0  |      | 32.0  | 32.0  |       | 32.0  | 32.0  | 30.0   |
| Total Split (s)         | 15.0  | 72.0  |      | 15.0  | 72.0  |      | 33.0  | 33.0  |       | 33.0  | 33.0  | 72.0   |
| Total Split (%)         | 12.5% | 60.0% |      | 12.5% | 60.0% |      | 27.5% | 27.5% |       | 27.5% | 27.5% | 60.0%  |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   |       | 4.0   | 4.0   | 4.0    |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   |       | 1.0   | 1.0   | 1.0    |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0    |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      | 5.0   | 5.0   |       | 5.0   | 5.0   | 5.0    |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   |      |       |       |       |       |       | Lag    |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |       |       |       |       |       | Yes    |
| Recall Mode             | None  | C-Max |      | None  | C-Max |      | Max   | Max   |       | Max   | Max   | C-Max  |
| Act Effct Green (s)     | 79.9  | 71.9  |      | 74.2  | 67.0  |      |       | 28.0  |       |       | 28.0  | 67.0   |
| Actuated g/C Ratio      | 0.67  | 0.60  |      | 0.62  | 0.56  |      |       | 0.23  |       |       | 0.23  | 0.56   |
| v/c Ratio               | 1.52  | 0.52  |      | 0.33  | 0.60  |      |       | 0.11  |       |       | 0.21  | 0.05   |
| Control Delay           | 283.5 | 5.0   |      | 10.8  | 9.0   |      |       | 22.8  |       |       | 39.2  | 1.6    |
| Queue Delay             | 0.0   | 0.1   |      | 0.0   | 0.0   |      |       | 0.0   |       |       | 0.0   | 0.0    |
| Total Delay             | 283.5 | 5.1   |      | 10.8  | 9.0   |      |       | 22.8  |       |       | 39.2  | 1.6    |
| LOS                     | F     | A     |      | B     | A     |      |       | C     |       |       | D     | A      |
| Approach Delay          |       | 58.8  |      |       | 9.1   |      |       | 22.8  |       |       | 24.5  |        |
| Approach LOS            |       | E     |      |       | A     |      |       | C     |       |       | C     |        |
| Queue Length 50th (ft)  | ~321  | 87    |      | 10    | 219   |      |       | 15    |       |       | 44    | 0      |
| Queue Length 95th (ft)  | #517  | 101   |      | 22    | 258   |      |       | 47    |       |       | 86    | 10     |
| Internal Link Dist (ft) |       | 335   |      |       | 362   |      |       | 155   |       |       | 114   |        |
| Turn Bay Length (ft)    | 90    |       |      | 90    |       |      |       |       |       |       |       | 100    |
| Base Capacity (vph)     | 244   | 3002  |      | 274   | 2755  |      |       | 410   |       |       | 332   | 896    |
| Starvation Cap Reductn  | 0     | 413   |      | 0     | 50    |      |       | 0     |       |       | 0     | 0      |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 0     |      |       | 0     |       |       | 0     | 0      |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      |       | 0     |       |       | 0     | 0      |
| Reduced v/c Ratio       | 1.52  | 0.60  |      | 0.28  | 0.61  |      |       | 0.11  |       |       | 0.21  | 0.05   |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

36: Colorado St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

Maximum v/c Ratio: 1.52

Intersection Signal Delay: 34.8

Intersection LOS: C

Intersection Capacity Utilization 87.1%

ICU Level of Service E

Analysis Period (min) 15

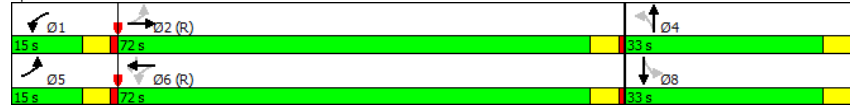
- Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 36: Colorado St & W. 15th St



37: N. Congress Ave & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

|                         | →     | ↗    | ↖     | ←     | ↙    | ↘     |
|-------------------------|-------|------|-------|-------|------|-------|
| Lane Group              | EBT   | EBR  | WBL   | WBT   | NBL  | NBR   |
| Lane Configurations     | ↑↑↑   | ↘    | ↙     | ↑↑↑   | ↘    | ↙     |
| Traffic Volume (vph)    | 1448  | 28   | 18    | 1707  | 0    | 1     |
| Future Volume (vph)     | 1448  | 28   | 18    | 1707  | 0    | 1     |
| Confl. Peds. (#/hr)     |       | 30   | 30    |       | 13   | 21    |
| Confl. Bikes (#/hr)     |       |      |       |       |      | 13    |
| Peak Hour Factor        | 0.98  | 0.98 | 0.98  | 0.98  | 0.98 | 0.98  |
| Adj. Flow (vph)         | 1478  | 29   | 18    | 1742  | 0    | 1     |
| Shared Lane Traffic (%) |       |      |       |       |      |       |
| Lane Group Flow (vph)   | 1507  | 0    | 18    | 1742  | 0    | 1     |
| Turn Type               | NA    |      | pm+pt | NA    |      | Perm  |
| Protected Phases        | 2     |      | 1     | 6     |      |       |
| Permitted Phases        |       |      | 6     |       |      | 4     |
| Detector Phase          | 2     |      | 1     | 6     |      | 4     |
| Switch Phase            |       |      |       |       |      |       |
| Minimum Initial (s)     | 5.0   |      | 5.0   | 5.0   |      | 5.0   |
| Minimum Split (s)       | 25.0  |      | 10.0  | 25.0  |      | 33.0  |
| Total Split (s)         | 72.0  |      | 15.0  | 87.0  |      | 33.0  |
| Total Split (%)         | 60.0% |      | 12.5% | 72.5% |      | 27.5% |
| Yellow Time (s)         | 4.0   |      | 4.0   | 4.0   |      | 4.0   |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0   |      | 1.0   |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0   |      | 0.0   |
| Total Lost Time (s)     | 5.0   |      | 5.0   | 5.0   |      | 5.0   |
| Lead/Lag                | Lag   |      | Lead  |       |      |       |
| Lead-Lag Optimize?      | Yes   |      | Yes   |       |      |       |
| Recall Mode             | C-Max |      | None  | C-Max |      | Max   |
| Act Effect Green (s)    | 77.5  |      | 82.0  | 82.0  |      | 28.0  |
| Actuated g/C Ratio      | 0.65  |      | 0.68  | 0.68  |      | 0.23  |
| v/c Ratio               | 0.46  |      | 0.08  | 0.50  |      | 0.00  |
| Control Delay           | 4.5   |      | 5.4   | 7.2   |      | 0.0   |
| Queue Delay             | 0.0   |      | 0.0   | 0.1   |      | 0.0   |
| Total Delay             | 4.5   |      | 5.4   | 7.2   |      | 0.0   |
| LOS                     | A     |      | A     | A     |      | A     |
| Approach Delay          | 4.5   |      |       | 7.2   |      |       |
| Approach LOS            | A     |      |       | A     |      |       |
| Queue Length 50th (ft)  | 53    |      | 3     | 194   |      | 0     |
| Queue Length 95th (ft)  | 60    |      | m4    | 78    |      | 0     |
| Internal Link Dist (ft) | 362   |      |       | 356   | 125  |       |
| Turn Bay Length (ft)    |       |      | 100   |       |      |       |
| Base Capacity (vph)     | 3270  |      | 281   | 3474  |      | 482   |
| Starvation Cap Reductn  | 172   |      | 0     | 377   |      | 0     |
| Spillback Cap Reductn   | 0     |      | 0     | 2     |      | 0     |
| Storage Cap Reductn     | 0     |      | 0     | 0     |      | 0     |
| Reduced v/c Ratio       | 0.49  |      | 0.06  | 0.56  |      | 0.00  |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 70

37: N. Congress Ave & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.50

Intersection Signal Delay: 6.0

Intersection LOS: A

Intersection Capacity Utilization 60.3%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 37: N. Congress Ave & W. 15th St

|        |        |      |
|--------|--------|------|
| Ø1     | Ø2 (R) | Ø4   |
| 15 s   | 72 s   | 33 s |
| Ø6 (R) |        |      |
| 37 s   |        |      |

38: Brazos St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

|                         |       |       |      |       |       |      |       |       |       |       |       |       |      |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|-------|-------|-------|-------|------|
|                         | ↖     | →     | ↘    | ↙     | ←     | ↖    | ↗     | ↘     | ↙     | ↖     | ↗     | ↘     | ↙    |
| Lane Group              | EBL   | EBT   | EBR  | WBL   | WBT   | WBR  | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |      |
| Lane Configurations     | ↖ ↗ ↘ | ↖ ↗ ↘ |      | ↖ ↗ ↘ | ↖ ↗ ↘ |      |       | ↖ ↗ ↘ | ↖ ↗ ↘ |       | ↖ ↗ ↘ | ↖ ↗ ↘ |      |
| Traffic Volume (vph)    | 80    | 1174  | 49   | 27    | 1729  | 115  | 4     | 2     | 8     | 2     | 0     | 4     |      |
| Future Volume (vph)     | 80    | 1174  | 49   | 27    | 1729  | 115  | 4     | 2     | 8     | 2     | 0     | 4     |      |
| Confl. Peds. (#/hr)     | 1     |       | 10   | 10    |       | 1    | 10    |       | 4     | 4     |       | 10    |      |
| Confl. Bikes (#/hr)     |       |       |      |       |       | 1    |       |       |       |       |       | 17    |      |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97 |
| Adj. Flow (vph)         | 82    | 1210  | 51   | 28    | 1782  | 119  | 4     | 2     | 8     | 2     | 0     | 4     |      |
| Shared Lane Traffic (%) |       |       |      |       |       |      |       |       |       |       |       |       |      |
| Lane Group Flow (vph)   | 82    | 1261  | 0    | 28    | 1901  | 0    | 0     | 6     | 8     | 0     | 6     | 0     |      |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    |      | Perm  | NA    | Perm  | Perm  | NA    |       |      |
| Protected Phases        | 5     | 2     |      | 1     | 6     |      |       | 4     |       |       | 8     |       |      |
| Permitted Phases        | 2     |       |      | 6     |       |      | 4     |       | 4     | 8     |       |       |      |
| Detector Phase          | 5     | 2     |      | 1     | 6     |      | 4     | 4     | 4     | 8     | 8     |       |      |
| Switch Phase            |       |       |      |       |       |      |       |       |       |       |       |       |      |
| Minimum Initial (s)     | 5.0   | 15.0  |      | 5.0   | 15.0  |      | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  |       |      |
| Minimum Split (s)       | 10.0  | 22.0  |      | 10.0  | 22.0  |      | 32.0  | 32.0  | 32.0  | 32.0  | 32.0  |       |      |
| Total Split (s)         | 15.0  | 78.0  |      | 10.0  | 73.0  |      | 32.0  | 32.0  | 32.0  | 32.0  | 32.0  |       |      |
| Total Split (%)         | 12.5% | 65.0% |      | 8.3%  | 60.8% |      | 26.7% | 26.7% | 26.7% | 26.7% | 26.7% |       |      |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |       |      |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |       |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   |      |       | 0.0   | 0.0   |       | 0.0   |       |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   |      |       | 5.0   | 5.0   |       | 5.0   |       |      |
| Lead/Lag                | Lead  | Lead  |      | Lag   | Lag   |      |       |       |       |       |       |       |      |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   |      |       |       |       |       |       |       |      |
| Recall Mode             | None  | C-Max |      | None  | C-Max |      | None  | None  | None  | None  | None  |       |      |
| Act Effct Green (s)     | 103.0 | 105.0 |      | 99.3  | 100.3 |      |       | 10.0  | 10.0  |       | 10.0  |       |      |
| Actuated g/C Ratio      | 0.86  | 0.88  |      | 0.83  | 0.84  |      |       | 0.08  | 0.08  |       | 0.08  |       |      |
| v/c Ratio               | 0.35  | 0.29  |      | 0.07  | 0.45  |      |       | 0.05  | 0.03  |       | 0.03  |       |      |
| Control Delay           | 14.2  | 3.9   |      | 2.0   | 1.9   |      |       | 51.7  | 0.2   |       | 0.2   |       |      |
| Queue Delay             | 0.0   | 0.0   |      | 0.0   | 0.0   |      |       | 0.0   | 0.0   |       | 0.0   |       |      |
| Total Delay             | 14.2  | 4.0   |      | 2.0   | 1.9   |      |       | 51.7  | 0.2   |       | 0.2   |       |      |
| LOS                     | B     | A     |      | A     | A     |      |       | D     | A     |       | A     |       |      |
| Approach Delay          |       | 4.6   |      |       | 1.9   |      |       | 22.3  |       |       | 0.2   |       |      |
| Approach LOS            |       | A     |      |       | A     |      |       | C     |       |       | A     |       |      |
| Queue Length 50th (ft)  | 11    | 102   |      | 1     | 19    |      |       | 4     | 0     |       | 0     |       |      |
| Queue Length 95th (ft)  | 63    | 118   |      | m3    | 152   |      |       | 18    | 0     |       | 0     |       |      |
| Internal Link Dist (ft) |       | 356   |      |       | 297   |      |       | 199   |       |       | 273   |       |      |
| Turn Bay Length (ft)    | 100   |       |      | 40    |       |      |       |       | 50    |       |       |       |      |
| Base Capacity (vph)     | 274   | 4414  |      | 377   | 4206  |      |       | 346   | 434   |       | 412   |       |      |
| Starvation Cap Reductn  | 0     | 988   |      | 0     | 269   |      |       | 0     | 0     |       | 0     |       |      |
| Spillback Cap Reductn   | 0     | 0     |      | 0     | 0     |      |       | 0     | 0     |       | 0     |       |      |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     |      |       | 0     | 0     |       | 0     |       |      |
| Reduced v/c Ratio       | 0.30  | 0.37  |      | 0.07  | 0.48  |      |       | 0.02  | 0.02  |       | 0.01  |       |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 75

38: Brazos St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.45

Intersection Signal Delay: 3.1

Intersection LOS: A

Intersection Capacity Utilization 65.3%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 38: Brazos St & W. 15th St



39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

|                         | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑↑   |      | ↓     | ↑↑↑   |      |      |      |      |       | ↑↑↑   | ↓     |
| Traffic Volume (vph)    | 0    | 899   | 357  | 164   | 1848  | 0    | 0    | 0    | 0    | 93    | 182   | 45    |
| Future Volume (vph)     | 0    | 899   | 357  | 164   | 1848  | 0    | 0    | 0    | 0    | 93    | 182   | 45    |
| Confl. Peds. (#/hr)     |      | 23    | 23   |       |       |      |      |      |      | 10    |       | 8     |
| Peak Hour Factor        | 0.99 | 0.99  | 0.99 | 0.99  | 0.99  | 0.99 | 0.99 | 0.99 | 0.99 | 0.99  | 0.99  | 0.99  |
| Adj. Flow (vph)         | 0    | 908   | 361  | 166   | 1867  | 0    | 0    | 0    | 0    | 94    | 184   | 45    |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 1269  | 0    | 166   | 1867  | 0    | 0    | 0    | 0    | 0     | 278   | 45    |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      | 3.0   | 10.0  |      |      |      |      | 7.0   | 7.0   | 7.0   |
| Minimum Split (s)       |      | 28.0  |      | 8.0   | 28.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (s)         |      | 68.0  |      | 20.0  | 88.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (%)         |      | 56.7% |      | 16.7% | 73.3% |      |      |      |      | 26.7% | 26.7% | 26.7% |
| Yellow Time (s)         |      | 4.0   |      | 4.0   | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      | 1.0   | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      | 0.0   | 0.0   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      | 5.0   | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      | Lead  |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      | Yes   |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      | None  | C-Max |      |      |      |      | None  | None  | None  |
| Act Effct Green (s)     |      | 84.9  |      | 97.8  | 97.8  |      |      |      |      | 12.2  | 12.2  | 12.2  |
| Actuated g/C Ratio      |      | 0.71  |      | 0.82  | 0.82  |      |      |      |      | 0.10  | 0.10  | 0.10  |
| v/c Ratio               |      | 0.37  |      | 0.45  | 0.45  |      |      |      |      | 0.55  | 0.21  | 0.21  |
| Control Delay           |      | 2.4   |      | 8.5   | 3.9   |      |      |      |      | 55.1  | 7.9   | 7.9   |
| Queue Delay             |      | 0.1   |      | 0.0   | 0.4   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             |      | 2.5   |      | 8.5   | 4.3   |      |      |      |      | 55.1  | 7.9   | 7.9   |
| LOS                     |      | A     |      | A     | A     |      |      |      |      | E     | A     | A     |
| Approach Delay          |      | 2.5   |      |       | 4.7   |      |      |      |      | 48.6  |       |       |
| Approach LOS            |      | A     |      |       | A     |      |      |      |      | D     |       |       |
| Queue Length 50th (ft)  |      | 0     |      | 25    | 111   |      |      |      |      | 76    | 0     | 0     |
| Queue Length 95th (ft)  |      | 0     |      | m28   | m119  |      |      |      |      | 104   | 22    | 22    |
| Internal Link Dist (ft) |      | 297   |      |       | 282   |      |      | 125  |      | 272   |       |       |
| Turn Bay Length (ft)    |      |       |      | 70    |       |      |      |      |      |       |       | 50    |
| Base Capacity (vph)     |      | 3433  |      | 450   | 4143  |      |      |      |      | 1119  | 397   | 397   |
| Starvation Cap Reductn  |      | 903   |      | 0     | 1555  |      |      |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       |      | 0.50  |      | 0.37  | 0.72  |      |      |      |      | 0.25  | 0.11  | 0.11  |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

Maximum v/c Ratio: 0.55

Intersection Signal Delay: 7.8

Intersection LOS: A

Intersection Capacity Utilization 95.5%

ICU Level of Service F

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 39: San Jacinto Blvd & W. 15th St



40: Trinity St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↩     | ↩↩↩   |      |      | ↩↩↩   |      | ↩     | ↩     | ↩     |      |      |      |
| Traffic Volume (vph)    | 222   | 821   | 0    | 0    | 1960  | 649  | 61    | 169   | 12    | 0    | 0    | 0    |
| Future Volume (vph)     | 222   | 821   | 0    | 0    | 1960  | 649  | 61    | 169   | 12    | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 1     |       |      |      |       | 1    | 3     |       | 6     |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       |      |       |       | 2     |      |      |      |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97 | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph)         | 229   | 846   | 0    | 0    | 2021  | 669  | 63    | 174   | 12    | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 229   | 846   | 0    | 0    | 2690  | 0    | 63    | 174   | 12    | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 1.0   | 10.0  |      |      | 1.0   |      | 10.0  | 10.0  | 10.0  |      |      |      |
| Minimum Split (s)       | 5.5   | 28.0  |      |      | 5.5   |      | 28.0  | 28.0  | 28.0  |      |      |      |
| Total Split (s)         | 20.0  | 92.0  |      |      | 72.0  |      | 28.0  | 28.0  | 28.0  |      |      |      |
| Total Split (%)         | 16.7% | 76.7% |      |      | 60.0% |      | 23.3% | 23.3% | 23.3% |      |      |      |
| Yellow Time (s)         | 3.5   | 4.0   |      |      | 3.5   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 4.5   | 5.0   |      |      | 4.5   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effct Green (s)     | 87.5  | 87.0  |      |      | 69.0  |      | 23.0  | 23.0  | 23.0  |      |      |      |
| Actuated g/C Ratio      | 0.73  | 0.72  |      |      | 0.58  |      | 0.19  | 0.19  | 0.19  |      |      |      |
| v/c Ratio               | 0.85  | 0.23  |      |      | 0.94  |      | 0.19  | 0.49  | 0.03  |      |      |      |
| Control Delay           | 64.7  | 3.5   |      |      | 11.7  |      | 42.4  | 48.6  | 0.2   |      |      |      |
| Queue Delay             | 0.0   | 0.1   |      |      | 0.8   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Delay             | 64.7  | 3.7   |      |      | 12.5  |      | 42.4  | 48.6  | 0.2   |      |      |      |
| LOS                     | E     | A     |      |      | B     |      | D     | D     | A     |      |      |      |
| Approach Delay          |       | 16.7  |      |      | 12.5  |      |       | 44.7  |       |      |      |      |
| Approach LOS            |       | B     |      |      | B     |      |       | D     |       |      |      |      |
| Queue Length 50th (ft)  | 123   | 37    |      |      | 169   |      | 41    | 121   | 0     |      |      |      |
| Queue Length 95th (ft)  | #231  | 43    |      |      | m166  |      | 83    | 194   | 0     |      |      |      |
| Internal Link Dist (ft) |       | 282   |      |      | 657   |      |       | 149   |       |      | 621  |      |
| Turn Bay Length (ft)    | 100   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 289   | 3686  |      |      | 2855  |      | 337   | 357   | 344   |      |      |      |
| Starvation Cap Reductn  | 0     | 1570  |      |      | 44    |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.79  | 0.40  |      |      | 0.96  |      | 0.19  | 0.49  | 0.03  |      |      |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 100

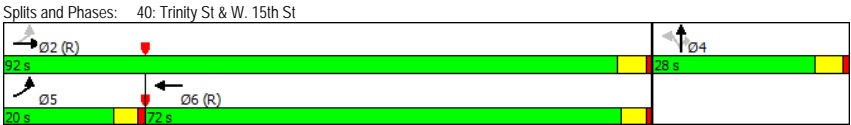
40: Trinity St & W. 15th St

2024 Background + Site

TIA for Texas Capitol Complex Master Plan 2018 Update

Timing Plan: AM

|   |                        |
|---|------------------------|
| Control Type: Actuated-Coordinated                                |                        |
| Maximum v/c Ratio: 0.94   |                        |
| Intersection Signal Delay: 15.6                                   | Intersection LOS: B    |
| Intersection Capacity Utilization 95.5%                           | ICU Level of Service F |
| Analysis Period (min) 15  |                        |
| # 95th percentile volume exceeds capacity, queue may be longer.   |                        |
| Queue shown is maximum after two cycles.                          |                        |
| m Volume for 95th percentile queue is metered by upstream signal. |                        |



11: Colorado St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 21.3 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | C    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |      |      | ↕    |      |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 4    | 202  | 36   | 0    | 82   | 32   | 5    | 0    | 15   | 60   | 66   |
| Future Vol, veh/h   | 0    | 4    | 202  | 36   | 0    | 82   | 32   | 5    | 0    | 15   | 60   | 66   |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 5    | 230  | 41   | 0    | 93   | 36   | 6    | 0    | 17   | 68   | 75   |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB   | NB   |
|----------------------------|------|------|------|
| Opposing Approach          | WB   | EB   | SB   |
| Opposing Lanes             | 1    | 1    | 1    |
| Conflicting Approach Left  | SB   | NB   | EB   |
| Conflicting Lanes Left     | 1    | 1    | 1    |
| Conflicting Approach Right | NB   | SB   | WB   |
| Conflicting Lanes Right    | 1    | 1    | 1    |
| HCM Control Delay          | 14.8 | 12.1 | 11.3 |
| HCM LOS                    | B    | B    | B    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 11%   | 2%    | 69%   | 1%    |
| Vol Thru, %            | 43%   | 83%   | 27%   | 96%   |
| Vol Right, %           | 47%   | 15%   | 4%    | 3%    |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 141   | 242   | 119   | 478   |
| LT Vol                 | 15    | 4     | 82    | 4     |
| Through Vol            | 60    | 202   | 32    | 458   |
| RT Vol                 | 66    | 36    | 5     | 16    |
| Lane Flow Rate         | 160   | 275   | 135   | 543   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.269 | 0.476 | 0.254 | 0.829 |
| Departure Headway (Hd) | 6.034 | 6.233 | 6.751 | 5.604 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 596   | 583   | 533   | 652   |
| Service Time           | 4.067 | 4.233 | 4.775 | 3.604 |
| HCM Lane V/C Ratio     | 0.268 | 0.472 | 0.253 | 0.833 |
| HCM Control Delay      | 11.3  | 14.8  | 12.1  | 29.9  |
| HCM Lane LOS           | B     | B     | B     | D     |
| HCM 95th-tile Q        | 1.1   | 2.6   | 1     | 8.8   |

11: Colorado St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 4    | 458  | 16   |
| Future Vol, veh/h   | 0    | 4    | 458  | 16   |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 5    | 520  | 18   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 29.9 |
| HCM LOS                    | D    |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection              |     |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|-----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 8.9 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | A   |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↶    |      |      |      | ↷    |      |      |      | ↶    |      |
| Traffic Vol, veh/h  | 0    | 0    | 275  | 0    | 0    | 0    | 116  | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h   | 0    | 0    | 275  | 0    | 0    | 0    | 116  | 0    | 0    | 0    | 0    | 0    |
| Peak Hour Factor    | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 | 0.87 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 316  | 0    | 0    | 0    | 133  | 0    | 0    | 0    | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB  | WB | NB |
|----------------------------|-----|----|----|
| Opposing Approach          | WB  | EB | SB |
| Opposing Lanes             | 1   | 1  | 1  |
| Conflicting Approach Left  | SB  | NB | EB |
| Conflicting Lanes Left     | 1   | 1  | 1  |
| Conflicting Approach Right | NB  | SB | WB |
| Conflicting Lanes Right    | 1   | 1  | 1  |
| HCM Control Delay          | 9.3 | 8  | 0  |
| HCM LOS                    | A   | A  | -  |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 0%    | 0%    | 0%    | 0%    |
| Vol Thru, %            | 100%  | 100%  | 100%  | 0%    |
| Vol Right, %           | 0%    | 0%    | 0%    | 100%  |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 0     | 275   | 116   | 9     |
| LT Vol                 | 0     | 0     | 0     | 0     |
| Through Vol            | 0     | 275   | 116   | 0     |
| RT Vol                 | 0     | 0     | 0     | 9     |
| Lane Flow Rate         | 0     | 316   | 133   | 10    |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0     | 0.356 | 0.155 | 0.012 |
| Departure Headway (Hd) | 4.911 | 4.051 | 4.187 | 4.29  |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 0     | 885   | 848   | 839   |
| Service Time           | 2.911 | 2.088 | 2.256 | 2.29  |
| HCM Lane V/C Ratio     | 0     | 0.357 | 0.157 | 0.012 |
| HCM Control Delay      | 7.9   | 9.3   | 8     | 7.3   |
| HCM Lane LOS           | N     | A     | A     | A     |
| HCM 95th-tile Q        | 0     | 1.6   | 0.5   | 0     |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      |      | ↶    |
| Traffic Vol, veh/h  | 0    | 0    | 0    | 9    |
| Future Vol, veh/h   | 0    | 0    | 0    | 9    |
| Peak Hour Factor    | 0.87 | 0.87 | 0.87 | 0.87 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 0    | 10   |
| Number of Lanes     | 0    | 0    | 0    | 1    |

| Approach                   | SB  |
|----------------------------|-----|
| Opposing Approach          | NB  |
| Opposing Lanes             | 1   |
| Conflicting Approach Left  | WB  |
| Conflicting Lanes Left     | 1   |
| Conflicting Approach Right | EB  |
| Conflicting Lanes Right    | 1   |
| HCM Control Delay          | 7.3 |
| HCM LOS                    | A   |

14: Brazos St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 14.8 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ⬆    |      |      |      | ⬆    |      |      |      | ⬆    |      |
| Traffic Vol, veh/h  | 0    | 124  | 98   | 8    | 0    | 17   | 177  | 106  | 0    | 21   | 0    | 0    |
| Future Vol, veh/h   | 0    | 124  | 98   | 8    | 0    | 17   | 177  | 106  | 0    | 21   | 0    | 0    |
| Peak Hour Factor    | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 157  | 124  | 10   | 0    | 22   | 224  | 134  | 0    | 27   | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB   | NB   |
|----------------------------|------|------|------|
| Opposing Approach          | WB   | EB   | SB   |
| Opposing Lanes             | 1    | 1    | 1    |
| Conflicting Approach Left  | SB   | NB   | EB   |
| Conflicting Lanes Left     | 1    | 1    | 1    |
| Conflicting Approach Right | NB   | SB   | WB   |
| Conflicting Lanes Right    | 1    | 1    | 1    |
| HCM Control Delay          | 13.7 | 15.2 | 10.2 |
| HCM LOS                    | B    | C    | B    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 100%  | 54%   | 6%    | 5%    |
| Vol Thru, %            | 0%    | 43%   | 59%   | 86%   |
| Vol Right, %           | 0%    | 3%    | 35%   | 9%    |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 21    | 230   | 300   | 271   |
| LT Vol                 | 21    | 124   | 17    | 14    |
| Through Vol            | 0     | 98    | 177   | 233   |
| RT Vol                 | 0     | 8     | 106   | 24    |
| Lane Flow Rate         | 27    | 291   | 380   | 343   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.05  | 0.464 | 0.564 | 0.547 |
| Departure Headway (Hd) | 6.717 | 5.742 | 5.342 | 5.743 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 529   | 623   | 672   | 624   |
| Service Time           | 4.812 | 3.806 | 3.401 | 3.802 |
| HCM Lane V/C Ratio     | 0.051 | 0.467 | 0.565 | 0.55  |
| HCM Control Delay      | 10.2  | 13.7  | 15.2  | 15.6  |
| HCM Lane LOS           | B     | B     | C     | C     |
| HCM 95th-tile Q        | 0.2   | 2.5   | 3.5   | 3.3   |

14: Brazos St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ⬆    |      |
| Traffic Vol, veh/h  | 0    | 14   | 233  | 24   |
| Future Vol, veh/h   | 0    | 14   | 233  | 24   |
| Peak Hour Factor    | 0.79 | 0.79 | 0.79 | 0.79 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 18   | 295  | 30   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 15.6 |
| HCM LOS                    | C    |

16: San Jacinto Blvd & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection              |    |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|----|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 17 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | C  |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↰    |      |      |      | ↱    |      |      |      |      |      |
| Traffic Vol, veh/h  | 0    | 0    | 23   | 77   | 0    | 74   | 173  | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h   | 0    | 0    | 23   | 77   | 0    | 74   | 173  | 0    | 0    | 0    | 0    | 0    |
| Peak Hour Factor    | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 24   | 82   | 0    | 79   | 184  | 0    | 0    | 0    | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    |

| Approach                   |  | EB   | WB   |
|----------------------------|--|------|------|
| Opposing Approach          |  | WB   | EB   |
| Opposing Lanes             |  | 1    | 1    |
| Conflicting Approach Left  |  | SB   |      |
| Conflicting Lanes Left     |  | 3    | 0    |
| Conflicting Approach Right |  |      | SB   |
| Conflicting Lanes Right    |  | 0    | 3    |
| HCM Control Delay          |  | 10.9 | 16.7 |
| HCM LOS                    |  | B    | C    |

| Lane                   | EBLn1 | WBLn1 | SBLn1 | SBLn2 | SBLn3 |
|------------------------|-------|-------|-------|-------|-------|
| Vol Left, %            | 0%    | 30%   | 0%    | 0%    | 0%    |
| Vol Thru, %            | 23%   | 70%   | 100%  | 100%  | 0%    |
| Vol Right, %           | 77%   | 0%    | 0%    | 0%    | 100%  |
| Sign Control           | Stop  | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 100   | 247   | 389   | 389   | 130   |
| LT Vol                 | 0     | 74    | 0     | 0     | 0     |
| Through Vol            | 23    | 173   | 389   | 389   | 0     |
| RT Vol                 | 77    | 0     | 0     | 0     | 130   |
| Lane Flow Rate         | 106   | 263   | 413   | 413   | 138   |
| Geometry Grp           | 7     | 7     | 7     | 7     | 7     |
| Degree of Util (X)     | 0.195 | 0.508 | 0.668 | 0.668 | 0.129 |
| Departure Headway (Hd) | 6.588 | 6.965 | 5.815 | 5.815 | 3.354 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 544   | 518   | 620   | 620   | 1065  |
| Service Time           | 4.336 | 4.707 | 3.546 | 3.546 | 1.086 |
| HCM Lane V/C Ratio     | 0.195 | 0.508 | 0.666 | 0.666 | 0.13  |
| HCM Control Delay      | 10.9  | 16.7  | 19.5  | 19.5  | 6.6   |
| HCM Lane LOS           | B     | C     | C     | C     | A     |
| HCM 95th-tile Q        | 0.7   | 2.8   | 5     | 5     | 0.4   |

16: San Jacinto Blvd & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↰↱   | ↱    |
| Traffic Vol, veh/h  | 0    | 0    | 777  | 130  |
| Future Vol, veh/h   | 0    | 0    | 777  | 130  |
| Peak Hour Factor    | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 827  | 138  |
| Number of Lanes     | 0    | 0    | 2    | 1    |

| Approach                   |  | SB   |
|----------------------------|--|------|
| Opposing Approach          |  |      |
| Opposing Lanes             |  | 0    |
| Conflicting Approach Left  |  | WB   |
| Conflicting Lanes Left     |  | 1    |
| Conflicting Approach Right |  | EB   |
| Conflicting Lanes Right    |  | 1    |
| HCM Control Delay          |  | 17.7 |
| HCM LOS                    |  | C    |

20: Colorado St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 30.2 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | D    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |      |      | ↕    |      |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 31   | 185  | 109  | 0    | 0    | 25   | 0    | 0    | 21   | 102  | 0    |
| Future Vol, veh/h   | 0    | 31   | 185  | 109  | 0    | 0    | 25   | 0    | 0    | 21   | 102  | 0    |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 35   | 210  | 124  | 0    | 0    | 28   | 0    | 0    | 24   | 116  | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB   | NB   |
|----------------------------|------|------|------|
| Opposing Approach          | WB   | EB   | SB   |
| Opposing Lanes             | 1    | 1    | 1    |
| Conflicting Approach Left  | SB   | NB   | EB   |
| Conflicting Lanes Left     | 1    | 1    | 1    |
| Conflicting Approach Right | NB   | SB   | WB   |
| Conflicting Lanes Right    | 1    | 1    | 1    |
| HCM Control Delay          | 17.7 | 10.4 | 11.3 |
| HCM LOS                    | C    | B    | B    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 17%   | 10%   | 0%    | 0%    |
| Vol Thru, %            | 83%   | 57%   | 100%  | 95%   |
| Vol Right, %           | 0%    | 34%   | 0%    | 5%    |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 123   | 325   | 25    | 546   |
| LT Vol                 | 21    | 31    | 0     | 0     |
| Through Vol            | 102   | 185   | 25    | 518   |
| RT Vol                 | 0     | 109   | 0     | 28    |
| Lane Flow Rate         | 140   | 369   | 28    | 620   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.241 | 0.605 | 0.055 | 0.929 |
| Departure Headway (Hd) | 6.216 | 5.898 | 7.016 | 5.39  |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 573   | 609   | 514   | 670   |
| Service Time           | 4.312 | 3.973 | 5.016 | 3.452 |
| HCM Lane V/C Ratio     | 0.244 | 0.606 | 0.054 | 0.925 |
| HCM Control Delay      | 11.3  | 17.7  | 10.4  | 42.8  |
| HCM Lane LOS           | B     | C     | B     | E     |
| HCM 95th-tile Q        | 0.9   | 4     | 0.2   | 12.5  |

20: Colorado St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 0    | 518  | 28   |
| Future Vol, veh/h   | 0    | 0    | 518  | 28   |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 589  | 32   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 42.8 |
| HCM LOS                    | E    |

| Intersection              |     |  |  |  |  |  |  |  |  |
|---------------------------|-----|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 8.4 |  |  |  |  |  |  |  |  |
| Intersection LOS          | A   |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | WBU  | WBT  | WBR  | SBU  | SBL  | SBR  |
|---------------------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↰    |      | ↱    |      |      | ↰↱   |      |
| Traffic Vol, veh/h  | 0    | 0    | 28   | 0    | 206  | 16   | 0    | 39   | 0    |
| Future Vol, veh/h   | 0    | 0    | 28   | 0    | 206  | 16   | 0    | 39   | 0    |
| Peak Hour Factor    | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 | 0.88 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 32   | 0    | 234  | 18   | 0    | 44   | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 1    | 0    | 0    | 1    | 0    |

| Approach                   | EB  |  |  | WB  |  |  | SB |  |  |
|----------------------------|-----|--|--|-----|--|--|----|--|--|
| Opposing Approach          | WB  |  |  | EB  |  |  |    |  |  |
| Opposing Lanes             | 1   |  |  | 1   |  |  | 0  |  |  |
| Conflicting Approach Left  | SB  |  |  |     |  |  | WB |  |  |
| Conflicting Lanes Left     | 1   |  |  | 0   |  |  | 1  |  |  |
| Conflicting Approach Right |     |  |  | SB  |  |  | EB |  |  |
| Conflicting Lanes Right    | 0   |  |  | 1   |  |  | 1  |  |  |
| HCM Control Delay          | 7.5 |  |  | 8.6 |  |  | 8  |  |  |
| HCM LOS                    | A   |  |  | A   |  |  | A  |  |  |

| Lane                   | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, %            | 0%    | 0%    | 100%  |
| Vol Thru, %            | 100%  | 93%   | 0%    |
| Vol Right, %           | 0%    | 7%    | 0%    |
| Sign Control           | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 28    | 222   | 39    |
| LT Vol                 | 0     | 0     | 39    |
| Through Vol            | 28    | 206   | 0     |
| RT Vol                 | 0     | 16    | 0     |
| Lane Flow Rate         | 32    | 252   | 44    |
| Geometry Grp           | 1     | 1     | 1     |
| Degree of Util (X)     | 0.037 | 0.28  | 0.058 |
| Departure Headway (Hd) | 4.201 | 3.991 | 4.747 |
| Convergence, Y/N       | Yes   | Yes   | Yes   |
| Cap                    | 840   | 896   | 759   |
| Service Time           | 2.288 | 2.037 | 2.747 |
| HCM Lane V/C Ratio     | 0.038 | 0.281 | 0.058 |
| HCM Control Delay      | 7.5   | 8.6   | 8     |
| HCM Lane LOS           | A     | A     | A     |
| HCM 95th-tile Q        | 0.1   | 1.2   | 0.2   |

4: Colorado St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 48.8 |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑↑   |      | ↑    | ↑↑   | ↑    |      |
| Traffic Vol, veh/h       | 1121 | 156  | 331  | 792  | 10   | 51   |
| Future Vol, veh/h        | 1121 | 156  | 331  | 792  | 10   | 51   |
| Conflicting Peds, #/hr   | 0    | 1    | 1    | 0    | 0    | 5    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | 40   | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 87   | 87   | 87   | 87   | 87   | 87   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 1289 | 179  | 380  | 910  | 11   | 59   |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |      |
|----------------------|--------|---|--------|---|--------|------|
| Conflicting Flow All | 0      | 0 | 1469   | 0 | 2595   | 740  |
| Stage 1              | -      | - | -      | - | 1379   | -    |
| Stage 2              | -      | - | -      | - | 1216   | -    |
| Critical Hdwy        | -      | - | 4.14   | - | 6.84   | 6.94 |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.84   | -    |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.84   | -    |
| Follow-up Hdwy       | -      | - | 2.22   | - | 3.52   | 3.32 |
| Pot Cap-1 Maneuver   | -      | - | 455    | - | 20     | 359  |
| Stage 1              | -      | - | -      | - | 199    | -    |
| Stage 2              | -      | - | -      | - | 243    | -    |
| Platoon blocked, %   | -      | - | -      | - | -      | -    |
| Mov Cap-1 Maneuver   | -      | - | 453    | - | ~ 3    | 357  |
| Mov Cap-2 Maneuver   | -      | - | -      | - | ~ 3    | -    |
| Stage 1              | -      | - | -      | - | 199    | -    |
| Stage 2              | -      | - | -      | - | 39     | -    |

| Approach             | EB | WB   | NB        |
|----------------------|----|------|-----------|
| HCM Control Delay, s | 0  | 12.5 | \$ 1736.7 |
| HCM LOS              |    |      | F         |

| Minor Lane/Major Mvmt | NBLn1     | EBT | EBR | WBL  | WBT |
|-----------------------|-----------|-----|-----|------|-----|
| Capacity (veh/h)      | 18        | -   | -   | 453  | -   |
| HCM Lane V/C Ratio    | 3.895     | -   | -   | 0.84 | -   |
| HCM Control Delay (s) | \$ 1736.7 | -   | -   | 42.5 | -   |
| HCM Lane LOS          | F         | -   | -   | E    | -   |
| HCM 95th %tile Q(veh) | 9.3       | -   | -   | 8.2  | -   |

| Notes                      |                        |                            |                                |
|----------------------------|------------------------|----------------------------|--------------------------------|
| -: Volume exceeds capacity | \$: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

9: Guadalupe St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 3    |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    | ↑    |      | ↑    |      |      |      |      |      | ↑↑   |      |
| Traffic Vol, veh/h       | 0    | 13   | 48   | 61   | 10   | 0    | 0    | 0    | 0    | 75   | 1355 | 18   |
| Future Vol, veh/h        | 0    | 13   | 48   | 61   | 10   | 0    | 0    | 0    | 0    | 75   | 1355 | 18   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 13   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 38   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 0    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   | 95   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 14   | 51   | 64   | 11   | 0    | 0    | 0    | 0    | 79   | 1426 | 19   |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |   |
|----------------------|--------|------|--------|------|--------|---|
| Conflicting Flow All | -      | 1632 | 774    | 891  | 1641   | - |
| Stage 1              | -      | 1632 | -      | 0    | 0      | - |
| Stage 2              | -      | 0    | -      | 891  | 1641   | - |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | - |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | - |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | - |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | - |
| Pot Cap-1 Maneuver   | 0      | 100  | 341    | 237  | 99     | 0 |
| Stage 1              | 0      | 158  | -      | -    | -      | 0 |
| Stage 2              | 0      | -    | -      | 304  | 156    | 0 |
| Platoon blocked, %   | -      | -    | -      | -    | -      | - |
| Mov Cap-1 Maneuver   | -      | 96   | 329    | 179  | 95     | - |
| Mov Cap-2 Maneuver   | -      | 96   | -      | 179  | 95     | - |
| Stage 1              | -      | 152  | -      | -    | -      | - |
| Stage 2              | -      | -    | -      | 234  | 150    | - |

| Approach             | EB   | WB   | SB |
|----------------------|------|------|----|
| HCM Control Delay, s | 24.4 | 46.3 |    |
| HCM LOS              | C    | E    |    |

| Minor Lane/Major Mvmt | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-------|-------|-----|-----|-----|
| Capacity (veh/h)      | 96    | 329   | 159   | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.143 | 0.154 | 0.47  | -   | -   | -   |
| HCM Control Delay (s) | 48.6  | 17.9  | 46.3  | -   | -   | -   |
| HCM Lane LOS          | E     | C     | E     | -   | -   | -   |
| HCM 95th %tile Q(veh) | 0.5   | 0.5   | 2.2   | -   | -   | -   |

10: Lavaca St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |       |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|-------|------|------|------|------|------|
| Int Delay, s/veh         | 4.2  |      |      |      |      |      |       |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL   | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      | ↕ ↕ ↕ |      |      |      |      |      |
| Traffic Vol, veh/h       | 4    | 70   | 0    | 0    | 34   | 19   | 90    | 583  | 173  | 0    | 0    | 0    |
| Future Vol, veh/h        | 4    | 70   | 0    | 0    | 34   | 19   | 90    | 583  | 173  | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 29   | 17    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free  | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -     | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 0     | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | -    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 94   | 94   | 94   | 94   | 94   | 94   | 94    | 94   | 94   | 94   | 94   | 94   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2     | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 4    | 74   | 0    | 0    | 36   | 20   | 96    | 620  | 184  | 0    | 0    | 0    |

| Major/Minor          | Minor2 |      | Minor1 |   | Major1 |      |      |   |
|----------------------|--------|------|--------|---|--------|------|------|---|
| Conflicting Flow All | 504    | 1013 | -      | - | 921    | 431  | 17   | 0 |
| Stage 1              | 17     | 17   | -      | - | 904    | -    | -    | - |
| Stage 2              | 487    | 996  | -      | - | 17     | -    | -    | - |
| Critical Hdwy        | 6.44   | 6.54 | -      | - | 6.54   | 7.14 | 5.34 | - |
| Critical Hdwy Stg 1  | -      | -    | -      | - | 5.54   | -    | -    | - |
| Critical Hdwy Stg 2  | 6.74   | 5.54 | -      | - | -      | -    | -    | - |
| Follow-up Hdwy       | 3.82   | 4.02 | -      | - | 4.02   | 3.92 | 3.12 | - |
| Pot Cap-1 Maneuver   | 494    | 237  | 0      | 0 | 269    | 489  | 1133 | - |
| Stage 1              | -      | -    | 0      | 0 | 354    | -    | -    | - |
| Stage 2              | 485    | 320  | 0      | 0 | -      | -    | -    | - |
| Platoon blocked, %   | -      | -    | -      | - | -      | -    | -    | - |
| Mov Cap-1 Maneuver   | 386    | 213  | -      | - | 242    | 489  | 1133 | - |
| Mov Cap-2 Maneuver   | 386    | 213  | -      | - | 242    | -    | -    | - |
| Stage 1              | -      | -    | -      | - | 324    | -    | -    | - |
| Stage 2              | 378    | 293  | -      | - | -      | -    | -    | - |

| Approach             | EB   | WB | NB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 30.6 | 20 | 0.9 |
| HCM LOS              | D    | C  |     |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1 | WBLn1 |
|-----------------------|-------|-----|-----|-------|-------|
| Capacity (veh/h)      | 1133  | -   | -   | 218   | 296   |
| HCM Lane V/C Ratio    | 0.085 | -   | -   | 0.361 | 0.19  |
| HCM Control Delay (s) | 8.5   | -   | -   | 30.6  | 20    |
| HCM Lane LOS          | A     | -   | -   | D     | C     |
| HCM 95th %tile Q(veh) | 0.3   | -   | -   | 1.6   | 0.7   |

13: W. 18th St & Parking Dr. 2  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.6  |      |      |      |      |      |
| Movement                 | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
| Lane Configurations      |      | ↕    | ↕    |      | ↕    |      |
| Traffic Vol, veh/h       | 123  | 151  | 119  | 103  | 14   | 17   |
| Future Vol, veh/h        | 123  | 151  | 119  | 103  | 14   | 17   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | -    | 0    | 0    | -    | 0    | -    |
| Grade, %                 | -    | 0    | 0    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 134  | 164  | 129  | 112  | 15   | 18   |




| Major/Minor          | Major1 |   | Major2 |   | Minor2 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 241    | 0 | -      | 0 | 617    | 185   |
| Stage 1              | -      | - | -      | - | 185    | -     |
| Stage 2              | -      | - | -      | - | 432    | -     |
| Critical Hdwy        | 4.12   | - | -      | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | 2.218  | - | -      | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | 1326   | - | -      | - | 453    | 857   |
| Stage 1              | -      | - | -      | - | 847    | -     |
| Stage 2              | -      | - | -      | - | 655    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | 1326   | - | -      | - | 403    | 857   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 403    | -     |
| Stage 1              | -      | - | -      | - | 847    | -     |
| Stage 2              | -      | - | -      | - | 582    | -     |

| Approach             | EB  | WB | SB   |
|----------------------|-----|----|------|
| HCM Control Delay, s | 3.6 | 0  | 11.7 |
| HCM LOS              |     |    | B    |

| Minor Lane/Major Mvmt | EBL   | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h)      | 1326  | -   | -   | -   | 568   |
| HCM Lane V/C Ratio    | 0.101 | -   | -   | -   | 0.059 |
| HCM Control Delay (s) | 8     | 0   | -   | -   | 11.7  |
| HCM Lane LOS          | A     | A   | -   | -   | B     |
| HCM 95th %tile Q(veh) | 0.3   | -   | -   | -   | 0.2   |

15: Brazos St & Parking Dr. 1  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection             |   |      |      |   |   |      |
|--------------------------|---|------|------|---|---|------|
| Int Delay, s/veh         | 3   |      |      |   |   |      |
| Movement                 | EBL   | EBR  | NBL  | NBT   | SBT   | SBR  |
| Lane Configurations      |  |      |      |  |  |      |
| Traffic Vol, veh/h       | 35  | 21   | 154  | 80  | 267   | 257  |
| Future Vol, veh/h        | 35  | 21   | 154  | 80  | 267   | 257  |
| Conflicting Peds, #/hr   | 0   | 0    | 0    | 0   | 0   | 0    |
| Sign Control             | Stop  | Stop | Free | Free  | Free  | Free |
| RT Channelized           | -   | None | -    | None  | -   | None |
| Storage Length           | 0   | -    | -    | -   | -   | -    |
| Veh in Median Storage, # | 0   | -    | -    | 0   | 0   | -    |
| Grade, %                 | 0   | -    | -    | 0   | 0   | -    |
| Peak Hour Factor         | 92  | 92   | 92   | 92  | 92  | 92   |
| Heavy Vehicles, %        | 2   | 2    | 2    | 2   | 2   | 2    |
| Mvmt Flow                | 38  | 23   | 167  | 87  | 290   | 279  |






| Major/Minor          | Minor2 | Major1 |       | Major2 |     |
|----------------------|--------|--------|-------|--------|-----|
| Conflicting Flow All | 852    | 430    | 570   | 0      | - 0 |
| Stage 1              | 430    | -      | -     | -      | -   |
| Stage 2              | 422    | -      | -     | -      | -   |
| Critical Hdwy        | 6.42   | 6.22   | 4.12  | -      | -   |
| Critical Hdwy Stg 1  | 5.42   | -      | -     | -      | -   |
| Critical Hdwy Stg 2  | 5.42   | -      | -     | -      | -   |
| Follow-up Hdwy       | 3.518  | 3.318  | 2.218 | -      | -   |
| Pot Cap-1 Maneuver   | 330    | 625    | 1002  | -      | -   |
| Stage 1              | 656    | -      | -     | -      | -   |
| Stage 2              | 662    | -      | -     | -      | -   |
| Platoon blocked, %   |        |        |       | -      | -   |
| Mov Cap-1 Maneuver   | 272    | 625    | 1002  | -      | -   |
| Mov Cap-2 Maneuver   | 272    | -      | -     | -      | -   |
| Stage 1              | 656    | -      | -     | -      | -   |
| Stage 2              | 546    | -      | -     | -      | -   |

| Approach             | EB   | NB  | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 17.7 | 6.1 | 0  |
| HCM LOS              | C    |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1002  | -   | 345   | -   | -   |
| HCM Lane V/C Ratio    | 0.167 | -   | 0.176 | -   | -   |
| HCM Control Delay (s) | 9.3   | 0   | 17.7  | -   | -   |
| HCM Lane LOS          | A     | A   | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.6   | -   | 0.6   | -   | -   |

17: Trinity St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection             |      |   |      |      |   |      |   |   |   |      |      |      |
|--------------------------|------|---|------|------|---|------|---|---|---|------|------|------|
| Int Delay, s/veh         | 6.1  |   |      |      |   |      |   |   |   |      |      |      |
| Movement                 | EBL  | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
| Lane Configurations      |      |  |      |      |  |      |  |  |  |      |      |      |
| Traffic Vol, veh/h       | 44   | 0   | 0    | 0    | 0   | 0    | 348   | 227   | 0   | 0    | 0    | 0    |
| Future Vol, veh/h        | 44   | 0   | 0    | 0    | 0   | 0    | 348   | 227   | 0   | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0   | 5    | 0    | 0   | 0    | 6   | 0   | 0   | 0    | 0    | 0    |
| Sign Control             | Stop | Stop  | Stop | Free | Free  | Free | Free  | Free  | Free  | Stop | Stop | Stop |
| RT Channelized           | -    | -   | None | -    | -   | None | -   | -   | None  | -    | -    | None |
| Storage Length           | -    | -   | -    | -    | -   | -    | 115   | -   | -   | -    | -    | -    |
| Veh in Median Storage, # | -    | 0   | -    | -    | 0   | -    | -   | 0   | -   | -    | -    | -    |
| Grade, %                 | -    | 0   | -    | -    | 0   | -    | -   | 0   | -   | -    | 0    | -    |
| Peak Hour Factor         | 88   | 88  | 88   | 88   | 88  | 88   | 88  | 88  | 88  | 88   | 88   | 88   |
| Heavy Vehicles, %        | 2    | 2   | 2    | 2    | 2   | 2    | 2   | 2   | 2   | 2    | 2    | 2    |
| Mvmt Flow                | 50   | 0   | 0    | 0    | 0   | 0    | 395   | 258   | 0   | 0    | 0    | 0    |

| Major/Minor          | Minor2 | Major2 |   | Major1 |           |
|----------------------|--------|--------|---|--------|-----------|
| Conflicting Flow All | 901    | 1056   | - | - 0    | 7 0 -     |
| Stage 1              | 7      | 7      | - | - - -  | - - -     |
| Stage 2              | 894    | 1049   | - | - - -  | - - -     |
| Critical Hdwy        | 6.08   | 6.53   | - | - - -  | 4.13 - -  |
| Critical Hdwy Stg 1  | 5.43   | 5.53   | - | - - -  | - - -     |
| Critical Hdwy Stg 2  | 6.03   | 5.53   | - | - - -  | - - -     |
| Follow-up Hdwy       | 3.669  | 4.019  | - | - - -  | 2.219 - - |
| Pot Cap-1 Maneuver   | 327    | 225    | 0 | 0 - -  | 1613 - 0  |
| Stage 1              | 974    | 890    | 0 | 0 - -  | - - 0     |
| Stage 2              | 334    | 303    | 0 | 0 - -  | - - 0     |
| Platoon blocked, %   |        |        | - | - - -  | - - -     |
| Mov Cap-1 Maneuver   | 244    | 0      | - | - - -  | 1613 - -  |
| Mov Cap-2 Maneuver   | 244    | 0      | - | - - -  | - - -     |
| Stage 1              | 968    | 0      | - | - - -  | - - -     |
| Stage 2              | 251    | 0      | - | - - -  | - - -     |

| Approach             | EB   | WB | NB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 23.5 | 0  | 4.8 |
| HCM LOS              | C    |    |     |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | WBT | WBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1613  | -   | 244   | -   | -   |
| HCM Lane V/C Ratio    | 0.245 | -   | 0.205 | -   | -   |
| HCM Control Delay (s) | 8     | -   | 23.5  | -   | -   |
| HCM Lane LOS          | A     | -   | C     | -   | -   |
| HCM 95th %tile Q(veh) | 1     | -   | 0.8   | -   | -   |

25: San Jacinto Blvd & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 8.5  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    | ↑    |      | ↑    |      |      |      |      | ↑↑   | ↑    | ↑    |
| Traffic Vol, veh/h       | 0    | 21   | 60   | 73   | 121  | 0    | 0    | 0    | 0    | 48   | 680  | 103  |
| Future Vol, veh/h        | 0    | 21   | 60   | 73   | 121  | 0    | 0    | 0    | 0    | 48   | 680  | 103  |
| Conflicting Peds, #/hr   | 0    | 0    | 23   | 0    | 0    | 0    | 0    | 0    | 0    | 4    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 40   | -    | -    | -    | -    | -    | -    | -    | -    | 50   |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 23   | 65   | 79   | 132  | 0    | 0    | 0    | 0    | 52   | 739  | 112  |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |   |
|----------------------|--------|------|--------|------|--------|---|
| Conflicting Flow All | -      | 847  | 393    | 512  | 847    | - |
| Stage 1              | -      | 843  | -      | 4    | 4      | - |
| Stage 2              | -      | 4    | -      | 508  | 843    | - |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | - |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | - |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | - |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | - |
| Pot Cap-1 Maneuver   | 0      | 297  | 606    | 445  | 297    | 0 |
| Stage 1              | 0      | 378  | -      | -    | -      | 0 |
| Stage 2              | 0      | -    | -      | 516  | 378    | 0 |
| Platoon blocked, %   | -      | -    | -      | -    | -      | - |
| Mov Cap-1 Maneuver   | -      | 277  | 606    | 353  | 277    | - |
| Mov Cap-2 Maneuver   | -      | 277  | -      | 353  | 277    | - |
| Stage 1              | -      | 354  | -      | -    | -      | - |
| Stage 2              | -      | -    | -      | 404  | 354    | - |

| Approach             | EB   | WB   | SB  |
|----------------------|------|------|-----|
| HCM Control Delay, s | 13.6 | 40.7 | 0.5 |
| HCM LOS              | B    | E    |     |

| Minor Lane/Major Mvmt | EBLn1 | EBLn2 | WBLn1 | SBL   | SBT | SBR |
|-----------------------|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h)      | 277   | 606   | 301   | 1616  | -   | -   |
| HCM Lane V/C Ratio    | 0.082 | 0.108 | 0.701 | 0.032 | -   | -   |
| HCM Control Delay (s) | 19.2  | 11.7  | 40.7  | 7.3   | 0.1 | -   |
| HCM Lane LOS          | C     | B     | E     | A     | A   | -   |
| HCM 95th %tile Q(veh) | 0.3   | 0.4   | 4.9   | 0.1   | -   | -   |

26: Trinity St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 0.6  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | ↓    |      | ↑↑↑  | ↑↑↑  |      |      |
| Traffic Vol, veh/h       | 36   | 0    | 103  | 542  | 0    | 0    |
| Future Vol, veh/h        | 36   | 0    | 103  | 542  | 0    | 0    |
| Conflicting Peds, #/hr   | 3    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | -    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 87   | 87   | 87   | 87   | 87   | 87   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 41   | 0    | 118  | 623  | 0    | 0    |

| Major/Minor          | Minor2 | Major1 |      |
|----------------------|--------|--------|------|
| Conflicting Flow All | 489    | -      | 0    |
| Stage 1              | 0      | -      | -    |
| Stage 2              | 489    | -      | -    |
| Critical Hdwy        | 5.74   | -      | 5.34 |
| Critical Hdwy Stg 1  | -      | -      | -    |
| Critical Hdwy Stg 2  | 6.04   | -      | -    |
| Follow-up Hdwy       | 3.82   | -      | 3.12 |
| Pot Cap-1 Maneuver   | 554    | 0      | -    |
| Stage 1              | -      | 0      | -    |
| Stage 2              | 532    | 0      | -    |
| Platoon blocked, %   | -      | -      | -    |
| Mov Cap-1 Maneuver   | 554    | -      | -    |
| Mov Cap-2 Maneuver   | 554    | -      | -    |
| Stage 1              | -      | -      | -    |
| Stage 2              | 532    | -      | -    |

| Approach             | EB | NB |
|----------------------|----|----|
| HCM Control Delay, s | 12 |    |
| HCM LOS              | B  |    |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 |
|-----------------------|-----|-----|-------|
| Capacity (veh/h)      | -   | -   | 554   |
| HCM Lane V/C Ratio    | -   | -   | 0.075 |
| HCM Control Delay (s) | -   | -   | 12    |
| HCM Lane LOS          | -   | -   | B     |
| HCM 95th %tile Q(veh) | -   | -   | 0.2   |

27: Guadalupe St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 3.7  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      |      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 0    | 13   | 48   | 53   | 9    | 0    | 0    | 0    | 0    | 193  | 1129 | 18   |
| Future Vol, veh/h        | 0    | 13   | 48   | 53   | 9    | 0    | 0    | 0    | 0    | 193  | 1129 | 18   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 21   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 25   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 14   | 52   | 58   | 10   | 0    | 0    | 0    | 0    | 210  | 1227 | 20   |

| Major/Minor          | Minor2 |      |      | Minor1 |      |   | Major2 |   |   |
|----------------------|--------|------|------|--------|------|---|--------|---|---|
| Conflicting Flow All | -      | 1672 | 660  | 1061   | 1672 | - | 0      | 0 | 0 |
| Stage 1              | -      | 1672 | -    | 0      | 0    | - | -      | - | - |
| Stage 2              | -      | 0    | -    | 1061   | 1672 | - | -      | - | - |
| Critical Hdwy        | -      | 6.54 | 6.94 | 7.54   | 6.54 | - | 4.14   | - | - |
| Critical Hdwy Stg 1  | -      | 5.54 | -    | -      | -    | - | -      | - | - |
| Critical Hdwy Stg 2  | -      | -    | -    | 6.54   | 5.54 | - | -      | - | - |
| Follow-up Hdwy       | -      | 4.02 | 3.32 | 3.52   | 4.02 | - | 2.22   | - | - |
| Pot Cap-1 Maneuver   | 0      | 95   | 406  | 178    | 95   | 0 | -      | - | - |
| Stage 1              | 0      | 151  | -    | -      | -    | 0 | -      | - | - |
| Stage 2              | 0      | -    | -    | 239    | 151  | 0 | -      | - | - |
| Platoon blocked, %   | -      | -    | -    | -      | -    | - | -      | - | - |
| Mov Cap-1 Maneuver   | -      | 93   | 396  | 137    | 93   | - | -      | - | - |
| Mov Cap-2 Maneuver   | -      | 93   | -    | 137    | 93   | - | -      | - | - |
| Stage 1              | -      | 147  | -    | -      | -    | - | -      | - | - |
| Stage 2              | -      | -    | -    | 188    | 147  | - | -      | - | - |

| Approach             | EB   |  |  | WB   |  |  | SB |  |  |
|----------------------|------|--|--|------|--|--|----|--|--|
| HCM Control Delay, s | 26.4 |  |  | 60.8 |  |  |    |  |  |
| HCM LOS              | D    |  |  | F    |  |  |    |  |  |

| Minor Lane/Major Mvmt | EBLn1WBLn1  | SBL | SBT | SBR |
|-----------------------|-------------|-----|-----|-----|
| Capacity (veh/h)      | 234 128     | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.283 0.526 | -   | -   | -   |
| HCM Control Delay (s) | 26.4 60.8   | -   | -   | -   |
| HCM Lane LOS          | D F         | -   | -   | -   |
| HCM 95th %tile Q(veh) | 1.1 2.5     | -   | -   | -   |

29: Colorado St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 71.3 |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      |      |      |      |      |      |      |      |      |      |      |      |
| Traffic Vol, veh/h       | 17   | 26   | 88   | 112  | 56   | 5    | 94   | 495  | 9    | 2    | 145  | 95   |
| Future Vol, veh/h        | 17   | 26   | 88   | 112  | 56   | 5    | 94   | 495  | 9    | 2    | 145  | 95   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 15   | 3    | 0    | 0    | 0    | 0    | 3    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   | 79   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 22   | 33   | 111  | 142  | 71   | 6    | 119  | 627  | 11   | 3    | 184  | 120  |

| Major/Minor          | Minor2 |       |       | Minor1 |       |       | Major1 |   |   | Major2 |   |   |
|----------------------|--------|-------|-------|--------|-------|-------|--------|---|---|--------|---|---|
| Conflicting Flow All | 1176   | 1128  | 247   | 1191   | 1182  | 647   | 307    | 0 | 0 | 638    | 0 | 0 |
| Stage 1              | 252    | 252   | -     | 870    | 870   | -     | -      | - | - | -      | - | - |
| Stage 2              | 924    | 876   | -     | 321    | 312   | -     | -      | - | - | -      | - | - |
| Critical Hdwy        | 7.12   | 6.52  | 6.22  | 7.12   | 6.52  | 6.22  | 4.12   | - | - | 4.12   | - | - |
| Critical Hdwy Stg 1  | 6.12   | 5.52  | -     | 6.12   | 5.52  | -     | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | 6.12   | 5.52  | -     | 6.12   | 5.52  | -     | -      | - | - | -      | - | - |
| Follow-up Hdwy       | 3.518  | 4.018 | 3.318 | 3.518  | 4.018 | 3.318 | 2.218  | - | - | 2.218  | - | - |
| Pot Cap-1 Maneuver   | 168    | 204   | 792   | 164    | 190   | 471   | 1254   | - | - | 946    | - | - |
| Stage 1              | 752    | 698   | -     | 346    | 369   | -     | -      | - | - | -      | - | - |
| Stage 2              | 323    | 367   | -     | 691    | 658   | -     | -      | - | - | -      | - | - |
| Platoon blocked, %   | -      | -     | -     | -      | -     | -     | -      | - | - | -      | - | - |
| Mov Cap-1 Maneuver   | 95     | 173   | 790   | -      | 107   | 161   | 1254   | - | - | 932    | - | - |
| Mov Cap-2 Maneuver   | 95     | 173   | -     | -      | 107   | 161   | -      | - | - | -      | - | - |
| Stage 1              | 640    | 693   | -     | 295    | 315   | -     | -      | - | - | -      | - | - |
| Stage 2              | 208    | 313   | -     | 563    | 653   | -     | -      | - | - | -      | - | - |

| Approach             | EB   |  |  | WB       |  |  | NB  |  |  | SB  |  |  |
|----------------------|------|--|--|----------|--|--|-----|--|--|-----|--|--|
| HCM Control Delay, s | 31.4 |  |  | \$ 442.8 |  |  | 1.3 |  |  | 0.1 |  |  |
| HCM LOS              | D    |  |  | F        |  |  |     |  |  |     |  |  |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1WBLn1       | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|------------------|-----|-----|-----|
| Capacity (veh/h)      | 1254  | -   | -   | 297 123 932      | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.095 | -   | -   | 0.558 1.78 0.003 | -   | -   | -   |
| HCM Control Delay (s) | 8.2   | 0   | -   | 31.4\$ 442.8 8.9 | 0   | -   | -   |
| HCM Lane LOS          | A     | A   | -   | D F A A          | -   | -   | -   |
| HCM 95th %tile Q(veh) | 0.3   | -   | -   | 3.2 16.9 0       | -   | -   | -   |

| Notes                      |                        |                            |                                |
|----------------------------|------------------------|----------------------------|--------------------------------|
| -: Volume exceeds capacity | \$: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

30: N. Congress Ave  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 9.9  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    |      |      | ↑    |      |      | ↑    |      |      | ↑    |      |
| Traffic Vol, veh/h       | 0    | 37   | 0    | 0    | 169  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 0    | 37   | 0    | 0    | 169  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 11   | 0    | 11   | 12   | 0    | 0    | 0    | 0    | 12   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 40   | 0    | 0    | 184  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |

| Major/Minor          | Minor2 |       | Minor1 |   | Major1 |   | Major2 |   |
|----------------------|--------|-------|--------|---|--------|---|--------|---|
| Conflicting Flow All | -      | 1     | -      | - | 1      | - | -      | 0 |
| Stage 1              | -      | 1     | -      | - | 0      | - | -      | - |
| Stage 2              | -      | 0     | -      | - | 1      | - | -      | - |
| Critical Hdwy        | -      | 6.52  | -      | - | 6.52   | - | -      | - |
| Critical Hdwy Stg 1  | -      | 5.52  | -      | - | 5.52   | - | -      | - |
| Critical Hdwy Stg 2  | -      | 5.52  | -      | - | 5.52   | - | -      | - |
| Follow-up Hdwy       | -      | 4.018 | -      | - | 4.018  | - | -      | - |
| Pot Cap-1 Maneuver   | 0      | 895   | 0      | 0 | 895    | 0 | 0      | - |
| Stage 1              | 0      | 895   | 0      | 0 | -      | 0 | 0      | - |
| Stage 2              | 0      | -     | 0      | 0 | 895    | 0 | 0      | - |
| Platoon blocked, %   | -      | -     | -      | - | -      | - | -      | - |
| Mov Cap-1 Maneuver   | -      | 895   | -      | - | 895    | - | -      | - |
| Mov Cap-2 Maneuver   | -      | 895   | -      | - | 895    | - | -      | - |
| Stage 1              | -      | 895   | -      | - | -      | - | -      | - |
| Stage 2              | -      | -     | -      | - | 895    | - | -      | - |

| Approach             | EB  |  | WB   |  | NB |  | SB |  |
|----------------------|-----|--|------|--|----|--|----|--|
| HCM Control Delay, s | 9.2 |  | 10.1 |  | 0  |  | 0  |  |
| HCM LOS              | A   |  | B    |  |    |  |    |  |

| Minor Lane/Major Mvmt | NBT | EBLn1 | WBLn1 | SBT |
|-----------------------|-----|-------|-------|-----|
| Capacity (veh/h)      | -   | 895   | 895   | -   |
| HCM Lane V/C Ratio    | -   | 0.045 | 0.205 | -   |
| HCM Control Delay (s) | -   | 9.2   | 10.1  | -   |
| HCM Lane LOS          | -   | A     | B     | -   |
| HCM 95th %tile Q(veh) | -   | 0.1   | 0.8   | -   |

MS

Synchro 9 Report  
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31: Brazos St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.2  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑    |      |      | ↑    | ↑    |      |
| Traffic Vol, veh/h       | 36   | 0    | 3    | 133  | 44   | 0    |
| Future Vol, veh/h        | 36   | 0    | 3    | 133  | 44   | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 26   | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 83   | 83   | 83   | 83   | 83   | 83   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 43   | 0    | 4    | 160  | 53   | 0    |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 0      | 0 | 69     | 0 | 236    | 69    |
| Stage 1              | -      | - | -      | - | 69     | -     |
| Stage 2              | -      | - | -      | - | 167    | -     |
| Critical Hdwy        | -      | - | 4.12   | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | -      | - | 2.218  | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | -      | - | 1532   | - | 752    | 994   |
| Stage 1              | -      | - | -      | - | 954    | -     |
| Stage 2              | -      | - | -      | - | 863    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | -      | - | 1532   | - | 731    | 969   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 731    | -     |
| Stage 1              | -      | - | -      | - | 930    | -     |
| Stage 2              | -      | - | -      | - | 860    | -     |

| Approach             | EB |  | WB  |  | NB   |  |
|----------------------|----|--|-----|--|------|--|
| HCM Control Delay, s | 0  |  | 0.2 |  | 10.3 |  |
| HCM LOS              |    |  |     |  | B    |  |




| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 731   | -   | -   | 1532  | -   |
| HCM Lane V/C Ratio    | 0.073 | -   | -   | 0.002 | -   |
| HCM Control Delay (s) | 10.3  | -   | -   | 7.4   | 0   |
| HCM Lane LOS          | B     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | 0     | -   |

MS

Synchro 9 Report  
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32: San Jacinto Blvd & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection             |      |   |      |      |   |   |
|--------------------------|------|---|------|------|---|---|
| Int Delay, s/veh         | 1.1  |   |      |      |   |   |
| Movement                 | EBL  | EBR   | NBL  | NBT  | SBT   | SBR   |
| Lane Configurations      |      |  |      |      |  |  |
| Traffic Vol, veh/h       | 0    | 45  | 0    | 0    | 345   | 155   |
| Future Vol, veh/h        | 0    | 45  | 0    | 0    | 345   | 155   |
| Conflicting Peds, #/hr   | 0    | 0   | 0    | 0    | 0   | 125   |
| Sign Control             | Stop | Stop  | Free | Free | Free  | Free  |
| RT Channelized           | -    | None  | -    | None | -   | None  |
| Storage Length           | -    | 0   | -    | -    | -   | 50  |
| Veh in Median Storage, # | 0    | -   | -    | -    | 0   | -   |
| Grade, %                 | 0    | -   | -    | 0    | 0   | -   |
| Peak Hour Factor         | 83   | 83  | 83   | 83   | 83  | 83  |
| Heavy Vehicles, %        | 2    | 2   | 2    | 2    | 2   | 2   |
| Mvmt Flow                | 0    | 54  | 0    | 0    | 416   | 187   |




| Major/Minor          | Minor2 | Major2 |
|----------------------|--------|--------|
| Conflicting Flow All | - 333  | - 0    |
| Stage 1              | - -    | - -    |
| Stage 2              | - -    | - -    |
| Critical Hdwy        | - 7.14 | - -    |
| Critical Hdwy Stg 1  | - -    | - -    |
| Critical Hdwy Stg 2  | - -    | - -    |
| Follow-up Hdwy       | - 3.92 | - -    |
| Pot Cap-1 Maneuver   | 0 566  | - -    |
| Stage 1              | 0 -    | - -    |
| Stage 2              | 0 -    | - -    |
| Platoon blocked, %   | - -    | - -    |
| Mov Cap-1 Maneuver   | - 499  | - -    |
| Mov Cap-2 Maneuver   | - -    | - -    |
| Stage 1              | - -    | - -    |
| Stage 2              | - -    | - -    |

| Approach             | EB   | SB |
|----------------------|------|----|
| HCM Control Delay, s | 13.1 | 0  |
| HCM LOS              | B    |    |

| Minor Lane/Major Mvmt | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-----|
| Capacity (veh/h)      | 499   | -   | -   |
| HCM Lane V/C Ratio    | 0.109 | -   | -   |
| HCM Control Delay (s) | 13.1  | -   | -   |
| HCM Lane LOS          | B     | -   | -   |
| HCM 95th %tile Q(veh) | 0.4   | -   | -   |

33: Colorado St & Parking Dr. 3  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection             |   |      |   |      |      |   |
|--------------------------|---|------|---|------|------|---|
| Int Delay, s/veh         | 1.6   |      |   |      |      |   |
| Movement                 | WBL   | WBR  | NBT   | NBR  | SBL  | SBT   |
| Lane Configurations      |  |      |  |      |      |  |
| Traffic Vol, veh/h       | 14  | 15   | 695   | 90   | 120  | 386   |
| Future Vol, veh/h        | 14  | 15   | 695   | 90   | 120  | 386   |
| Conflicting Peds, #/hr   | 0   | 0    | 0   | 0    | 0    | 0   |
| Sign Control             | Stop  | Stop | Free  | Free | Free | Free  |
| RT Channelized           | -   | None | -   | None | -    | None  |
| Storage Length           | 0   | -    | -   | -    | -    | -   |
| Veh in Median Storage, # | 0   | -    | 0   | -    | -    | 0   |
| Grade, %                 | 0   | -    | 0   | -    | -    | 0   |
| Peak Hour Factor         | 92  | 92   | 92  | 92   | 92   | 92  |
| Heavy Vehicles, %        | 2   | 2    | 2   | 2    | 2    | 2   |
| Mvmt Flow                | 15  | 16   | 755   | 98   | 130  | 420   |




| Major/Minor          | Minor1      | Major1 | Major2  |
|----------------------|-------------|--------|---------|
| Conflicting Flow All | 1484 804    | 0 0    | 853 0   |
| Stage 1              | 804 -       | - -    | - -     |
| Stage 2              | 680 -       | - -    | - -     |
| Critical Hdwy        | 6.42 6.22   | - -    | 4.12 -  |
| Critical Hdwy Stg 1  | 5.42 -      | - -    | - -     |
| Critical Hdwy Stg 2  | 5.42 -      | - -    | - -     |
| Follow-up Hdwy       | 3.518 3.318 | - -    | 2.218 - |
| Pot Cap-1 Maneuver   | 137 383     | - -    | 786 -   |
| Stage 1              | 440 -       | - -    | - -     |
| Stage 2              | 503 -       | - -    | - -     |
| Platoon blocked, %   | - -         | - -    | - -     |
| Mov Cap-1 Maneuver   | 107 383     | - -    | 786 -   |
| Mov Cap-2 Maneuver   | 107 -       | - -    | - -     |
| Stage 1              | 440 -       | - -    | - -     |
| Stage 2              | 394 -       | - -    | - -     |

| Approach             | WB   | NB | SB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 30.8 | 0  | 2.5 |
| HCM LOS              | D    |    |     |

| Minor Lane/Major Mvmt | NBT       | NBRWBLn1 | SBL | SBT |
|-----------------------|-----------|----------|-----|-----|
| Capacity (veh/h)      | - - 171   | 786 -    | -   | -   |
| HCM Lane V/C Ratio    | - - 0.184 | 0.166 -  | -   | -   |
| HCM Control Delay (s) | - - 30.8  | 10.5 0   | -   | -   |
| HCM Lane LOS          | - - D     | B A      | -   | -   |
| HCM 95th %tile Q(veh) | - - 0.7   | 0.6 -    | -   | -   |

62: Colorado St & Parking Dr. 4  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection             |   |      |      |   |   |      |
|--------------------------|---|------|------|---|---|------|
| Int Delay, s/veh         | 1.1   |      |      |   |   |      |
| Movement                 | EBL   | EBR  | NBL  | NBT   | SBT   | SBR  |
| Lane Configurations      |  |      |      |  |  |      |
| Traffic Vol, veh/h       | 12  | 12   | 84   | 625   | 494   | 96   |
| Future Vol, veh/h        | 12  | 12   | 84   | 625   | 494   | 96   |
| Conflicting Peds, #/hr   | 0   | 0    | 0    | 0   | 0   | 0    |
| Sign Control             | Stop  | Stop | Free | Free  | Free  | Free |
| RT Channelized           | -   | None | -    | None  | -   | None |
| Storage Length           | 0   | -    | -    | -   | -   | -    |
| Veh in Median Storage, # | 0   | -    | -    | 0   | 0   | -    |
| Grade, %                 | 0   | -    | -    | 0   | 0   | -    |
| Peak Hour Factor         | 92  | 92   | 92   | 92  | 92  | 92   |
| Heavy Vehicles, %        | 2   | 2    | 2    | 2   | 2   | 2    |
| Mvmt Flow                | 13  | 13   | 91   | 679   | 537   | 104  |

| Major/Minor          | Minor2 | Major1 |       | Major2 |     |
|----------------------|--------|--------|-------|--------|-----|
| Conflicting Flow All | 1451   | 589    | 641   | 0      | - 0 |
| Stage 1              | 589    | -      | -     | -      | -   |
| Stage 2              | 862    | -      | -     | -      | -   |
| Critical Hdwy        | 6.42   | 6.22   | 4.12  | -      | -   |
| Critical Hdwy Stg 1  | 5.42   | -      | -     | -      | -   |
| Critical Hdwy Stg 2  | 5.42   | -      | -     | -      | -   |
| Follow-up Hdwy       | 3.518  | 3.318  | 2.218 | -      | -   |
| Pot Cap-1 Maneuver   | 144    | 508    | 943   | -      | -   |
| Stage 1              | 554    | -      | -     | -      | -   |
| Stage 2              | 414    | -      | -     | -      | -   |
| Platoon blocked, %   | -      | -      | -     | -      | -   |
| Mov Cap-1 Maneuver   | 122    | 508    | 943   | -      | -   |
| Mov Cap-2 Maneuver   | 122    | -      | -     | -      | -   |
| Stage 1              | 554    | -      | -     | -      | -   |
| Stage 2              | 350    | -      | -     | -      | -   |




| Approach             | EB | NB  |  | SB |
|----------------------|----|-----|--|----|
| HCM Control Delay, s | 26 | 1.1 |  | 0  |
| HCM LOS              | D  |     |  |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 943   | -   | 197   | -   | -   |
| HCM Lane V/C Ratio    | 0.097 | -   | 0.132 | -   | -   |
| HCM Control Delay (s) | 9.2   | 0   | 26    | -   | -   |
| HCM Lane LOS          | A     | A   | D     | -   | -   |
| HCM 95th %tile Q(veh) | 0.3   | -   | 0.4   | -   | -   |

69: Parking Dr. 5 & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection             |   |      |      |   |   |      |
|--------------------------|---|------|------|---|---|------|
| Int Delay, s/veh         | 2.1   |      |      |   |   |      |
| Movement                 | EBT   | EBR  | WBL  | WBT   | NBL   | NBR  |
| Lane Configurations      |  |      |      |  |  |      |
| Traffic Vol, veh/h       | 125   | 120  | 90   | 154   | 19  | 10   |
| Future Vol, veh/h        | 125   | 120  | 90   | 154   | 19  | 10   |
| Conflicting Peds, #/hr   | 0   | 0    | 0    | 0   | 0   | 0    |
| Sign Control             | Free  | Free | Free | Free  | Stop  | Stop |
| RT Channelized           | -   | None | -    | None  | -   | None |
| Storage Length           | -   | -    | -    | -   | 0   | -    |
| Veh in Median Storage, # | 0   | -    | -    | 0   | 0   | -    |
| Grade, %                 | 0   | -    | -    | 0   | 0   | -    |
| Peak Hour Factor         | 92  | 92   | 92   | 92  | 92  | 92   |
| Heavy Vehicles, %        | 2   | 2    | 2    | 2   | 2   | 2    |
| Mvmt Flow                | 136   | 130  | 98   | 167   | 21  | 11   |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 0      | 0 | 266    | 0 | 564    | 201   |
| Stage 1              | -      | - | -      | - | 201    | -     |
| Stage 2              | -      | - | -      | - | 363    | -     |
| Critical Hdwy        | -      | - | 4.12   | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | -      | - | 2.218  | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | -      | - | 1298   | - | 487    | 840   |
| Stage 1              | -      | - | -      | - | 833    | -     |
| Stage 2              | -      | - | -      | - | 704    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | -      | - | 1298   | - | 447    | 840   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 447    | -     |
| Stage 1              | -      | - | -      | - | 833    | -     |
| Stage 2              | -      | - | -      | - | 646    | -     |

| Approach             | EB | WB |  | NB   |
|----------------------|----|----|--|------|
| HCM Control Delay, s | 0  | 3  |  | 12.2 |
| HCM LOS              |    |    |  | B    |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 533   | -   | -   | 1298  | -   |
| HCM Lane V/C Ratio    | 0.059 | -   | -   | 0.075 | -   |
| HCM Control Delay (s) | 12.2  | -   | -   | 8     | 0   |
| HCM Lane LOS          | B     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | 0.2   | -   |

71: E. 16th St & Parking Dr. 6  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |  |
|--------------------------|------|------|------|------|------|------|--|
| Int Delay, s/veh         | 2    |      |      |      |      |      |  |
| Movement                 | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |  |
| Lane Configurations      |      | ↕    | ↕    |      | ↕    |      |  |
| Traffic Vol, veh/h       | 91   | 231  | 64   | 109  | 15   | 12   |  |
| Future Vol, veh/h        | 91   | 231  | 64   | 109  | 15   | 12   |  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |  |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |  |
| RT Channelized           | -    | None | -    | None | -    | None |  |
| Storage Length           | -    | -    | -    | -    | 0    | -    |  |
| Veh in Median Storage, # | -    | 0    | 0    | -    | 0    | -    |  |
| Grade, %                 | -    | 0    | 0    | -    | 0    | -    |  |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |  |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |  |
| Mvmt Flow                | 99   | 251  | 70   | 118  | 16   | 13   |  |

| Major/Minor          | Major1 | Major2 | Minor2 |   |             |
|----------------------|--------|--------|--------|---|-------------|
| Conflicting Flow All | 188    | 0      | -      | 0 | 578 129     |
| Stage 1              | -      | -      | -      | - | 129 -       |
| Stage 2              | -      | -      | -      | - | 449 -       |
| Critical Hdwy        | 4.12   | -      | -      | - | 6.42 6.22   |
| Critical Hdwy Stg 1  | -      | -      | -      | - | 5.42 -      |
| Critical Hdwy Stg 2  | -      | -      | -      | - | 5.42 -      |
| Follow-up Hdwy       | 2.218  | -      | -      | - | 3.518 3.318 |
| Pot Cap-1 Maneuver   | 1386   | -      | -      | - | 478 921     |
| Stage 1              | -      | -      | -      | - | 897 -       |
| Stage 2              | -      | -      | -      | - | 643 -       |
| Platoon blocked, %   | -      | -      | -      | - | -           |
| Mov Cap-1 Maneuver   | 1386   | -      | -      | - | 438 921     |
| Mov Cap-2 Maneuver   | -      | -      | -      | - | 438 -       |
| Stage 1              | -      | -      | -      | - | 897 -       |
| Stage 2              | -      | -      | -      | - | 590 -       |

| Approach             | EB  | WB | SB   |
|----------------------|-----|----|------|
| HCM Control Delay, s | 2.2 | 0  | 11.6 |
| HCM LOS              |     |    | B    |

| Minor Lane/Major Mvmt | EBL   | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h)      | 1386  | -   | -   | -   | 571   |
| HCM Lane V/C Ratio    | 0.071 | -   | -   | -   | 0.051 |
| HCM Control Delay (s) | 7.8   | 0   | -   | -   | 11.6  |
| HCM Lane LOS          | A     | A   | -   | -   | B     |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | -   | 0.2   |

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73: Colorado St & Parking Dr. 7/Parkin Dr. 8  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: AM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |  |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| Int Delay, s/veh         | 2.9  |      |      |      |      |      |      |      |      |      |      |      |  |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      | ↕    | ↕    |      |      | ↕    |      |  |
| Traffic Vol, veh/h       | 16   | 0    | 12   | 13   | 0    | 15   | 85   | 336  | 97   | 109  | 411  | 116  |  |
| Future Vol, veh/h        | 16   | 0    | 12   | 13   | 0    | 15   | 85   | 336  | 97   | 109  | 411  | 116  |  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |  |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |  |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |  |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |  |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |  |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |  |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |  |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |  |
| Mvmt Flow                | 17   | 0    | 13   | 14   | 0    | 16   | 92   | 365  | 105  | 118  | 447  | 126  |  |

| Major/Minor          | Minor2            | Minor1            | Major1    | Major2    |  |
|----------------------|-------------------|-------------------|-----------|-----------|--|
| Conflicting Flow All | 1358 1402 510     | 1356 1413 418     | 573 0 0   | 471 0 0   |  |
| Stage 1              | 747 747 -         | 603 603 -         | - - -     | - - -     |  |
| Stage 2              | 611 655 -         | 753 810 -         | - - -     | - - -     |  |
| Critical Hdwy        | 7.12 6.52 6.22    | 7.12 6.52 6.22    | 4.12 - -  | 4.12 - -  |  |
| Critical Hdwy Stg 1  | 6.12 5.52 -       | 6.12 5.52 -       | - - -     | - - -     |  |
| Critical Hdwy Stg 2  | 6.12 5.52 -       | 6.12 5.52 -       | - - -     | - - -     |  |
| Follow-up Hdwy       | 3.518 4.018 3.318 | 3.518 4.018 3.318 | 2.218 - - | 2.218 - - |  |
| Pot Cap-1 Maneuver   | 126 140 563       | 126 138 635       | 1000 - -  | 1091 - -  |  |
| Stage 1              | 405 420 -         | 486 488 -         | - - -     | - - -     |  |
| Stage 2              | 481 463 -         | 402 393 -         | - - -     | - - -     |  |
| Platoon blocked, %   | -                 | -                 | -         | -         |  |
| Mov Cap-1 Maneuver   | 97 102 563        | 98 101 635        | 1000 - -  | 1091 - -  |  |
| Mov Cap-2 Maneuver   | 97 102 -          | 98 101 -          | - - -     | - - -     |  |
| Stage 1              | 354 352 -         | 424 426 -         | - - -     | - - -     |  |
| Stage 2              | 409 404 -         | 329 329 -         | - - -     | - - -     |  |

| Approach             | EB | WB   | NB  | SB  |
|----------------------|----|------|-----|-----|
| HCM Control Delay, s | 35 | 29.2 | 1.5 | 1.5 |
| HCM LOS              | E  | D    |     |     |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1 | WBLn1 | SBL   | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h)      | 1000  | -   | -   | 150   | 179   | 1091  | -   | -   |
| HCM Lane V/C Ratio    | 0.092 | -   | -   | 0.203 | 0.17  | 0.109 | -   | -   |
| HCM Control Delay (s) | 9     | 0   | -   | 35    | 29.2  | 8.7   | 0   | -   |
| HCM Lane LOS          | A     | A   | -   | E     | D     | A     | A   | -   |
| HCM 95th %tile Q(veh) | 0.3   | -   | -   | 0.7   | 0.6   | 0.4   | -   | -   |

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1: Martin Luther King Jr. Blvd & Guadalupe St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

|                         | ↖     | →     | ↘    | ↙    | ←     | ↖     | ↙    | ↘    | ↗    | ↘     | ↗     | ↘     |
|-------------------------|-------|-------|------|------|-------|-------|------|------|------|-------|-------|-------|
| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR   | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
| Lane Configurations     | ↖     | ↖↗    |      |      | ↖↗    | ↖     |      |      |      | ↖     | ↖↗    | ↖     |
| Traffic Volume (vph)    | 155   | 387   | 165  | 0    | 1414  | 746   | 0    | 0    | 0    | 194   | 655   | 237   |
| Future Volume (vph)     | 155   | 387   | 165  | 0    | 1414  | 746   | 0    | 0    | 0    | 194   | 655   | 237   |
| Confl. Peds. (#/hr)     | 30    |       | 70   | 70   |       | 30    |      |      |      | 42    |       | 70    |
| Confl. Bikes (#/hr)     |       |       | 1    |      |       | 6     |      |      |      |       |       | 3     |
| Peak Hour Factor        | 0.94  | 0.94  | 0.94 | 0.94 | 0.94  | 0.94  | 0.94 | 0.94 | 0.94 | 0.94  | 0.94  | 0.94  |
| Adj. Flow (vph)         | 165   | 412   | 176  | 0    | 1504  | 794   | 0    | 0    | 0    | 206   | 697   | 252   |
| Shared Lane Traffic (%) |       |       |      |      |       |       |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 165   | 588   | 0    | 0    | 1504  | 794   | 0    | 0    | 0    | 206   | 697   | 252   |
| Turn Type               | Prot  | NA    |      |      | NA    | pm+ov |      |      |      | pm+pt | NA    | Perm  |
| Protected Phases        | 5     | 2     |      |      | 6     | 7     |      |      |      | 7     | 4     |       |
| Permitted Phases        |       |       |      |      |       | 6     |      |      |      | 4     |       | 4     |
| Detector Phase          | 5     | 2     |      |      | 6     | 7     |      |      |      | 7     | 4     | 4     |
| Switch Phase            |       |       |      |      |       |       |      |      |      |       |       |       |
| Minimum Initial (s)     | 2.0   | 15.0  |      |      | 15.0  | 10.0  |      |      |      | 10.0  | 5.0   | 5.0   |
| Minimum Split (s)       | 7.0   | 27.0  |      |      | 34.0  | 15.0  |      |      |      | 15.0  | 32.0  | 32.0  |
| Total Split (s)         | 25.0  | 92.0  |      |      | 67.0  | 43.0  |      |      |      | 43.0  | 43.0  | 43.0  |
| Total Split (%)         | 18.5% | 68.1% |      |      | 49.6% | 31.9% |      |      |      | 31.9% | 31.9% | 31.9% |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   | 4.0   |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   | 1.0   |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   | 0.0   |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   | 5.0   |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                | Lag   |       |      |      | Lead  |       |      |      |      |       |       |       |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |       |      |      |      |       |       |       |
| Recall Mode             | None  | C-Max |      |      | C-Max | None  |      |      |      | None  | Max   | Max   |
| Act Effect Green (s)    | 20.0  | 87.0  |      |      | 62.0  | 100.0 |      |      |      | 38.0  | 38.0  | 38.0  |
| Actuated g/C Ratio      | 0.15  | 0.64  |      |      | 0.46  | 0.74  |      |      |      | 0.28  | 0.28  | 0.28  |
| v/c Ratio               | 0.63  | 0.28  |      |      | 0.93  | 0.68  |      |      |      | 0.41  | 0.70  | 0.51  |
| Control Delay           | 65.7  | 10.4  |      |      | 33.3  | 2.8   |      |      |      | 42.5  | 47.9  | 20.1  |
| Queue Delay             | 0.0   | 0.0   |      |      | 45.6  | 0.4   |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             | 65.7  | 10.4  |      |      | 78.9  | 3.2   |      |      |      | 42.5  | 47.9  | 20.1  |
| LOS                     | E     | B     |      |      | E     | A     |      |      |      | D     | D     | C     |
| Approach Delay          |       | 22.6  |      |      | 52.7  |       |      |      |      |       | 40.8  |       |
| Approach LOS            |       | C     |      |      | D     |       |      |      |      |       | D     |       |
| Queue Length 50th (ft)  | 138   | 106   |      |      | 601   | 25    |      |      |      | 147   | 288   | 73    |
| Queue Length 95th (ft)  | 217   | 136   |      |      | m655  | m63   |      |      |      | 224   | 360   | 160   |
| Internal Link Dist (ft) |       | 228   |      |      | 45    |       | 159  |      |      |       | 210   |       |
| Turn Bay Length (ft)    | 160   |       |      |      |       |       |      |      |      | 130   |       | 120   |
| Base Capacity (vph)     | 262   | 2094  |      |      | 1625  | 1172  |      |      |      | 498   | 996   | 499   |
| Starvation Cap Reductn  | 0     | 0     |      |      | 371   | 88    |      |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     | 0     |      |      |      | 0     | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     | 0     |      |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       | 0.63  | 0.28  |      |      | 1.20  | 0.73  |      |      |      | 0.41  | 0.70  | 0.51  |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 90

MS

Synchro 9 Report  
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1: Martin Luther King Jr. Blvd & Guadalupe St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 44.1

Intersection LOS: D

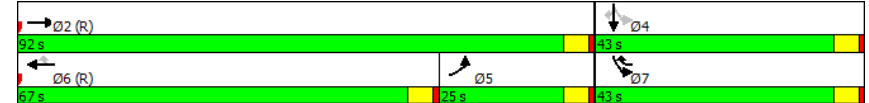
Intersection Capacity Utilization 82.7%

ICU Level of Service E

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Martin Luther King Jr. Blvd & Guadalupe St



MS

Synchro 9 Report  
Page 2

3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

|                         | →     | ↖    | ↗    | ←     | ↖     | ↗     |
|-------------------------|-------|------|------|-------|-------|-------|
| Lane Group              | EBT   | EBR  | WBL  | WBT   | NBL   | NBR   |
| Lane Configurations     | ↑↑    |      |      | ↑↑    | ↑↑    | ↑     |
| Traffic Volume (vph)    | 559   | 0    | 0    | 1409  | 1086  | 248   |
| Future Volume (vph)     | 559   | 0    | 0    | 1409  | 1086  | 248   |
| Confl. Peds. (#/hr)     |       |      |      |       |       | 82    |
| Peak Hour Factor        | 0.91  | 0.91 | 0.91 | 0.91  | 0.91  | 0.91  |
| Adj. Flow (vph)         | 614   | 0    | 0    | 1548  | 1193  | 273   |
| Shared Lane Traffic (%) |       |      |      |       |       |       |
| Lane Group Flow (vph)   | 614   | 0    | 0    | 1548  | 1193  | 273   |
| Turn Type               | NA    |      |      | NA    | Prot  | Perm  |
| Protected Phases        | 2     |      |      | 6     | 8     |       |
| Permitted Phases        |       |      |      |       |       | 3     |
| Detector Phase          | 2     |      |      | 6     | 8     | 3     |
| Switch Phase            |       |      |      |       |       |       |
| Minimum Initial (s)     | 10.0  |      |      | 10.0  | 5.0   | 5.0   |
| Minimum Split (s)       | 30.0  |      |      | 15.0  | 10.0  | 10.0  |
| Total Split (s)         | 86.0  |      |      | 86.0  | 49.0  | 49.0  |
| Total Split (%)         | 63.7% |      |      | 63.7% | 36.3% | 36.3% |
| Yellow Time (s)         | 4.0   |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |       |      |      |       |       |       |
| Lead-Lag Optimize?      |       |      |      |       |       |       |
| Recall Mode             | C-Max |      |      | C-Max | Max   | Max   |
| Act Effect Green (s)    | 81.0  |      |      | 81.0  | 44.0  | 44.0  |
| Actuated g/C Ratio      | 0.60  |      |      | 0.60  | 0.33  | 0.33  |
| v/c Ratio               | 0.29  |      |      | 0.73  | 1.07  | 0.45  |
| Control Delay           | 13.7  |      |      | 15.1  | 99.0  | 26.8  |
| Queue Delay             | 0.3   |      |      | 1.3   | 13.6  | 0.0   |
| Total Delay             | 14.0  |      |      | 16.4  | 112.6 | 26.8  |
| LOS                     | B     |      |      | B     | F     | C     |
| Approach Delay          | 14.0  |      |      | 16.4  | 96.6  |       |
| Approach LOS            | B     |      |      | B     | F     |       |
| Queue Length 50th (ft)  | 126   |      |      | 282   | -601  | 108   |
| Queue Length 95th (ft)  | 155   |      |      | 352   | #743  | 174   |
| Internal Link Dist (ft) | 272   |      |      | 277   | 337   |       |
| Turn Bay Length (ft)    |       |      |      |       |       |       |
| Base Capacity (vph)     | 2123  |      |      | 2123  | 1118  | 601   |
| Starvation Cap Reductn  | 857   |      |      | 115   | 0     | 0     |
| Spillback Cap Reductn   | 0     |      |      | 344   | 90    | 0     |
| Storage Cap Reductn     | 0     |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       | 0.48  |      |      | 0.87  | 1.16  | 0.45  |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green  
Natural Cycle: 70  
Control Type: Actuated-Coordinated

MS

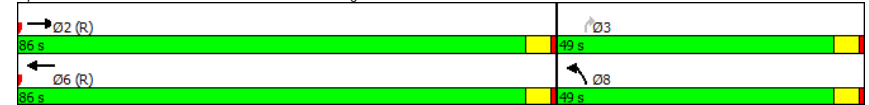
Synchro 9 Report  
Page 3

3: Lavaca St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

Maximum v/c Ratio: 1.07  
Intersection Signal Delay: 48.4  
Intersection LOS: D  
Intersection Capacity Utilization 97.7%  
ICU Level of Service F  
Analysis Period (min) 15  
~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.  
# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Splits and Phases: 3: Lavaca St & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 4

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

|                         | →     | ↖    | ↗     | ←      | ↖    | ↗    |
|-------------------------|-------|------|-------|--------|------|------|
| Lane Group              | EBT   | EBR  | WBL   | WBT    | NBL  | NBR  |
| Lane Configurations     | ↔↔    |      | ↖     | ↔↔     |      |      |
| Traffic Volume (vph)    | 952   | 0    | 13    | 1321   | 0    | 0    |
| Future Volume (vph)     | 952   | 0    | 13    | 1321   | 0    | 0    |
| Confl. Peds. (#/hr)     |       | 33   | 33    |        | 35   |      |
| Confl. Bikes (#/hr)     |       | 4    |       |        |      |      |
| Peak Hour Factor        | 0.94  | 0.94 | 0.94  | 0.94   | 0.94 | 0.94 |
| Adj. Flow (vph)         | 1013  | 0    | 14    | 1405   | 0    | 0    |
| Shared Lane Traffic (%) |       |      |       |        |      |      |
| Lane Group Flow (vph)   | 1013  | 0    | 14    | 1405   | 0    | 0    |
| Turn Type               | NA    |      | pm+pt | NA     |      |      |
| Protected Phases        | 2     |      | 1     | 6      |      |      |
| Permitted Phases        |       |      | 6     |        |      |      |
| Detector Phase          | 2     |      | 1     | 6      |      |      |
| Switch Phase            |       |      |       |        |      |      |
| Minimum Initial (s)     | 15.0  |      | 3.0   | 15.0   |      |      |
| Minimum Split (s)       | 34.0  |      | 8.0   | 20.0   |      |      |
| Total Split (s)         | 121.0 |      | 14.0  | 135.0  |      |      |
| Total Split (%)         | 89.6% |      | 10.4% | 100.0% |      |      |
| Yellow Time (s)         | 4.0   |      | 4.0   | 4.0    |      |      |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0    |      |      |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0    |      |      |
| Total Lost Time (s)     | 5.0   |      | 5.0   | 5.0    |      |      |
| Lead/Lag                | Lead  |      | Lag   |        |      |      |
| Lead-Lag Optimize?      | Yes   |      | Yes   |        |      |      |
| Recall Mode             | C-Max |      | None  | C-Max  |      |      |
| Act Effect Green (s)    | 127.4 |      | 133.0 | 135.0  |      |      |
| Actuated g/C Ratio      | 0.94  |      | 0.99  | 1.00   |      |      |
| v/c Ratio               | 0.30  |      | 0.02  | 0.40   |      |      |
| Control Delay           | 0.8   |      | 0.1   | 0.4    |      |      |
| Queue Delay             | 0.0   |      | 0.0   | 0.0    |      |      |
| Total Delay             | 0.8   |      | 0.1   | 0.4    |      |      |
| LOS                     | A     |      | A     | A      |      |      |
| Approach Delay          | 0.8   |      |       | 0.4    |      |      |
| Approach LOS            | A     |      |       | A      |      |      |
| Queue Length 50th (ft)  | 0     |      | 0     | 3      |      |      |
| Queue Length 95th (ft)  | 56    |      | m0    | 0      |      |      |
| Internal Link Dist (ft) | 366   |      |       | 377    | 331  |      |
| Turn Bay Length (ft)    |       |      | 115   |        |      |      |
| Base Capacity (vph)     | 3339  |      | 578   | 3539   |      |      |
| Starvation Cap Reductn  | 0     |      | 0     | 0      |      |      |
| Spillback Cap Reductn   | 0     |      | 0     | 17     |      |      |
| Storage Cap Reductn     | 0     |      | 0     | 0      |      |      |
| Reduced v/c Ratio       | 0.30  |      | 0.02  | 0.40   |      |      |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 45

MS

Synchro 9 Report  
Page 5

5: N. Congress Ave & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.40

Intersection Signal Delay: 0.5

Intersection LOS: A

Intersection Capacity Utilization 40.7%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: N. Congress Ave & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 6

6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

|                         | ↖     | →     | ↘    | ↙     | ←     | ↖     | ↙     | ↘     | ↗     | ↘     | ↙     | ↗     |
|-------------------------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Group              | EBL   | EBT   | EBR  | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     | ↖     | ↖↗    |      | ↖     | ↖↗    | ↖     |       | ↖     | ↖↗    |       | ↖     | ↖     |
| Traffic Volume (vph)    | 91    | 945   | 32   | 45    | 938   | 136   | 125   | 24    | 333   | 100   | 26    | 253   |
| Future Volume (vph)     | 91    | 945   | 32   | 45    | 938   | 136   | 125   | 24    | 333   | 100   | 26    | 253   |
| Confl. Peds. (#/hr)     | 44    |       | 7    | 7     |       | 44    | 22    |       | 23    | 23    |       | 22    |
| Confl. Bikes (#/hr)     |       |       | 4    |       |       | 3     |       |       |       |       |       |       |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  |
| Adj. Flow (vph)         | 94    | 974   | 33   | 46    | 967   | 140   | 129   | 25    | 343   | 103   | 27    | 261   |
| Shared Lane Traffic (%) |       |       |      |       |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)   | 94    | 1007  | 0    | 46    | 967   | 140   | 0     | 154   | 343   | 0     | 130   | 261   |
| Turn Type               | pm+pt | NA    |      | pm+pt | NA    | Perm  | Perm  | NA    | Perm  | Perm  | NA    | Perm  |
| Protected Phases        | 5     | 2     |      | 1     | 6     |       |       | 8     |       |       | 4     |       |
| Permitted Phases        | 2     |       |      | 6     |       | 6     | 8     |       | 8     | 4     |       | 4     |
| Detector Phase          | 5     | 2     |      | 1     | 6     | 6     | 8     | 8     | 8     | 4     | 4     | 4     |
| Switch Phase            |       |       |      |       |       |       |       |       |       |       |       |       |
| Minimum Initial (s)     | 3.0   | 10.0  |      | 3.0   | 10.0  | 10.0  | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       | 8.0   | 22.0  |      | 8.0   | 28.0  | 28.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  | 30.0  |
| Total Split (s)         | 15.0  | 89.0  |      | 15.0  | 89.0  | 89.0  | 31.0  | 31.0  | 31.0  | 31.0  | 31.0  | 31.0  |
| Total Split (%)         | 11.1% | 65.9% |      | 11.1% | 65.9% | 65.9% | 23.0% | 23.0% | 23.0% | 23.0% | 23.0% | 23.0% |
| Yellow Time (s)         | 4.0   | 4.0   |      | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |      | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   | 5.0   |      | 5.0   | 5.0   | 5.0   |       | 5.0   | 5.0   |       | 5.0   | 5.0   |
| Lead/Lag                | Lead  | Lag   |      | Lead  | Lag   | Lag   |       |       |       |       |       |       |
| Lead-Lag Optimize?      | Yes   | Yes   |      | Yes   | Yes   | Yes   |       |       |       |       |       |       |
| Recall Mode             | None  | C-Max |      | None  | C-Max | C-Max | Max   | Max   | Max   | Max   | Max   | Max   |
| Act Effect Green (s)    | 96.0  | 89.7  |      | 92.9  | 86.5  | 86.5  |       | 26.0  | 26.0  |       | 26.0  | 26.0  |
| Actuated g/C Ratio      | 0.71  | 0.66  |      | 0.69  | 0.64  | 0.64  |       | 0.19  | 0.19  |       | 0.19  | 0.19  |
| v/c Ratio               | 0.24  | 0.43  |      | 0.12  | 0.43  | 0.16  |       | 0.75  | 0.71  |       | 0.69  | 0.56  |
| Control Delay           | 5.5   | 8.4   |      | 2.5   | 5.7   | 1.9   |       | 75.0  | 25.1  |       | 70.8  | 14.9  |
| Queue Delay             | 0.0   | 0.3   |      | 0.0   | 0.3   | 0.0   |       | 0.0   | 1.5   |       | 0.7   | 0.0   |
| Total Delay             | 5.5   | 8.7   |      | 2.5   | 6.0   | 1.9   |       | 75.0  | 26.6  |       | 71.5  | 14.9  |
| LOS                     | A     | A     |      | A     | A     | A     |       | E     | C     |       | E     | B     |
| Approach Delay          |       | 8.4   |      |       | 5.4   |       |       | 41.6  |       |       | 33.7  |       |
| Approach LOS            |       | A     |      |       | A     |       |       | D     |       |       | C     |       |
| Queue Length 50th (ft)  | 16    | 155   |      | 2     | 123   | 10    |       | 129   | 86    |       | 107   | 30    |
| Queue Length 95th (ft)  | 26    | 149   |      | m6    | 162   | 27    |       | #238  | 204   |       | #200  | 118   |
| Internal Link Dist (ft) |       | 377   |      |       | 273   |       |       | 135   |       |       | 212   |       |
| Turn Bay Length (ft)    | 160   |       |      | 100   |       | 100   |       |       | 100   |       |       |       |
| Base Capacity (vph)     | 417   | 2337  |      | 422   | 2267  | 899   |       | 204   | 480   |       | 188   | 468   |
| Starvation Cap Reductn  | 0     | 618   |      | 0     | 585   | 0     |       | 0     | 0     |       | 0     | 0     |
| Spillback Cap Reductn   | 0     | 367   |      | 0     | 0     | 0     |       | 0     | 42    |       | 5     | 0     |
| Storage Cap Reductn     | 0     | 0     |      | 0     | 0     | 0     |       | 0     | 0     |       | 0     | 0     |
| Reduced v/c Ratio       | 0.23  | 0.59  |      | 0.11  | 0.57  | 0.16  |       | 0.75  | 0.78  |       | 0.71  | 0.56  |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 70

MS

Synchro 9 Report  
Page 7

6: Brazos St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 15.7

Intersection LOS: B

Intersection Capacity Utilization 83.3%

ICU Level of Service E

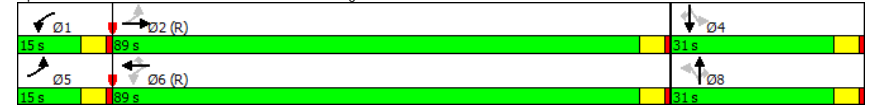
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Brazos St & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 8

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

|                         | ↖    | →     | ↘    | ↙     | ←     | ↖    | ↗    | ↘    | ↙    | ↖     | ↗     | ↘     | ↙ |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|---|
| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |   |
| Lane Configurations     |      | ↑↑    |      | ↖     | ↑↑    |      |      |      |      | ↘     | ↑↑    | ↗     |   |
| Traffic Volume (vph)    | 0    | 1315  | 30   | 379   | 1174  | 0    | 0    | 0    | 0    | 39    | 204   | 144   |   |
| Future Volume (vph)     | 0    | 1315  | 30   | 379   | 1174  | 0    | 0    | 0    | 0    | 39    | 204   | 144   |   |
| Confl. Peds. (#/hr)     |      |       | 37   | 37    |       |      |      |      |      | 73    |       | 17    |   |
| Confl. Bikes (#/hr)     |      |       | 8    |       |       |      |      |      |      |       |       | 14    |   |
| Peak Hour Factor        | 0.93 | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93 | 0.93 | 0.93 | 0.93  | 0.93  | 0.93  |   |
| Adj. Flow (vph)         | 0    | 1414  | 32   | 408   | 1262  | 0    | 0    | 0    | 0    | 42    | 219   | 155   |   |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |   |
| Lane Group Flow (vph)   | 0    | 1446  | 0    | 408   | 1262  | 0    | 0    | 0    | 0    | 42    | 219   | 155   |   |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |   |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |       | 4     |       |   |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |   |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4     | 4     | 4     |   |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |   |
| Minimum Initial (s)     |      | 10.0  |      | 3.0   | 10.0  |      |      |      |      | 5.0   | 5.0   | 5.0   |   |
| Minimum Split (s)       |      | 32.0  |      | 8.0   | 30.0  |      |      |      |      | 30.0  | 30.0  | 30.0  |   |
| Total Split (s)         |      | 78.0  |      | 25.0  | 103.0 |      |      |      |      | 32.0  | 32.0  | 32.0  |   |
| Total Split (%)         |      | 57.8% |      | 18.5% | 76.3% |      |      |      |      | 23.7% | 23.7% | 23.7% |   |
| Yellow Time (s)         |      | 4.0   |      | 4.0   | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |   |
| All-Red Time (s)        |      | 1.0   |      | 1.0   | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |   |
| Lost Time Adjust (s)    |      | 0.0   |      | 0.0   | 0.0   |      |      |      |      | 0.0   | 0.0   | 0.0   |   |
| Total Lost Time (s)     |      | 5.0   |      | 5.0   | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |   |
| Lead/Lag                |      | Lag   |      | Lead  |       |      |      |      |      |       |       |       |   |
| Lead-Lag Optimize?      |      | Yes   |      | Yes   |       |      |      |      |      |       |       |       |   |
| Recall Mode             |      | C-Max |      | None  | C-Max |      |      |      |      | Max   | Max   | Max   |   |
| Act Effect Green (s)    |      | 73.0  |      | 98.0  | 98.0  |      |      |      |      | 27.0  | 27.0  | 27.0  |   |
| Actuated g/C Ratio      |      | 0.54  |      | 0.73  | 0.73  |      |      |      |      | 0.20  | 0.20  | 0.20  |   |
| v/c Ratio               |      | 0.76  |      | 1.19  | 0.49  |      |      |      |      | 0.13  | 0.31  | 0.40  |   |
| Control Delay           |      | 20.4  |      | 149.3 | 4.2   |      |      |      |      | 45.9  | 47.5  | 19.0  |   |
| Queue Delay             |      | 0.4   |      | 0.2   | 0.3   |      |      |      |      | 0.0   | 0.0   | 0.0   |   |
| Total Delay             |      | 20.7  |      | 149.4 | 4.5   |      |      |      |      | 45.9  | 47.5  | 19.0  |   |
| LOS                     |      | C     |      | F     | A     |      |      |      |      | D     | D     | B     |   |
| Approach Delay          |      | 20.7  |      |       | 39.9  |      |      |      |      |       |       | 36.7  |   |
| Approach LOS            |      | C     |      |       | D     |      |      |      |      |       |       | D     |   |
| Queue Length 50th (ft)  |      | 428   |      | ~364  | 123   |      |      |      |      | 31    | 86    | 34    |   |
| Queue Length 95th (ft)  |      | 503   |      | m#575 | m127  |      |      |      |      | 65    | 127   | 100   |   |
| Internal Link Dist (ft) |      | 273   |      |       | 321   |      |      | 343  |      |       | 244   |       |   |
| Turn Bay Length (ft)    |      |       |      | 120   |       |      |      |      |      | 100   |       | 100   |   |
| Base Capacity (vph)     |      | 1906  |      | 344   | 2569  |      |      |      |      | 312   | 707   | 386   |   |
| Starvation Cap Reductn  |      | 112   |      | 5     | 641   |      |      |      |      | 0     | 0     | 0     |   |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |   |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |   |
| Reduced v/c Ratio       |      | 0.81  |      | 1.20  | 0.65  |      |      |      |      | 0.13  | 0.31  | 0.40  |   |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 90

MS

Synchro 9 Report  
Page 9

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.19

Intersection Signal Delay: 31.7

Intersection LOS: C

Intersection Capacity Utilization 91.7%

ICU Level of Service F

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

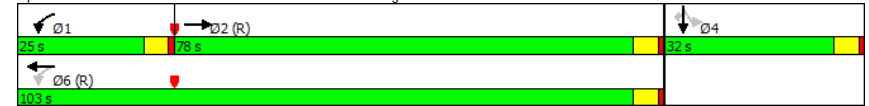
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: San Jacinto Blvd & Martin Luther King Jr. Blvd




MS

Synchro 9 Report  
Page 10

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

|                         |  |       |      |      |       |      |       |       |       |      |      |      |
|-------------------------|---|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
| Lane Configurations     | ↰   | ↰↰    |      |      | ↰↰    |      | ↰     | ↰     | ↰     |      | ↓    | ↰    |
| Traffic Volume (vph)    | 87  | 1347  | 0    | 0    | 1285  | 53   | 217   | 327   | 595   | 0    | 0    | 0    |
| Future Volume (vph)     | 87  | 1347  | 0    | 0    | 1285  | 53   | 217   | 327   | 595   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     |   |       | 34   |      |       | 90   | 17    |       | 153   |      |      |      |
| Confl. Bikes (#/hr)     |   |       |      |      |       | 4    |       |       | 13    |      |      |      |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97 | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph)         | 90  | 1389  | 0    | 0    | 1325  | 55   | 224   | 337   | 613   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |   |       |      |      |       | 10%  |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 90  | 1389  | 0    | 0    | 1380  | 0    | 202   | 359   | 613   | 0    | 0    | 0    |
| Turn Type               | pm+pt   | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5   | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2   |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5   | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |   |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 26.0  |      |      | 26.0  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (s)         | 15.0  | 104.0 |      |      | 89.0  |      | 31.0  | 31.0  | 31.0  |      |      |      |
| Total Split (%)         | 11.1%   | 77.0% |      |      | 65.9% |      | 23.0% | 23.0% | 23.0% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 99.0  | 99.0  |      |      | 86.6  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Actuated g/C Ratio      | 0.73  | 0.73  |      |      | 0.64  |      | 0.19  | 0.19  | 0.19  |      |      |      |
| v/c Ratio               | 0.35  | 0.54  |      |      | 0.62  |      | 0.65  | 1.06  | 2.25  |      |      |      |
| Control Delay           | 8.3   | 1.3   |      |      | 7.6   |      | 69.2  | 123.6 | 599.9 |      |      |      |
| Queue Delay             | 0.0   | 0.1   |      |      | 1.0   |      | 20.2  | 19.5  | 0.0   |      |      |      |
| Total Delay             | 8.3   | 1.4   |      |      | 8.5   |      | 89.4  | 143.1 | 599.9 |      |      |      |
| LOS                     | A   | A     |      |      | A     |      | F     | F     | F     |      |      |      |
| Approach Delay          |   | 1.8   |      |      | 8.5   |      |       | 372.4 |       |      |      |      |
| Approach LOS            |   | A     |      |      | A     |      |       | F     |       |      |      |      |
| Queue Length 50th (ft)  | 3   | 22    |      |      | 116   |      | 181   | -367  | -823  |      |      |      |
| Queue Length 95th (ft)  | m4  | 24    |      |      | 131   |      | 272   | #578  | #1062 |      |      |      |
| Internal Link Dist (ft) |   | 321   |      |      | 699   |      |       | 350   |       |      | 106  |      |
| Turn Bay Length (ft)    | 120   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 286   | 2595  |      |      | 2230  |      | 313   | 339   | 272   |      |      |      |
| Starvation Cap Reductn  | 0   | 198   |      |      | 529   |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0   | 0     |      |      | 104   |      | 100   | 109   | 0     |      |      |      |
| Storage Cap Reductn     | 0   | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.31  | 0.58  |      |      | 0.81  |      | 0.95  | 1.56  | 2.25  |      |      |      |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green  
Natural Cycle: 70

MS

Synchro 9 Report  
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8: Trinity St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.25

Intersection Signal Delay: 112.0

Intersection LOS: F

Intersection Capacity Utilization 91.7%

ICU Level of Service F

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

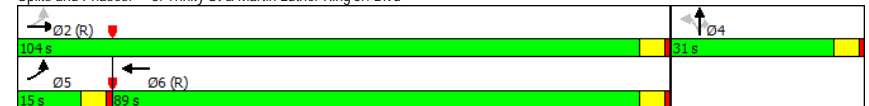
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Trinity St & Martin Luther King Jr. Blvd




















MS

Synchro 9 Report  
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18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

|  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group   | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations  |   |  |  |   |  |   |   |   |   |   |  |  |
| Traffic Volume (vph)                                       | 0   | 21  | 12  | 166   | 97  | 0   | 0   | 0   | 0   | 61  | 1207  | 23  |
| Future Volume (vph)  | 0   | 21  | 12  | 166   | 97  | 0   | 0   | 0   | 0   | 61  | 1207  | 23  |
| Confl. Peds. (#/hr)  |   |   | 69  |   |   |   |   |   |   |   | 44  |   |
| Confl. Bikes (#/hr)  |   |   |   |   |   |   |   |   | 2   |   |   |   |
| Peak Hour Factor   | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  | 0.96  |
| Parking (#/hr)   |   | 0   |   |   |   |   |   |   |   |   |   |   |
| Adj. Flow (vph)  | 0   | 22  | 13  | 173   | 101   | 0   | 0   | 0   | 0   | 64  | 1257  | 24  |
| Shared Lane Traffic (%)                                    |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)                                      | 0   | 22  | 13  | 0   | 274   | 0   | 0   | 0   | 0   | 0   | 1345  | 0   |
| Turn Type  | NA  | Perm  | Perm  | NA  |   |   |   |   |   | Perm  | NA  |   |
| Protected Phases   | 4 12  |   |   | 4 12  |   |   |   |   |   |   | 2 10  |   |
| Permitted Phases   |   |   | 4 12  | 4 12  |   |   |   |   |   | 2 10  |   |   |
| Detector Phase   |   | 4 12  | 4 12  | 4 12  | 4 12  |   |   |   |   | 2 10  | 2 10  |   |
| Switch Phase   |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (%)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Yellow Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| All-Red Time (s)   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lost Time Adjust (s)                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Lost Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead/Lag   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?   |   |   |   |   |   |   |   |   |   |   |   |   |
| Recall Mode  |   |   |   |   |   |   |   |   |   |   |   |   |
| Act Effct Green (s)  |   | 31.9  | 31.9  |   | 31.9  |   |   |   |   |   | 79.1  |   |
| Actuated g/C Ratio   |   | 0.24  | 0.24  |   | 0.24  |   |   |   |   |   | 0.59  |   |
| v/c Ratio  |   | 0.06  | 0.03  |   | 0.79  |   |   |   |   |   | 0.65  |   |
| Control Delay  |   | 21.6  | 0.2   |   | 35.0  |   |   |   |   |   | 13.7  |   |
| Queue Delay  |   | 0.0   | 0.0   |   | 0.0   |   |   |   |   |   | 0.0   |   |
| Total Delay  |   | 21.6  | 0.2   |   | 35.0  |   |   |   |   |   | 13.7  |   |
| LOS  |   | C   | A   |   | D   |   |   |   |   |   | B   |   |
| Approach Delay   |   | 13.6  |   |   | 35.0  |   |   |   |   |   | 13.7  |   |
| Approach LOS   |   | B   |   |   | D   |   |   |   |   |   | B   |   |
| Queue Length 50th (ft)                                     |   | 10  | 0   |   | 100   |   |   |   |   |   | 220   |   |
| Queue Length 95th (ft)                                     |   | 24  | 0   |   | 128   |   |   |   |   |   | 308   |   |
| Internal Link Dist (ft)                                    |   | 177   |   |   | 244   |   |   | 271   |   |   | 262   |   |
| Turn Bay Length (ft)                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Base Capacity (vph)  |   | 533   | 508   |   | 471   |   |   |   |   |   | 2060  |   |
| Starvation Cap Reductn                                     |   | 0   | 0   |   | 1   |   |   |   |   |   | 0   |   |
| Spillback Cap Reductn                                      |   | 0   | 0   |   | 0   |   |   |   |   |   | 0   |   |
| Storage Cap Reductn  |   | 0   | 0   |   | 0   |   |   |   |   |   | 0   |   |
| Reduced v/c Ratio  |   | 0.04  | 0.03  |   | 0.58  |   |   |   |   |   | 0.65  |   |
| Intersection Summary                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Cycle Length: 135  |   |   |   |   |   |   |   |   |   |   |   |   |
| Actuated Cycle Length: 135                                 |   |   |   |   |   |   |   |   |   |   |   |   |
| Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green |   |   |   |   |   |   |   |   |   |   |   |   |

MS

Synchro 9 Report  
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18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Confl. Bikes (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 21.0  | 21.0 | 22.5 | 22.5 |
| Total Split (s)         | 56.0  | 29.0 | 24.0 | 26.0 |
| Total Split (%)         | 41%   | 21%  | 18%  | 19%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effct Green (s)     |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

MS

Synchro 9 Report  
Page 14

18: Guadalupe St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 17.2

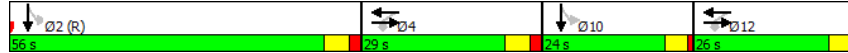
Intersection LOS: B

Intersection Capacity Utilization 77.7%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 18: Guadalupe St & E. 17th St



19: Lavaca St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Lane Group              | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations     |      |      |      |      |      |      |      |      |      |      |      |      |
| Traffic Volume (vph)    | 11   | 78   | 0    | 0    | 134  | 161  | 66   | 1224 | 70   | 0    | 0    | 0    |
| Future Volume (vph)     | 11   | 78   | 0    | 0    | 134  | 161  | 66   | 1224 | 70   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 34   |      |      |      |      |      |      |      | 47   |      |      |      |
| Peak Hour Factor        | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Parking (#/hr)          |      | 0    |      |      |      |      |      |      |      |      |      |      |
| Adj. Flow (vph)         | 12   | 85   | 0    | 0    | 146  | 175  | 72   | 1330 | 76   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |      |      |      |      |      |      |      |      |      |      |      |      |
| Lane Group Flow (vph)   | 0    | 97   | 0    | 0    | 321  | 0    | 0    | 1402 | 76   | 0    | 0    | 0    |
| Turn Type               | Perm | NA   |      |      | NA   |      | Perm | NA   | Perm |      |      |      |
| Protected Phases        |      | 4 12 |      |      | 4 12 |      |      | 2 10 |      |      |      |      |
| Permitted Phases        | 4 12 |      |      |      |      |      | 2 10 |      | 2 10 |      |      |      |
| Detector Phase          | 4 12 | 4 12 |      |      | 4 12 |      | 2 10 | 2 10 | 2 10 |      |      |      |
| Switch Phase            |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Initial (s)     |      |      |      |      |      |      |      |      |      |      |      |      |
| Minimum Split (s)       |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (s)         |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Split (%)         |      |      |      |      |      |      |      |      |      |      |      |      |
| Yellow Time (s)         |      |      |      |      |      |      |      |      |      |      |      |      |
| All-Red Time (s)        |      |      |      |      |      |      |      |      |      |      |      |      |
| Lost Time Adjust (s)    |      |      |      |      |      |      |      |      |      |      |      |      |
| Total Lost Time (s)     |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead/Lag                |      |      |      |      |      |      |      |      |      |      |      |      |
| Lead-Lag Optimize?      |      |      |      |      |      |      |      |      |      |      |      |      |
| Recall Mode             |      |      |      |      |      |      |      |      |      |      |      |      |
| Act Effct Green (s)     | 33.7 |      |      | 33.7 |      |      | 77.3 | 77.3 |      |      |      |      |
| Actuated g/C Ratio      | 0.25 |      |      | 0.25 |      |      | 0.57 | 0.57 |      |      |      |      |
| v/c Ratio               | 0.25 |      |      | 0.72 |      |      | 0.48 | 0.10 |      |      |      |      |
| Control Delay           | 22.1 |      |      | 33.7 |      |      | 11.2 | 4.5  |      |      |      |      |
| Queue Delay             | 0.0  |      |      | 0.0  |      |      | 0.0  | 0.0  |      |      |      |      |
| Total Delay             | 22.1 |      |      | 33.7 |      |      | 11.2 | 4.5  |      |      |      |      |
| LOS                     | C    |      |      | C    |      |      | B    | A    |      |      |      |      |
| Approach Delay          | 22.1 |      |      | 33.7 |      |      | 10.9 |      |      |      |      |      |
| Approach LOS            | C    |      |      | C    |      |      | B    |      |      |      |      |      |
| Queue Length 50th (ft)  | 41   |      |      | 154  |      |      | 163  | 9    |      |      |      |      |
| Queue Length 95th (ft)  | m75  |      |      | 220  |      |      | 161  | m16  |      |      |      |      |
| Internal Link Dist (ft) | 244  |      |      | 319  |      |      | 272  |      |      | 254  |      |      |
| Turn Bay Length (ft)    |      |      |      |      |      |      |      | 100  |      |      |      |      |
| Base Capacity (vph)     | 501  |      |      | 577  |      |      | 2907 | 775  |      |      |      |      |
| Starvation Cap Reductn  | 0    |      |      | 0    |      |      | 154  | 0    |      |      |      |      |
| Spillback Cap Reductn   | 0    |      |      | 0    |      |      | 0    | 0    |      |      |      |      |
| Storage Cap Reductn     | 0    |      |      | 0    |      |      | 0    | 0    |      |      |      |      |
| Reduced v/c Ratio       | 0.19 |      |      | 0.56 |      |      | 0.51 | 0.10 |      |      |      |      |

Intersection Summary

Cycle Length: 135

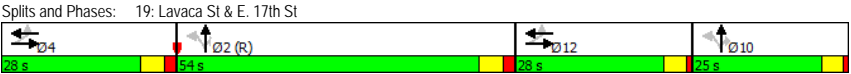
Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green

Natural Cycle: 100


















| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 26.0  | 28.0 | 22.5 | 22.5 |
| Total Split (s)         | 54.0  | 28.0 | 25.0 | 28.0 |
| Total Split (%)         | 40%   | 21%  | 19%  | 21%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effect Green (s)    |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

Control Type: Actuated-Coordinated  
Maximum v/c Ratio: 0.72  
Intersection Signal Delay: 15.3  
Intersection Capacity Utilization 51.9%  
Analysis Period (min) 15  
Intersection LOS: B  
ICU Level of Service A  
m Volume for 95th percentile queue is metered by upstream signal.



28: Lavaca St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

|  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group   | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations  |   |  |   |   |  |   |   |  |  |  |   |   |
| Traffic Volume (vph)                                       | 11  | 74  | 0   | 0   | 130   | 191   | 65  | 1145  | 68  | 0   | 0   | 0   |
| Future Volume (vph)  | 11  | 74  | 0   | 0   | 130   | 191   | 65  | 1145  | 68  | 0   | 0   | 0   |
| Confl. Peds. (#/hr)  |   |   |   |   |   | 170   |   | 88  |   |   |   |   |
| Confl. Bikes (#/hr)  |   |   |   |   |   | 2   |   |   |   |   |   |   |
| Peak Hour Factor   | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  | 0.95  |
| Parking (#/hr)   |   |   |   |   | 0   |   |   |   |   |   |   |   |
| Adj. Flow (vph)  | 12  | 78  | 0   | 0   | 137   | 201   | 68  | 1205  | 72  | 0   | 0   | 0   |
| Shared Lane Traffic (%)                                    |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)                                      | 0   | 90  | 0   | 0   | 338   | 0   | 0   | 1273  | 72  | 0   | 0   | 0   |
| Turn Type  | Perm  | NA  |   |   | NA  |   | Perm  | NA  | Perm  |   |   |   |
| Protected Phases   |   | 4 12  |   |   | 4 12  |   |   | 2 10  |   |   |   |   |
| Permitted Phases   | 4 12  |   |   |   |   |   | 2 10  |   | 2 10  |   |   |   |
| Detector Phase   | 4 12  | 4 12  |   |   | 4 12  |   | 2 10  | 2 10  | 2 10  |   |   |   |
| Switch Phase   |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Split (%)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Yellow Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| All-Red Time (s)   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lost Time Adjust (s)                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Total Lost Time (s)  |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead/Lag   |   |   |   |   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?   |   |   |   |   |   |   |   |   |   |   |   |   |
| Recall Mode  |   |   |   |   |   |   |   |   |   |   |   |   |
| Act Effct Green (s)  |   | 38.0  |   |   | 38.0  |   |   | 73.0  | 73.0  |   |   |   |
| Actuated g/C Ratio   |   | 0.28  |   |   | 0.28  |   |   | 0.54  | 0.54  |   |   |   |
| v/c Ratio  |   | 0.18  |   |   | 0.86  |   |   | 0.47  | 0.08  |   |   |   |
| Control Delay  |   | 20.8  |   |   | 44.2  |   |   | 15.5  | 4.3   |   |   |   |
| Queue Delay  |   | 0.0   |   |   | 0.0   |   |   | 0.7   | 0.0   |   |   |   |
| Total Delay  |   | 20.8  |   |   | 44.2  |   |   | 16.2  | 4.3   |   |   |   |
| LOS  |   | C   |   |   | D   |   |   | B   | A   |   |   |   |
| Approach Delay   |   | 20.8  |   |   | 44.2  |   |   | 15.6  |   |   |   |   |
| Approach LOS   |   | C   |   |   | D   |   |   | B   |   |   |   |   |
| Queue Length 50th (ft)                                     |   | 41  |   |   | 168   |   |   | 230   | 7   |   |   |   |
| Queue Length 95th (ft)                                     |   | m73   |   |   | 238   |   |   | m243  | m8  |   |   |   |
| Internal Link Dist (ft)                                    |   | 233   |   |   | 60  |   |   | 281   |   |   | 272   |   |
| Turn Bay Length (ft)                                       |   |   |   |   |   |   |   |   | 100   |   |   |   |
| Base Capacity (vph)  |   | 568   |   |   | 449   |   |   | 2706  | 885   |   |   |   |
| Starvation Cap Reductn                                     |   | 0   |   |   | 0   |   |   | 961   | 0   |   |   |   |
| Spillback Cap Reductn                                      |   | 0   |   |   | 0   |   |   | 26  | 0   |   |   |   |
| Storage Cap Reductn  |   | 0   |   |   | 0   |   |   | 0   | 0   |   |   |   |
| Reduced v/c Ratio  |   | 0.16  |   |   | 0.75  |   |   | 0.73  | 0.08  |   |   |   |
| Intersection Summary                                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Cycle Length: 135  |   |   |   |   |   |   |   |   |   |   |   |   |
| Actuated Cycle Length: 135                                 |   |   |   |   |   |   |   |   |   |   |   |   |
| Offset: 0 (0%), Referenced to phase 2:NBTL, Start of Green |   |   |   |   |   |   |   |   |   |   |   |   |

MS

Synchro 9 Report  
Page 19

28: Lavaca St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Lane Group              | Ø2    | Ø4   | Ø10  | Ø12  |
|-------------------------|-------|------|------|------|
| Lane Configurations     |       |      |      |      |
| Traffic Volume (vph)    |       |      |      |      |
| Future Volume (vph)     |       |      |      |      |
| Confl. Peds. (#/hr)     |       |      |      |      |
| Confl. Bikes (#/hr)     |       |      |      |      |
| Peak Hour Factor        |       |      |      |      |
| Parking (#/hr)          |       |      |      |      |
| Adj. Flow (vph)         |       |      |      |      |
| Shared Lane Traffic (%) |       |      |      |      |
| Lane Group Flow (vph)   |       |      |      |      |
| Turn Type               |       |      |      |      |
| Protected Phases        | 2     | 4    | 10   | 12   |
| Permitted Phases        |       |      |      |      |
| Detector Phase          |       |      |      |      |
| Switch Phase            |       |      |      |      |
| Minimum Initial (s)     | 15.0  | 15.0 | 5.0  | 5.0  |
| Minimum Split (s)       | 28.0  | 32.0 | 21.0 | 20.0 |
| Total Split (s)         | 55.0  | 32.0 | 24.0 | 24.0 |
| Total Split (%)         | 41%   | 24%  | 18%  | 18%  |
| Yellow Time (s)         | 4.0   | 4.0  | 3.5  | 3.5  |
| All-Red Time (s)        | 2.0   | 2.0  | 1.0  | 1.0  |
| Lost Time Adjust (s)    |       |      |      |      |
| Total Lost Time (s)     |       |      |      |      |
| Lead/Lag                |       |      |      |      |
| Lead-Lag Optimize?      |       |      |      |      |
| Recall Mode             | C-Max | None | None | None |
| Act Effct Green (s)     |       |      |      |      |
| Actuated g/C Ratio      |       |      |      |      |
| v/c Ratio               |       |      |      |      |
| Control Delay           |       |      |      |      |
| Queue Delay             |       |      |      |      |
| Total Delay             |       |      |      |      |
| LOS                     |       |      |      |      |
| Approach Delay          |       |      |      |      |
| Approach LOS            |       |      |      |      |
| Queue Length 50th (ft)  |       |      |      |      |
| Queue Length 95th (ft)  |       |      |      |      |
| Internal Link Dist (ft) |       |      |      |      |
| Turn Bay Length (ft)    |       |      |      |      |
| Base Capacity (vph)     |       |      |      |      |
| Starvation Cap Reductn  |       |      |      |      |
| Spillback Cap Reductn   |       |      |      |      |
| Storage Cap Reductn     |       |      |      |      |
| Reduced v/c Ratio       |       |      |      |      |
| Intersection Summary    |       |      |      |      |

MS

Synchro 9 Report  
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## 28: Lavaca St &amp; E. 16th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2024 Background + Site

Timing Plan: PM

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 21.3

Intersection LOS: C

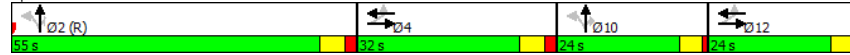
Intersection Capacity Utilization 56.4%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 28: Lavaca St &amp; E. 16th St



## 34: Guadalupe St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2024 Background + Site

Timing Plan: PM

|                         | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑↑   |      | ↑     | ↑↑↑   |      |      |      |      |       | ↑↑↑   | ↑     |
| Traffic Volume (vph)    | 0    | 968   | 99   | 253   | 1881  | 0    | 0    | 0    | 0    | 155   | 944   | 476   |
| Future Volume (vph)     | 0    | 968   | 99   | 253   | 1881  | 0    | 0    | 0    | 0    | 155   | 944   | 476   |
| Confl. Peds. (#/hr)     |      |       | 18   | 18    |       |      |      |      |      | 20    |       | 28    |
| Confl. Bikes (#/hr)     |      |       |      |       |       |      |      |      |      |       |       | 28    |
| Peak Hour Factor        | 0.86 | 0.86  | 0.86 | 0.86  | 0.86  | 0.86 | 0.86 | 0.86 | 0.86 | 0.86  | 0.86  | 0.86  |
| Adj. Flow (vph)         | 0    | 1126  | 115  | 294   | 2187  | 0    | 0    | 0    | 0    | 180   | 1098  | 553   |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 1241  | 0    | 294   | 2187  | 0    | 0    | 0    | 0    | 0     | 1278  | 553   |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1 3   | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1 3   | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      |       | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       |      | 25.0  |      |       | 25.0  |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (s)         |      | 58.0  |      |       | 88.0  |      |      |      |      | 47.0  | 47.0  | 47.0  |
| Total Split (%)         |      | 43.0% |      |       | 65.2% |      |      |      |      | 34.8% | 34.8% | 34.8% |
| Yellow Time (s)         |      | 4.0   |      |       | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      |       | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      |       | 0.0   |      |      |      |      |       | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      |       | 5.0   |      |      |      |      |       | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      |       |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      |       |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      |       | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effect Green (s)    |      | 53.0  |      | 83.0  | 83.0  |      |      |      |      |       | 42.0  | 42.0  |
| Actuated g/C Ratio      |      | 0.39  |      | 0.61  | 0.61  |      |      |      |      |       | 0.31  | 0.31  |
| v/c Ratio               |      | 0.63  |      | 0.81  | 0.70  |      |      |      |      |       | 0.82  | 1.06  |
| Control Delay           |      | 34.4  |      | 36.7  | 6.8   |      |      |      |      |       | 45.7  | 87.7  |
| Queue Delay             |      | 0.0   |      | 44.2  | 0.4   |      |      |      |      |       | 0.0   | 0.0   |
| Total Delay             |      | 34.4  |      | 81.0  | 7.2   |      |      |      |      |       | 45.7  | 87.7  |
| LOS                     |      | C     |      | F     | A     |      |      |      |      |       | D     | F     |
| Approach Delay          |      | 34.4  |      |       | 15.9  |      |      |      |      |       | 58.4  |       |
| Approach LOS            |      | C     |      |       | B     |      |      |      |      |       | E     |       |
| Queue Length 50th (ft)  |      | 315   |      | 133   | 139   |      |      |      |      |       | 337   | ~454  |
| Queue Length 95th (ft)  |      | 344   |      | m172  | 141   |      |      |      |      |       | 383   | #631  |
| Internal Link Dist (ft) |      | 262   |      |       | 240   |      |      | 197  |      |       | 285   |       |
| Turn Bay Length (ft)    |      |       |      | 50    |       |      |      |      |      |       |       | 100   |
| Base Capacity (vph)     |      | 1968  |      | 365   | 3126  |      |      |      |      |       | 1564  | 524   |
| Starvation Cap Reductn  |      | 0     |      | 90    | 417   |      |      |      |      |       | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      |       | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      |       | 0     | 0     |
| Reduced v/c Ratio       |      | 0.63  |      | 1.07  | 0.81  |      |      |      |      |       | 0.82  | 1.06  |

## Intersection Summary

Cycle Length: 135

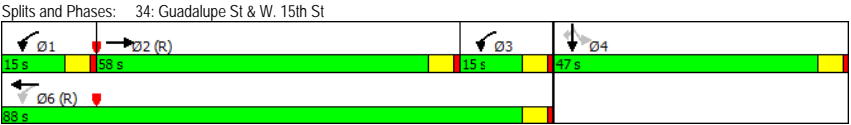
Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 90

| Lane Group              | Ø1   | Ø3   |
|-------------------------|------|------|
| Lane Configurations     |      |      |
| Traffic Volume (vph)    |      |      |
| Future Volume (vph)     |      |      |
| Confl. Peds. (#/hr)     |      |      |
| Confl. Bikes (#/hr)     |      |      |
| Peak Hour Factor        |      |      |
| Adj. Flow (vph)         |      |      |
| Shared Lane Traffic (%) |      |      |
| Lane Group Flow (vph)   |      |      |
| Turn Type               |      |      |
| Protected Phases        | 1    | 3    |
| Permitted Phases        |      |      |
| Detector Phase          |      |      |
| Switch Phase            |      |      |
| Minimum Initial (s)     | 5.0  | 8.0  |
| Minimum Split (s)       | 10.0 | 13.0 |
| Total Split (s)         | 15.0 | 15.0 |
| Total Split (%)         | 11%  | 11%  |
| Yellow Time (s)         | 4.0  | 4.0  |
| All-Red Time (s)        | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |
| Total Lost Time (s)     |      |      |
| Lead/Lag                | Lead |      |
| Lead-Lag Optimize?      | Yes  |      |
| Recall Mode             | Min  | None |
| Act Effect Green (s)    |      |      |
| Actuated g/C Ratio      |      |      |
| v/c Ratio               |      |      |
| Control Delay           |      |      |
| Queue Delay             |      |      |
| Total Delay             |      |      |
| LOS                     |      |      |
| Approach Delay          |      |      |
| Approach LOS            |      |      |
| Queue Length 50th (ft)  |      |      |
| Queue Length 95th (ft)  |      |      |
| Internal Link Dist (ft) |      |      |
| Turn Bay Length (ft)    |      |      |
| Base Capacity (vph)     |      |      |
| Starvation Cap Reductn  |      |      |
| Spillback Cap Reductn   |      |      |
| Storage Cap Reductn     |      |      |
| Reduced v/c Ratio       |      |      |
| Intersection Summary    |      |      |

|   |                        |
|---|------------------------|
| Control Type: Actuated-Coordinated                                |                        |
| Maximum v/c Ratio: 1.06   |                        |
| Intersection Signal Delay: 34.1                                   | Intersection LOS: C    |
| Intersection Capacity Utilization 83.0%                           | ICU Level of Service E |
| Analysis Period (min) 15  |                        |
| - Volume exceeds capacity, queue is theoretically infinite.       |                        |
| Queue shown is maximum after two cycles.                          |                        |
| # 95th percentile volume exceeds capacity, queue may be longer.   |                        |
| Queue shown is maximum after two cycles.                          |                        |
| m Volume for 95th percentile queue is metered by upstream signal. |                        |



## 35: Lavaca St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2024 Background + Site

Timing Plan: PM

|                         | ↖     | →     | ↘    | ↙    | ←     | ↖    | ↙     | ↗     | ↘     | ↓    | ↘    | ↙    |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
| Lane Configurations     | ↖ ↖ ↖ | ↖ ↖ ↖ |      |      | ↖ ↖ ↖ |      |       | ↖ ↖ ↖ | ↖     |      |      |      |
| Traffic Volume (vph)    | 132   | 958   | 0    | 0    | 1808  | 68   | 401   | 911   | 170   | 0    | 0    | 0    |
| Future Volume (vph)     | 132   | 958   | 0    | 0    | 1808  | 68   | 401   | 911   | 170   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 48    |       |      |      |       | 48   | 31    |       | 18    |      |      |      |
| Confl. Bikes (#/hr)     |       |       | 2    |      |       |      |       |       | 28    |      |      |      |
| Peak Hour Factor        | 0.90  | 0.90  | 0.90 | 0.90 | 0.90  | 0.90 | 0.90  | 0.90  | 0.90  | 0.90 | 0.90 | 0.90 |
| Adj. Flow (vph)         | 147   | 1064  | 0    | 0    | 2009  | 76   | 446   | 1012  | 189   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 147   | 1064  | 0    | 0    | 2085  | 0    | 0     | 1458  | 189   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 28.0  |      |      | 28.0  |      | 33.0  | 33.0  | 33.0  |      |      |      |
| Total Split (s)         | 20.0  | 86.0  |      |      | 66.0  |      | 49.0  | 49.0  | 49.0  |      |      |      |
| Total Split (%)         | 14.8% | 63.7% |      |      | 48.9% |      | 36.3% | 36.3% | 36.3% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 2.0   | 2.0   | 2.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 6.0   | 6.0   | 6.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 81.0  | 81.0  |      |      | 64.4  |      |       | 43.0  | 43.0  |      |      |      |
| Actuated g/C Ratio      | 0.60  | 0.60  |      |      | 0.48  |      |       | 0.32  | 0.32  |      |      |      |
| v/c Ratio               | 0.71  | 0.35  |      |      | 0.87  |      |       | 0.93  | 0.35  |      |      |      |
| Control Delay           | 72.8  | 3.1   |      |      | 16.5  |      |       | 55.6  | 17.5  |      |      |      |
| Queue Delay             | 0.4   | 0.1   |      |      | 0.0   |      |       | 17.9  | 0.0   |      |      |      |
| Total Delay             | 73.2  | 3.2   |      |      | 16.5  |      |       | 73.5  | 17.5  |      |      |      |
| LOS                     | E     | A     |      |      | B     |      |       | E     | B     |      |      |      |
| Approach Delay          |       | 11.7  |      |      | 16.5  |      |       | 67.0  |       |      |      |      |
| Approach LOS            |       | B     |      |      | B     |      |       | E     |       |      |      |      |
| Queue Length 50th (ft)  | 96    | 45    |      |      | 132   |      |       | 452   | 54    |      |      |      |
| Queue Length 95th (ft)  | m164  | 48    |      |      | 131   |      |       | #545  | 120   |      |      |      |
| Internal Link Dist (ft) |       | 240   |      |      | 335   |      |       | 116   |       |      | 281  |      |
| Turn Bay Length (ft)    | 50    |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 249   | 3051  |      |      | 2407  |      |       | 1572  | 546   |      |      |      |
| Starvation Cap Reductn  | 8     | 875   |      |      | 0     |      |       | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 5     |      |       | 157   | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      |       | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.61  | 0.49  |      |      | 0.87  |      |       | 1.03  | 0.35  |      |      |      |

## Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 90

MS

Synchro 9 Report  
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## 35: Lavaca St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2024 Background + Site

Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 32.2

Intersection LOS: C

Intersection Capacity Utilization 83.0%

ICU Level of Service E

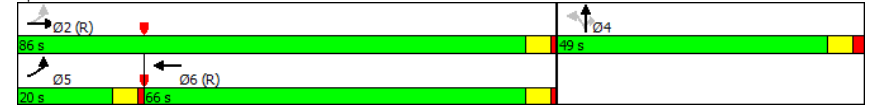
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 35: Lavaca St &amp; W. 15th St






















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Synchro 9 Report  
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36: Colorado St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     |  |  |   |  |  |   |   |  |   |   |  |  |
| Traffic Volume (vph)    | 56  | 1103  | 22  | 23  | 1429  | 62  | 9   | 27  | 113   | 396   | 6   | 415   |
| Future Volume (vph)     | 56  | 1103  | 22  | 23  | 1429  | 62  | 9   | 27  | 113   | 396   | 6   | 415   |
| Confl. Peds. (#/hr)     | 33  |   | 35  | 35  |   | 33  | 99  |   | 6   | 6   |   | 99  |
| Confl. Bikes (#/hr)     |   |   | 1   |   |   | 2   |   |   | 2   |   |   | 1   |
| Peak Hour Factor        | 0.87  | 0.87  | 0.87  | 0.87  | 0.87  | 0.87  | 0.87  | 0.87  | 0.87  | 0.87  | 0.87  | 0.87  |
| Adj. Flow (vph)         | 64  | 1268  | 25  | 26  | 1643  | 71  | 10  | 31  | 130   | 455   | 7   | 477   |
| Shared Lane Traffic (%) |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)   | 64  | 1293  | 0   | 26  | 1714  | 0   | 0   | 171   | 0   | 0   | 462   | 477   |
| Turn Type               | pm+pt   | NA  |   | pm+pt   | NA  |   | Perm  | NA  |   | Perm  | NA  | custom  |
| Protected Phases        | 5   | 2   |   | 1   | 6   |   |   | 4   |   |   | 8   |   |
| Permitted Phases        | 2   |   |   | 6   |   |   | 4   |   |   | 8   |   | 6   |
| Detector Phase          | 5   | 2   |   | 1   | 6   |   | 4   | 4   |   | 8   | 8   | 6   |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     | 5.0   | 15.0  |   | 5.0   | 15.0  |   | 5.0   | 5.0   |   | 5.0   | 5.0   | 15.0  |
| Minimum Split (s)       | 10.0  | 20.0  |   | 10.0  | 22.0  |   | 36.0  | 36.0  |   | 10.0  | 10.0  | 22.0  |
| Total Split (s)         | 10.0  | 79.0  |   | 10.0  | 79.0  |   | 46.0  | 46.0  |   | 46.0  | 46.0  | 79.0  |
| Total Split (%)         | 7.4%  | 58.5%   |   | 7.4%  | 58.5%   |   | 34.1%   | 34.1%   |   | 34.1%   | 34.1%   | 58.5%   |
| Yellow Time (s)         | 4.0   | 4.0   |   | 4.0   | 4.0   |   | 4.0   | 4.0   |   | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        | 1.0   | 1.0   |   | 1.0   | 1.0   |   | 1.0   | 1.0   |   | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |   | 0.0   | 0.0   |   |   | 0.0   |   |   | 0.0   | 0.0   |
| Total Lost Time (s)     | 5.0   | 5.0   |   | 5.0   | 5.0   |   |   | 5.0   |   |   | 5.0   | 5.0   |
| Lead/Lag                | Lead  | Lag   |   | Lead  | Lag   |   |   |   |   |   | Lag   |   |
| Lead-Lag Optimize?      | Yes   | Yes   |   | Yes   | Yes   |   |   |   |   |   | Yes   |   |
| Recall Mode             | None  | C-Max   |   | None  | C-Max   |   | Max   | Max   |   | Max   | Max   | C-Max   |
| Act Effect Green (s)    | 81.0  | 78.0  |   | 80.0  | 76.0  |   |   | 41.0  |   |   | 41.0  | 76.0  |
| Actuated g/C Ratio      | 0.60  | 0.58  |   | 0.59  | 0.56  |   |   | 0.30  |   |   | 0.30  | 0.56  |
| v/c Ratio               | 0.43  | 0.44  |   | 0.11  | 0.61  |   |   | 0.36  |   |   | 1.54  | 0.59  |
| Control Delay           | 21.9  | 6.9   |   | 5.2   | 9.9   |   |   | 16.5  |   |   | 292.5   | 9.9   |
| Queue Delay             | 0.0   | 0.2   |   | 0.0   | 0.1   |   |   | 0.0   |   |   | 0.0   | 0.2   |
| Total Delay             | 21.9  | 7.1   |   | 5.2   | 10.0  |   |   | 16.5  |   |   | 292.5   | 10.0  |
| LOS                     | C   | A   |   | A   | B   |   |   | B   |   |   | F   | B   |
| Approach Delay          |   | 7.8   |   |   | 10.0  |   |   | 16.5  |   |   | 149.0   |   |
| Approach LOS            |   | A   |   |   | A   |   |   | B   |   |   | F   |   |
| Queue Length 50th (ft)  | 7   | 108   |   | 3   | 371   |   |   | 41  |   |   | -568  | 88  |
| Queue Length 95th (ft)  | 31  | 123   |   | 6   | 163   |   |   | 98  |   |   | #748  | 176   |
| Internal Link Dist (ft) |   | 335   |   |   | 362   |   |   | 155   |   |   | 114   |   |
| Turn Bay Length (ft)    | 90  |   |   | 90  |   |   |   |   |   |   |   | 100   |
| Base Capacity (vph)     | 150   | 2927  |   | 229   | 2830  |   |   | 480   |   |   | 300   | 807   |
| Starvation Cap Reductn  | 0   | 648   |   | 0   | 232   |   |   | 0   |   |   | 0   | 0   |
| Spillback Cap Reductn   | 0   | 0   |   | 0   | 141   |   |   | 0   |   |   | 0   | 33  |
| Storage Cap Reductn     | 0   | 0   |   | 0   | 0   |   |   | 0   |   |   | 0   | 0   |
| Reduced v/c Ratio       | 0.43  | 0.57  |   | 0.11  | 0.66  |   |   | 0.36  |   |   | 1.54  | 0.62  |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

MS

Synchro 9 Report  
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36: Colorado St & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.54

Intersection Signal Delay: 40.6

Intersection LOS: D

Intersection Capacity Utilization 99.1%

ICU Level of Service F

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 36: Colorado St & W. 15th St



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37: N. Congress Ave & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

|                         | →     | ↖    | ↗     | ←     | ↖    | ↗     |
|-------------------------|-------|------|-------|-------|------|-------|
| Lane Group              | EBT   | EBR  | WBL   | WBT   | NBL  | NBR   |
| Lane Configurations     | ↑↑↑   |      | ↖     | ↑↑↑   |      | ↗     |
| Traffic Volume (vph)    | 1671  | 0    | 0     | 1271  | 0    | 1     |
| Future Volume (vph)     | 1671  | 0    | 0     | 1271  | 0    | 1     |
| Confl. Peds. (#/hr)     |       | 49   | 49    |       | 41   | 14    |
| Confl. Bikes (#/hr)     |       |      |       |       |      | 4     |
| Peak Hour Factor        | 0.86  | 0.86 | 0.86  | 0.86  | 0.86 | 0.86  |
| Adj. Flow (vph)         | 1943  | 0    | 0     | 1478  | 0    | 1     |
| Shared Lane Traffic (%) |       |      |       |       |      |       |
| Lane Group Flow (vph)   | 1943  | 0    | 0     | 1478  | 0    | 1     |
| Turn Type               | NA    |      | pm+pt | NA    |      | Perm  |
| Protected Phases        | 2     |      | 1     | 6     |      |       |
| Permitted Phases        |       |      | 6     |       |      | 4     |
| Detector Phase          | 2     |      | 1     | 6     |      | 4     |
| Switch Phase            |       |      |       |       |      |       |
| Minimum Initial (s)     | 5.0   |      | 5.0   | 5.0   |      | 5.0   |
| Minimum Split (s)       | 25.0  |      | 10.0  | 25.0  |      | 33.0  |
| Total Split (s)         | 92.0  |      | 10.0  | 102.0 |      | 33.0  |
| Total Split (%)         | 68.1% |      | 7.4%  | 75.6% |      | 24.4% |
| Yellow Time (s)         | 4.0   |      | 4.0   | 4.0   |      | 4.0   |
| All-Red Time (s)        | 1.0   |      | 1.0   | 1.0   |      | 1.0   |
| Lost Time Adjust (s)    | 0.0   |      | 0.0   | 0.0   |      | 0.0   |
| Total Lost Time (s)     | 5.0   |      | 5.0   | 5.0   |      | 5.0   |
| Lead/Lag                | Lag   |      | Lead  |       |      |       |
| Lead-Lag Optimize?      | Yes   |      | Yes   |       |      |       |
| Recall Mode             | C-Max |      | None  | C-Max |      | Max   |
| Act Effect Green (s)    | 97.0  |      |       | 97.0  |      | 28.0  |
| Actuated g/C Ratio      | 0.72  |      |       | 0.72  |      | 0.21  |
| v/c Ratio               | 0.53  |      |       | 0.40  |      | 0.00  |
| Control Delay           | 8.0   |      |       | 7.7   |      | 0.0   |
| Queue Delay             | 0.1   |      |       | 0.1   |      | 0.0   |
| Total Delay             | 8.0   |      |       | 7.9   |      | 0.0   |
| LOS                     | A     |      |       | A     |      | A     |
| Approach Delay          | 8.0   |      |       | 7.9   |      |       |
| Approach LOS            | A     |      |       | A     |      |       |
| Queue Length 50th (ft)  | 194   |      |       | 183   |      | 0     |
| Queue Length 95th (ft)  | m187  |      |       | 81    |      | 0     |
| Internal Link Dist (ft) | 362   |      |       | 356   | 125  |       |
| Turn Bay Length (ft)    |       |      |       |       |      |       |
| Base Capacity (vph)     | 3653  |      |       | 3653  |      | 379   |
| Starvation Cap Reductn  | 325   |      |       | 914   |      | 0     |
| Spillback Cap Reductn   | 0     |      |       | 304   |      | 0     |
| Storage Cap Reductn     | 0     |      |       | 0     |      | 0     |
| Reduced v/c Ratio       | 0.58  |      |       | 0.54  |      | 0.00  |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 80

MS

Synchro 9 Report  
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37: N. Congress Ave & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.53

Intersection Signal Delay: 7.9

Intersection LOS: A

Intersection Capacity Utilization 64.0%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 37: N. Congress Ave & W. 15th St



MS


























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## 38: Brazos St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2024 Background + Site

Timing Plan: PM

|                         |  |    |  |  |    |  |  |  |  |  |    |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |
| Lane Configurations     |  |    |   |  |    |   |   |  |  |   |    |   |
| Traffic Volume (vph)    | 5   | 1660  | 39  | 10  | 1125  | 11  | 135   | 3   | 119   | 66  | 3   | 89  |
| Future Volume (vph)     | 5   | 1660  | 39  | 10  | 1125  | 11  | 135   | 3   | 119   | 66  | 3   | 89  |
| Confl. Peds. (#/hr)     | 8   |   | 9   | 9   |   | 8   | 5   |   | 19  | 19  |   | 5   |
| Confl. Bikes (#/hr)     |   |   |   |   |   | 1   |   |   |   |   |   | 1   |
| Peak Hour Factor        | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  | 0.93  |
| Adj. Flow (vph)         | 5   | 1785  | 42  | 11  | 1210  | 12  | 145   | 3   | 128   | 71  | 3   | 96  |
| Shared Lane Traffic (%) |   |   |   |   |   |   |   |   |   |   |   |   |
| Lane Group Flow (vph)   | 5   | 1827  | 0   | 11  | 1222  | 0   | 0   | 148   | 128   | 0   | 170   | 0   |
| Turn Type               | pm+pt   | NA  |   | pm+pt   | NA  |   | Perm  | NA  | Perm  | Perm  | NA  |   |
| Protected Phases        | 5   | 2   |   | 1   | 6   |   |   | 4   |   |   | 8   |   |
| Permitted Phases        | 2   |   |   | 6   |   |   | 4   |   | 4   | 8   |   |   |
| Detector Phase          | 5   | 2   |   | 1   | 6   |   | 4   | 4   | 4   | 8   | 8   |   |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     | 5.0   | 15.0  |   | 5.0   | 15.0  |   | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  |   |
| Minimum Split (s)       | 10.0  | 22.0  |   | 10.0  | 22.0  |   | 32.0  | 32.0  | 32.0  | 32.0  | 32.0  |   |
| Total Split (s)         | 12.0  | 77.0  |   | 12.0  | 77.0  |   | 46.0  | 46.0  | 46.0  | 46.0  | 46.0  |   |
| Total Split (%)         | 8.9%  | 57.0%   |   | 8.9%  | 57.0%   |   | 34.1%   | 34.1%   | 34.1%   | 34.1%   | 34.1%   |   |
| Yellow Time (s)         | 4.0   | 4.0   |   | 4.0   | 4.0   |   | 4.0   | 4.0   | 4.0   | 4.0   | 4.0   |   |
| All-Red Time (s)        | 1.0   | 1.0   |   | 1.0   | 1.0   |   | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |   | 0.0   | 0.0   |   |   | 0.0   | 0.0   |   | 0.0   |   |
| Total Lost Time (s)     | 5.0   | 5.0   |   | 5.0   | 5.0   |   |   | 5.0   | 5.0   |   | 5.0   |   |
| Lead/Lag                | Lead  | Lead  |   | Lag   | Lag   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?      | Yes   | Yes   |   | Yes   | Yes   |   |   |   |   |   |   |   |
| Recall Mode             | None  | C-Max   |   | None  | C-Max   |   | None  | None  | None  | None  | None  |   |
| Act Effect Green (s)    | 96.2  | 96.2  |   | 98.8  | 98.8  |   |   | 24.0  | 24.0  |   | 24.0  |   |
| Actuated g/C Ratio      | 0.71  | 0.71  |   | 0.73  | 0.73  |   |   | 0.18  | 0.18  |   | 0.18  |   |
| v/c Ratio               | 0.02  | 0.51  |   | 0.05  | 0.33  |   |   | 0.85  | 0.36  |   | 0.74  |   |
| Control Delay           | 6.4   | 4.4   |   | 6.8   | 5.1   |   |   | 89.9  | 15.8  |   | 54.5  |   |
| Queue Delay             | 0.0   | 0.0   |   | 0.0   | 0.1   |   |   | 0.0   | 0.0   |   | 0.0   |   |
| Total Delay             | 6.4   | 4.4   |   | 6.8   | 5.2   |   |   | 89.9  | 15.8  |   | 54.5  |   |
| LOS                     | A   | A   |   | A   | A   |   |   | F   | B   |   | D   |   |
| Approach Delay          |   | 4.4   |   |   | 5.2   |   |   | 55.5  |   |   | 54.5  |   |
| Approach LOS            |   | A   |   |   | A   |   |   | E   |   |   | D   |   |
| Queue Length 50th (ft)  | 0   | 42  |   | 2   | 86  |   |   | 127   | 22  |   | 102   |   |
| Queue Length 95th (ft)  | m1  | 108   |   | m7  | 223   |   |   | 193   | 74  |   | 173   |   |
| Internal Link Dist (ft) |   | 356   |   |   | 297   |   |   | 199   |   |   | 273   |   |
| Turn Bay Length (ft)    | 100   |   |   | 40  |   |   |   |   | 50  |   |   |   |
| Base Capacity (vph)     | 320   | 3609  |   | 214   | 3716  |   |   | 298   | 530   |   | 358   |   |
| Starvation Cap Reductn  | 0   | 132   |   | 0   | 1193  |   |   | 0   | 0   |   | 0   |   |
| Spillback Cap Reductn   | 0   | 270   |   | 0   | 0   |   |   | 0   | 4   |   | 2   |   |
| Storage Cap Reductn     | 0   | 0   |   | 0   | 0   |   |   | 0   | 0   |   | 0   |   |
| Reduced v/c Ratio       | 0.02  | 0.55  |   | 0.05  | 0.48  |   |   | 0.50  | 0.24  |   | 0.48  |   |

## Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 75

MS

Synchro 9 Report  
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## 38: Brazos St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2024 Background + Site

Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 11.1

Intersection LOS: B

Intersection Capacity Utilization 72.5%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 38: Brazos St &amp; W. 15th St



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39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

|                         | ↖    | →     | ↘    | ↙     | ←     | ↖    | ↗    | ↘    | ↙    | ↓      | ↘     | ↙     |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|--------|-------|-------|
| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL    | SBT   | SBR   |
| Lane Configurations     |      | ↑↑↑   |      | ↓     | ↑↑↑   |      |      |      |      | ↓↑↑    | ↑     |       |
| Traffic Volume (vph)    | 0    | 1963  | 117  | 67    | 929   | 0    | 0    | 0    | 0    | 522    | 648   | 315   |
| Future Volume (vph)     | 0    | 1963  | 117  | 67    | 929   | 0    | 0    | 0    | 0    | 522    | 648   | 315   |
| Confl. Peds. (#/hr)     |      |       | 11   | 11    |       |      |      |      |      | 32     |       | 5     |
| Confl. Bikes (#/hr)     |      |       |      |       |       |      |      |      |      |        |       | 2     |
| Peak Hour Factor        | 0.93 | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93 | 0.93 | 0.93 | 0.93   | 0.93  | 0.93  |
| Adj. Flow (vph)         | 0    | 2111  | 126  | 72    | 999   | 0    | 0    | 0    | 0    | 561    | 697   | 339   |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |        |       |       |
| Lane Group Flow (vph)   | 0    | 2237  | 0    | 72    | 999   | 0    | 0    | 0    | 0    | 0      | 1258  | 339   |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm   | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |        | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4      |       | 4     |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4      | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |        |       |       |
| Minimum Initial (s)     |      | 10.0  |      | 3.0   | 10.0  |      |      |      |      | 7.0    | 7.0   | 7.0   |
| Minimum Split (s)       |      | 28.0  |      | 8.0   | 28.0  |      |      |      |      | 32.0   | 32.0  | 32.0  |
| Total Split (s)         |      | 80.0  |      | 15.0  | 95.0  |      |      |      |      | 40.0   | 40.0  | 40.0  |
| Total Split (%)         |      | 59.3% |      | 11.1% | 70.4% |      |      |      |      | 29.6%  | 29.6% | 29.6% |
| Yellow Time (s)         |      | 4.0   |      | 4.0   | 4.0   |      |      |      |      | 4.0    | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      | 1.0   | 1.0   |      |      |      |      | 1.0    | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      | 0.0   | 0.0   |      |      |      |      | 0.0    | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      | 5.0   | 5.0   |      |      |      |      | 5.0    | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      | Lead  |       |      |      |      |      |        |       |       |
| Lead-Lag Optimize?      |      | Yes   |      | Yes   |       |      |      |      |      |        |       |       |
| Recall Mode             |      | C-Max |      | None  | C-Max |      |      |      |      | None   | None  | None  |
| Act Effect Green (s)    |      | 79.6  |      | 90.0  | 90.0  |      |      |      |      | 35.0   | 35.0  | 35.0  |
| Actuated g/C Ratio      |      | 0.59  |      | 0.67  | 0.67  |      |      |      |      | 0.26   | 0.26  | 0.26  |
| v/c Ratio               |      | 0.75  |      | 0.47  | 0.29  |      |      |      |      | 1.25dl | 0.74  | 0.74  |
| Control Delay           |      | 10.9  |      | 41.7  | 6.1   |      |      |      |      | 74.5   | 45.5  | 45.5  |
| Queue Delay             |      | 0.1   |      | 0.0   | 0.2   |      |      |      |      | 0.0    | 0.0   | 0.0   |
| Total Delay             |      | 11.0  |      | 41.7  | 6.3   |      |      |      |      | 74.5   | 45.5  | 45.5  |
| LOS                     |      | B     |      | D     | A     |      |      |      |      | E      | D     | D     |
| Approach Delay          |      | 11.0  |      |       | 8.6   |      |      |      |      | 68.4   |       |       |
| Approach LOS            |      | B     |      |       | A     |      |      |      |      | E      |       |       |
| Queue Length 50th (ft)  |      | 150   |      | 24    | 87    |      |      |      |      | 405    | 213   | 213   |
| Queue Length 95th (ft)  |      | 595   |      | m71   | 102   |      |      |      |      | #514   | 332   | 332   |
| Internal Link Dist (ft) |      | 297   |      |       | 282   |      |      | 125  |      | 272    |       |       |
| Turn Bay Length (ft)    |      |       |      | 70    |       |      |      |      |      |        |       | 50    |
| Base Capacity (vph)     |      | 2972  |      | 183   | 3390  |      |      |      |      | 1261   | 460   | 460   |
| Starvation Cap Reductn  |      | 89    |      | 0     | 1256  |      |      |      |      | 0      | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      | 0      | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      | 0      | 0     | 0     |
| Reduced v/c Ratio       |      | 0.78  |      | 0.39  | 0.47  |      |      |      |      | 1.00   | 0.74  | 0.74  |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 80

MS

Synchro 9 Report  
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39: San Jacinto Blvd & W. 15th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 29.2

Intersection LOS: C

Intersection Capacity Utilization 79.9%

ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 39: San Jacinto Blvd & W. 15th St



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Synchro 9 Report  
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## 40: Trinity St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2024 Background + Site

Timing Plan: PM

| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     |       |       |      |      |       |      |       |       |       |      |      |      |
| Traffic Volume (vph)    | 89    | 2165  | 0    | 0    | 818   | 147  | 183   | 315   | 289   | 0    | 0    | 0    |
| Future Volume (vph)     | 89    | 2165  | 0    | 0    | 818   | 147  | 183   | 315   | 289   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     | 2     |       |      |      |       | 2    | 7     |       | 8     |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       |      |       | 9     |       |      |      |      |
| Peak Hour Factor        | 0.96  | 0.96  | 0.96 | 0.96 | 0.96  | 0.96 | 0.96  | 0.96  | 0.96  | 0.96 | 0.96 | 0.96 |
| Adj. Flow (vph)         | 93    | 2255  | 0    | 0    | 852   | 153  | 191   | 328   | 301   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       |       |      |      |      |
| Lane Group Flow (vph)   | 93    | 2255  | 0    | 0    | 1005  | 0    | 0     | 519   | 301   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 28.0  |      |      | 28.0  |      | 35.0  | 35.0  | 35.0  |      |      |      |
| Total Split (s)         | 10.0  | 100.0 |      |      | 90.0  |      | 35.0  | 35.0  | 35.0  |      |      |      |
| Total Split (%)         | 7.4%  | 74.1% |      |      | 66.7% |      | 25.9% | 25.9% | 25.9% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 95.0  | 95.0  |      |      | 85.0  |      | 30.0  | 30.0  | 30.0  |      |      |      |
| Actuated g/C Ratio      | 0.70  | 0.70  |      |      | 0.63  |      | 0.22  | 0.22  | 0.22  |      |      |      |
| v/c Ratio               | 0.26  | 0.63  |      |      | 0.32  |      | 0.67  | 0.78  | 0.78  |      |      |      |
| Control Delay           | 5.6   | 6.5   |      |      | 15.1  |      | 53.1  | 55.2  | 55.2  |      |      |      |
| Queue Delay             | 0.0   | 0.4   |      |      | 0.0   |      | 0.0   | 0.3   | 0.3   |      |      |      |
| Total Delay             | 5.6   | 6.9   |      |      | 15.1  |      | 53.1  | 55.5  | 55.5  |      |      |      |
| LOS                     | A     | A     |      |      | B     |      | D     | E     | E     |      |      |      |
| Approach Delay          |       | 6.8   |      |      | 15.1  |      | 54.0  |       |       |      |      |      |
| Approach LOS            |       | A     |      |      | B     |      | D     |       |       |      |      |      |
| Queue Length 50th (ft)  | 18    | 163   |      |      | 191   |      | 221   | 206   | 206   |      |      |      |
| Queue Length 95th (ft)  | m22   | m171  |      |      | 202   |      | 285   | #342  | #342  |      |      |      |
| Internal Link Dist (ft) |       | 282   |      |      | 641   |      | 149   |       |       | 621  |      |      |
| Turn Bay Length (ft)    | 100   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 356   | 3578  |      |      | 3139  |      | 769   | 384   | 384   |      |      |      |
| Starvation Cap Reductn  | 0     | 656   |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 513   |      |      | 0     |      | 0     | 5     | 5     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.26  | 0.77  |      |      | 0.32  |      | 0.67  | 0.79  | 0.79  |      |      |      |

## Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 75

MS

Synchro 9 Report  
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## 40: Trinity St &amp; W. 15th St

## TIA for Texas Capitol Complex Master Plan 2018 Update

## 2024 Background + Site

Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 18.1

Intersection LOS: B

Intersection Capacity Utilization 79.9%

ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 40: Trinity St &amp; W. 15th St



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Synchro 9 Report  
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11: Colorado St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection              |       |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|-------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 127.6 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | F     |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | +    |      |      |      | +    |      |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 6    | 106  | 14   | 0    | 76   | 202  | 10   | 0    | 15   | 342  | 289  |
| Future Vol, veh/h   | 0    | 6    | 106  | 14   | 0    | 76   | 202  | 10   | 0    | 15   | 342  | 289  |
| Peak Hour Factor    | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 | 0.78 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 8    | 136  | 18   | 0    | 97   | 259  | 13   | 0    | 19   | 438  | 371  |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB   | NB    |
|----------------------------|------|------|-------|
| Opposing Approach          | WB   | EB   | SB    |
| Opposing Lanes             | 1    | 1    | 1     |
| Conflicting Approach Left  | SB   | NB   | EB    |
| Conflicting Lanes Left     | 1    | 1    | 1     |
| Conflicting Approach Right | NB   | SB   | WB    |
| Conflicting Lanes Right    | 1    | 1    | 1     |
| HCM Control Delay          | 16.1 | 28.5 | 224.2 |
| HCM LOS                    | C    | D    | F     |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 2%    | 5%    | 26%   | 10%   |
| Vol Thru, %            | 53%   | 84%   | 70%   | 66%   |
| Vol Right, %           | 45%   | 11%   | 3%    | 23%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 646   | 126   | 288   | 179   |
| LT Vol                 | 15    | 6     | 76    | 18    |
| Through Vol            | 342   | 106   | 202   | 119   |
| RT Vol                 | 289   | 14    | 10    | 42    |
| Lane Flow Rate         | 828   | 162   | 369   | 229   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 1.436 | 0.338 | 0.713 | 0.448 |
| Departure Headway (Hd) | 6.24  | 8.743 | 7.985 | 7.89  |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 588   | 414   | 458   | 459   |
| Service Time           | 4.24  | 6.743 | 5.985 | 5.89  |
| HCM Lane V/C Ratio     | 1.408 | 0.391 | 0.806 | 0.499 |
| HCM Control Delay      | 224.2 | 16.1  | 28.5  | 17.1  |
| HCM Lane LOS           | F     | C     | D     | C     |
| HCM 95th-tile Q        | 39.3  | 1.5   | 5.5   | 2.3   |

11: Colorado St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | +    |      |
| Traffic Vol, veh/h  | 0    | 18   | 119  | 42   |
| Future Vol, veh/h   | 0    | 18   | 119  | 42   |
| Peak Hour Factor    | 0.78 | 0.78 | 0.78 | 0.78 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 23   | 153  | 54   |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 17.1 |
| HCM LOS                    | C    |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 12.7 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | B    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |      |      | ↕    |      |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 0    | 415  | 0    | 0    | 0    | 348  | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h   | 0    | 0    | 415  | 0    | 0    | 0    | 348  | 0    | 0    | 0    | 0    | 0    |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 483  | 0    | 0    | 0    | 405  | 0    | 0    | 0    | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB   | NB |
|----------------------------|------|------|----|
| Opposing Approach          | WB   | EB   | SB |
| Opposing Lanes             | 1    | 1    | 1  |
| Conflicting Approach Left  | SB   | NB   | EB |
| Conflicting Lanes Left     | 1    | 1    | 1  |
| Conflicting Approach Right | NB   | SB   | WB |
| Conflicting Lanes Right    | 1    | 1    | 1  |
| HCM Control Delay          | 13.5 | 11.9 | 0  |
| HCM LOS                    | B    | B    | -  |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 0%    | 0%    | 0%    | 0%    |
| Vol Thru, %            | 100%  | 100%  | 100%  | 0%    |
| Vol Right, %           | 0%    | 0%    | 0%    | 100%  |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 0     | 415   | 348   | 13    |
| LT Vol                 | 0     | 0     | 0     | 0     |
| Through Vol            | 0     | 415   | 348   | 0     |
| RT Vol                 | 0     | 0     | 0     | 13    |
| Lane Flow Rate         | 0     | 483   | 405   | 15    |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0     | 0.587 | 0.501 | 0.022 |
| Departure Headway (Hd) | 5.844 | 4.381 | 4.454 | 5.198 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 0     | 825   | 809   | 686   |
| Service Time           | 3.899 | 2.399 | 2.472 | 3.248 |
| HCM Lane V/C Ratio     | 0     | 0.585 | 0.501 | 0.022 |
| HCM Control Delay      | 8.9   | 13.5  | 11.9  | 8.4   |
| HCM Lane LOS           | N     | B     | B     | A     |
| HCM 95th-tile Q        | 0     | 3.9   | 2.9   | 0.1   |

12: N. Congress Ave & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      |      | ↕    |
| Traffic Vol, veh/h  | 0    | 0    | 0    | 13   |
| Future Vol, veh/h   | 0    | 0    | 0    | 13   |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 0    | 15   |
| Number of Lanes     | 0    | 0    | 0    | 1    |

| Approach                   | SB  |
|----------------------------|-----|
| Opposing Approach          | NB  |
| Opposing Lanes             | 1   |
| Conflicting Approach Left  | WB  |
| Conflicting Lanes Left     | 1   |
| Conflicting Approach Right | EB  |
| Conflicting Lanes Right    | 1   |
| HCM Control Delay          | 8.4 |
| HCM LOS                    | A   |

14: Brazos St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 52.6 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | F    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |      |      | ↕    |      |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 67   | 383  | 26   | 0    | 11   | 76   | 25   | 0    | 191  | 167  | 0    |
| Future Vol, veh/h   | 0    | 67   | 383  | 26   | 0    | 11   | 76   | 25   | 0    | 191  | 167  | 0    |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 78   | 445  | 30   | 0    | 13   | 88   | 29   | 0    | 222  | 194  | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB | NB   |
|----------------------------|------|----|------|
| Opposing Approach          | WB   | EB | SB   |
| Opposing Lanes             | 1    | 1  | 1    |
| Conflicting Approach Left  | SB   | NB | EB   |
| Conflicting Lanes Left     | 1    | 1  | 1    |
| Conflicting Approach Right | NB   | SB | WB   |
| Conflicting Lanes Right    | 1    | 1  | 1    |
| HCM Control Delay          | 87.8 | 15 | 39.7 |
| HCM LOS                    | F    | B  | E    |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 53%   | 14%   | 10%   | 36%   |
| Vol Thru, %            | 47%   | 80%   | 68%   | 21%   |
| Vol Right, %           | 0%    | 5%    | 22%   | 43%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 358   | 476   | 112   | 273   |
| LT Vol                 | 191   | 67    | 11    | 97    |
| Through Vol            | 167   | 383   | 76    | 58    |
| RT Vol                 | 0     | 26    | 25    | 118   |
| Lane Flow Rate         | 416   | 553   | 130   | 317   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 0.843 | 1.075 | 0.295 | 0.645 |
| Departure Headway (Hd) | 7.63  | 6.994 | 8.51  | 7.669 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 479   | 520   | 425   | 473   |
| Service Time           | 5.63  | 5.062 | 6.51  | 5.669 |
| HCM Lane V/C Ratio     | 0.868 | 1.063 | 0.306 | 0.67  |
| HCM Control Delay      | 39.7  | 87.8  | 15    | 23.6  |
| HCM Lane LOS           | E     | F     | B     | C     |
| HCM 95th-tile Q        | 8.4   | 16.9  | 1.2   | 4.5   |

14: Brazos St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 97   | 58   | 118  |
| Future Vol, veh/h   | 0    | 97   | 58   | 118  |
| Peak Hour Factor    | 0.86 | 0.86 | 0.86 | 0.86 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 113  | 67   | 137  |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB   |
|----------------------------|------|
| Opposing Approach          | NB   |
| Opposing Lanes             | 1    |
| Conflicting Approach Left  | WB   |
| Conflicting Lanes Left     | 1    |
| Conflicting Approach Right | EB   |
| Conflicting Lanes Right    | 1    |
| HCM Control Delay          | 23.6 |
| HCM LOS                    | C    |

16: San Jacinto Blvd & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 25.9 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | D    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↰    |      |      |      | ↱    |      |      |      |      |      |
| Traffic Vol, veh/h  | 0    | 0    | 203  | 306  | 0    | 37   | 54   | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h   | 0    | 0    | 203  | 306  | 0    | 37   | 54   | 0    | 0    | 0    | 0    | 0    |
| Peak Hour Factor    | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 214  | 322  | 0    | 39   | 57   | 0    | 0    | 0    | 0    | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    |

| Approach                   |  | EB   | WB   |
|----------------------------|--|------|------|
| Opposing Approach          |  | WB   | EB   |
| Opposing Lanes             |  | 1    | 1    |
| Conflicting Approach Left  |  | SB   |      |
| Conflicting Lanes Left     |  | 3    | 0    |
| Conflicting Approach Right |  |      | SB   |
| Conflicting Lanes Right    |  | 0    | 3    |
| HCM Control Delay          |  | 39.9 | 11.9 |
| HCM LOS                    |  | E    | B    |

| Lane                   | EBLn1 | WBLn1 | SBLn1 | SBLn2 | SBLn3 |
|------------------------|-------|-------|-------|-------|-------|
| Vol Left, %            | 0%    | 41%   | 0%    | 0%    | 0%    |
| Vol Thru, %            | 40%   | 59%   | 100%  | 100%  | 0%    |
| Vol Right, %           | 60%   | 0%    | 0%    | 0%    | 100%  |
| Sign Control           | Stop  | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 509   | 91    | 285   | 285   | 34    |
| LT Vol                 | 0     | 37    | 0     | 0     | 0     |
| Through Vol            | 203   | 54    | 285   | 285   | 0     |
| RT Vol                 | 306   | 0     | 0     | 0     | 34    |
| Lane Flow Rate         | 536   | 96    | 299   | 299   | 36    |
| Geometry Grp           | 7     | 7     | 7     | 7     | 7     |
| Degree of Util (X)     | 0.895 | 0.195 | 0.54  | 0.54  | 0.04  |
| Departure Headway (Hd) | 6.013 | 7.342 | 6.495 | 6.495 | 4.021 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 600   | 487   | 554   | 554   | 883   |
| Service Time           | 3.768 | 5.12  | 4.254 | 4.254 | 1.779 |
| HCM Lane V/C Ratio     | 0.893 | 0.197 | 0.54  | 0.54  | 0.041 |
| HCM Control Delay      | 39.9  | 11.9  | 16.7  | 16.7  | 6.9   |
| HCM Lane LOS           | E     | B     | C     | C     | A     |
| HCM 95th-tile Q        | 10.7  | 0.7   | 3.2   | 3.2   | 0.1   |

16: San Jacinto Blvd & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection              |  |  |  |
|---------------------------|--|--|--|
| Intersection Delay, s/veh |  |  |  |
| Intersection LOS          |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↰↱   | ↱    |
| Traffic Vol, veh/h  | 0    | 0    | 569  | 34   |
| Future Vol, veh/h   | 0    | 0    | 569  | 34   |
| Peak Hour Factor    | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 599  | 36   |
| Number of Lanes     | 0    | 0    | 2    | 1    |

| Approach                   |  | SB   |
|----------------------------|--|------|
| Opposing Approach          |  |      |
| Opposing Lanes             |  | 0    |
| Conflicting Approach Left  |  | WB   |
| Conflicting Lanes Left     |  | 1    |
| Conflicting Approach Right |  | EB   |
| Conflicting Lanes Right    |  | 1    |
| HCM Control Delay          |  | 16.1 |
| HCM LOS                    |  | C    |

20: Colorado St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection              |      |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------|------|--|--|--|--|--|--|--|--|--|--|--|
| Intersection Delay, s/veh | 57.5 |  |  |  |  |  |  |  |  |  |  |  |
| Intersection LOS          | F    |  |  |  |  |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | EBR  | WBU  | WBL  | WBT  | WBR  | NBU  | NBL  | NBT  | NBR  |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |      |      | ↕    |      |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 80   | 36   | 28   | 0    | 0    | 174  | 0    | 0    | 52   | 514  | 0    |
| Future Vol, veh/h   | 0    | 80   | 36   | 28   | 0    | 0    | 174  | 0    | 0    | 52   | 514  | 0    |
| Peak Hour Factor    | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 | 0.82 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 98   | 44   | 34   | 0    | 0    | 212  | 0    | 0    | 63   | 627  | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    |

| Approach                   | EB   | WB   | NB |
|----------------------------|------|------|----|
| Opposing Approach          | WB   | EB   | SB |
| Opposing Lanes             | 1    | 1    | 1  |
| Conflicting Approach Left  | SB   | NB   | EB |
| Conflicting Lanes Left     | 1    | 1    | 1  |
| Conflicting Approach Right | NB   | SB   | WB |
| Conflicting Lanes Right    | 1    | 1    | 1  |
| HCM Control Delay          | 14.4 | 15.4 | 98 |
| HCM LOS                    | B    | C    | F  |

| Lane                   | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, %            | 9%    | 56%   | 0%    | 0%    |
| Vol Thru, %            | 91%   | 25%   | 100%  | 60%   |
| Vol Right, %           | 0%    | 19%   | 0%    | 40%   |
| Sign Control           | Stop  | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 566   | 144   | 174   | 220   |
| LT Vol                 | 52    | 80    | 0     | 0     |
| Through Vol            | 514   | 36    | 174   | 131   |
| RT Vol                 | 0     | 28    | 0     | 89    |
| Lane Flow Rate         | 690   | 176   | 212   | 268   |
| Geometry Grp           | 1     | 1     | 1     | 1     |
| Degree of Util (X)     | 1.123 | 0.345 | 0.411 | 0.463 |
| Departure Headway (Hd) | 5.859 | 7.51  | 7.383 | 6.528 |
| Convergence, Y/N       | Yes   | Yes   | Yes   | Yes   |
| Cap                    | 614   | 481   | 490   | 555   |
| Service Time           | 3.938 | 5.51  | 5.383 | 4.528 |
| HCM Lane V/C Ratio     | 1.124 | 0.366 | 0.433 | 0.483 |
| HCM Control Delay      | 98    | 14.4  | 15.4  | 15    |
| HCM Lane LOS           | F     | B     | C     | B     |
| HCM 95th-tile Q        | 21.3  | 1.5   | 2     | 2.4   |

20: Colorado St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection              |  |  |  |  |
|---------------------------|--|--|--|--|
| Intersection Delay, s/veh |  |  |  |  |
| Intersection LOS          |  |  |  |  |

| Movement            | SBU  | SBL  | SBT  | SBR  |
|---------------------|------|------|------|------|
| Lane Configurations |      |      | ↕    |      |
| Traffic Vol, veh/h  | 0    | 0    | 131  | 89   |
| Future Vol, veh/h   | 0    | 0    | 131  | 89   |
| Peak Hour Factor    | 0.82 | 0.82 | 0.82 | 0.82 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 160  | 109  |
| Number of Lanes     | 0    | 0    | 1    | 0    |

| Approach                   | SB |
|----------------------------|----|
| Opposing Approach          | NB |
| Opposing Lanes             | 1  |
| Conflicting Approach Left  | WB |
| Conflicting Lanes Left     | 1  |
| Conflicting Approach Right | EB |
| Conflicting Lanes Right    | 1  |
| HCM Control Delay          | 15 |
| HCM LOS                    | B  |

| Intersection              |  |     |  |  |  |  |  |  |  |
|---------------------------|--|-----|--|--|--|--|--|--|--|
| Intersection Delay, s/veh |  | 8.7 |  |  |  |  |  |  |  |
| Intersection LOS          |  | A   |  |  |  |  |  |  |  |

| Movement            | EBU  | EBL  | EBT  | WBU  | WBT  | WBR  | SBU  | SBL  | SBR  |
|---------------------|------|------|------|------|------|------|------|------|------|
| Lane Configurations |      |      |      |      |      |      |      |      |      |
| Traffic Vol, veh/h  | 0    | 0    | 193  | 0    | 40   | 52   | 0    | 97   | 0    |
| Future Vol, veh/h   | 0    | 0    | 193  | 0    | 40   | 52   | 0    | 97   | 0    |
| Peak Hour Factor    | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 | 0.81 |
| Heavy Vehicles, %   | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow           | 0    | 0    | 238  | 0    | 49   | 64   | 0    | 120  | 0    |
| Number of Lanes     | 0    | 0    | 1    | 0    | 1    | 0    | 0    | 1    | 0    |

| Approach                   |  | EB  |  | WB  |  | SB  |  |
|----------------------------|--|-----|--|-----|--|-----|--|
| Opposing Approach          |  | WB  |  | EB  |  |     |  |
| Opposing Lanes             |  | 1   |  | 1   |  | 0   |  |
| Conflicting Approach Left  |  | SB  |  |     |  | WB  |  |
| Conflicting Lanes Left     |  | 1   |  | 0   |  | 1   |  |
| Conflicting Approach Right |  |     |  | SB  |  | EB  |  |
| Conflicting Lanes Right    |  | 0   |  | 1   |  | 1   |  |
| HCM Control Delay          |  | 9.1 |  | 7.8 |  | 8.9 |  |
| HCM LOS                    |  | A   |  | A   |  | A   |  |

| Lane                   | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|
| Vol Left, %            | 0%    | 0%    | 100%  |
| Vol Thru, %            | 100%  | 43%   | 0%    |
| Vol Right, %           | 0%    | 57%   | 0%    |
| Sign Control           | Stop  | Stop  | Stop  |
| Traffic Vol by Lane    | 193   | 92    | 97    |
| LT Vol                 | 0     | 0     | 97    |
| Through Vol            | 193   | 40    | 0     |
| RT Vol                 | 0     | 52    | 0     |
| Lane Flow Rate         | 238   | 114   | 120   |
| Geometry Grp           | 1     | 1     | 1     |
| Degree of Util (X)     | 0.288 | 0.131 | 0.163 |
| Departure Headway (Hd) | 4.357 | 4.155 | 4.904 |
| Convergence, Y/N       | Yes   | Yes   | Yes   |
| Cap                    | 827   | 864   | 733   |
| Service Time           | 2.374 | 2.174 | 2.928 |
| HCM Lane V/C Ratio     | 0.288 | 0.132 | 0.164 |
| HCM Control Delay      | 9.1   | 7.8   | 8.9   |
| HCM Lane LOS           | A     | A     | A     |
| HCM 95th-tile Q        | 1.2   | 0.5   | 0.6   |

4: Colorado St & Martin Luther King Jr. Blvd  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 32.6 |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑↑   |      | ↑    | ↑↑   | ↑    |      |
| Traffic Vol, veh/h       | 672  | 45   | 66   | 1365 | 66   | 305  |
| Future Vol, veh/h        | 672  | 45   | 66   | 1365 | 66   | 305  |
| Conflicting Peds, #/hr   | 0    | 8    | 8    | 0    | 0    | 11   |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | 40   | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 94   | 94   | 94   | 94   | 94   | 94   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 715  | 48   | 70   | 1452 | 70   | 324  |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |      |
|----------------------|--------|---|--------|---|--------|------|
| Conflicting Flow All | 0      | 0 | 771    | 0 | 1613   | 400  |
| Stage 1              | -      | - | -      | - | 747    | -    |
| Stage 2              | -      | - | -      | - | 866    | -    |
| Critical Hdwy        | -      | - | 4.14   | - | 6.84   | 6.94 |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.84   | -    |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.84   | -    |
| Follow-up Hdwy       | -      | - | 2.22   | - | 3.52   | 3.32 |
| Pot Cap-1 Maneuver   | -      | - | 840    | - | 95     | 600  |
| Stage 1              | -      | - | -      | - | 429    | -    |
| Stage 2              | -      | - | -      | - | 372    | -    |
| Platoon blocked, %   | -      | - | -      | - | -      | -    |
| Mov Cap-1 Maneuver   | -      | - | 831    | - | 86     | 589  |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 86     | -    |
| Stage 1              | -      | - | -      | - | 426    | -    |
| Stage 2              | -      | - | -      | - | 341    | -    |

| Approach             | EB |  | WB  |  | NB    |  |
|----------------------|----|--|-----|--|-------|--|
| HCM Control Delay, s | 0  |  | 0.4 |  | 219.8 |  |
| HCM LOS              |    |  |     |  | F     |  |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 289   | -   | -   | 831   | -   |
| HCM Lane V/C Ratio    | 1.366 | -   | -   | 0.084 | -   |
| HCM Control Delay (s) | 219.8 | -   | -   | 9.7   | -   |
| HCM Lane LOS          | F     | -   | -   | A     | -   |
| HCM 95th %tile Q(veh) | 20.4  | -   | -   | 0.3   | -   |

MS

Synchro 9 Report  
Page 1

9: Guadalupe St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 45.3 |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    | ↑    |      | ↑    |      |      |      |      |      | ↑↑   |      |
| Traffic Vol, veh/h       | 0    | 21   | 12   | 204  | 97   | 0    | 0    | 0    | 0    | 37   | 1066 | 23   |
| Future Vol, veh/h        | 0    | 21   | 12   | 204  | 97   | 0    | 0    | 0    | 0    | 37   | 1066 | 23   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 56   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 42   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 0    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   | 97   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 22   | 12   | 210  | 100  | 0    | 0    | 0    | 0    | 38   | 1099 | 24   |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |      |
|----------------------|--------|------|--------|------|--------|------|
| Conflicting Flow All | -      | 1229 | 659    | 693  | 1241   | 0    |
| Stage 1              | -      | 1229 | -      | 0    | 0      | -    |
| Stage 2              | -      | 0    | -      | 693  | 1241   | -    |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | 4.14 |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | -    |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | -    |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | 2.22 |
| Pot Cap-1 Maneuver   | 0      | 177  | 406    | 330  | 174    | 0    |
| Stage 1              | 0      | 248  | -      | -    | -      | 0    |
| Stage 2              | 0      | -    | -      | 400  | 245    | 0    |
| Platoon blocked, %   | -      | -    | -      | -    | -      | -    |
| Mov Cap-1 Maneuver   | -      | 170  | 390    | 288  | 167    | -    |
| Mov Cap-2 Maneuver   | -      | 170  | -      | 288  | 167    | -    |
| Stage 1              | -      | 238  | -      | -    | -      | -    |
| Stage 2              | -      | -    | -      | 352  | 235    | -    |

| Approach             | EB   |  | WB    |  | SB |  |
|----------------------|------|--|-------|--|----|--|
| HCM Control Delay, s | 23.9 |  | 216.9 |  |    |  |
| HCM LOS              | C    |  | F     |  |    |  |

| Minor Lane/Major Mvmt | EBLn1 | EBLn2 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-------|-------|-----|-----|-----|
| Capacity (veh/h)      | 170   | 390   | 233   | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.127 | 0.032 | 1.332 | -   | -   | -   |
| HCM Control Delay (s) | 29.2  | 14.5  | 216.9 | -   | -   | -   |
| HCM Lane LOS          | D     | B     | F     | -   | -   | -   |
| HCM 95th %tile Q(veh) | 0.4   | 0.1   | 16.7  | -   | -   | -   |

MS

Synchro 9 Report  
Page 2

10: Lavaca St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |       |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|-------|------|------|------|------|------|
| Int Delay, s/veh         | 71.2 |      |      |      |      |      |       |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL   | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      | ↕ ↕ ↕ |      |      |      |      |      |
| Traffic Vol, veh/h       | 11   | 54   | 0    | 0    | 172  | 75   | 66    | 1234 | 78   | 0    | 0    | 0    |
| Future Vol, veh/h        | 11   | 54   | 0    | 0    | 172  | 75   | 66    | 1234 | 78   | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 21   | 25    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free  | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -     | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | 0     | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | -    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -     | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 95   | 95   | 95   | 95   | 95   | 95   | 95    | 95   | 95   | 95   | 95   | 95   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2     | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 12   | 57   | 0    | 0    | 181  | 79   | 69    | 1299 | 82   | 0    | 0    | 0    |

| Major/Minor          | Minor2 |      | Minor1 |   | Major1 |      |
|----------------------|--------|------|--------|---|--------|------|
| Conflicting Flow All | 795    | 1545 | -      | - | 1504   | 712  |
| Stage 1              | 25     | 25   | -      | - | 1479   | -    |
| Stage 2              | 770    | 1520 | -      | - | 25     | -    |
| Critical Hdwy        | 6.44   | 6.54 | -      | - | 6.54   | 7.14 |
| Critical Hdwy Stg 1  | -      | -    | -      | - | 5.54   | -    |
| Critical Hdwy Stg 2  | 6.74   | 5.54 | -      | - | -      | -    |
| Follow-up Hdwy       | 3.82   | 4.02 | -      | - | 4.02   | 3.92 |
| Pot Cap-1 Maneuver   | 336    | 114  | 0      | 0 | ~ 120  | 322  |
| Stage 1              | -      | -    | 0      | 0 | 188    | -    |
| Stage 2              | 326    | 179  | 0      | 0 | -      | -    |
| Platoon blocked, %   | -      | -    | -      | - | -      | -    |
| Mov Cap-1 Maneuver   | -      | 104  | -      | - | ~ 110  | 322  |
| Mov Cap-2 Maneuver   | -      | 104  | -      | - | ~ 110  | -    |
| Stage 1              | -      | -    | -      | - | ~ 176  | -    |
| Stage 2              | -      | 168  | -      | - | -      | -    |

| Approach             | EB | WB       | NB  |
|----------------------|----|----------|-----|
| HCM Control Delay, s |    | \$ 484.8 | 0.4 |
| HCM LOS              | -  | F        |     |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1 | WBLn1    |
|-----------------------|-------|-----|-----|-------|----------|
| Capacity (veh/h)      | 1124  | -   | -   | -     | 137      |
| HCM Lane V/C Ratio    | 0.062 | -   | -   | -     | 1.898    |
| HCM Control Delay (s) | 8.4   | -   | -   | -     | \$ 484.8 |
| HCM Lane LOS          | A     | -   | -   | -     | F        |
| HCM 95th %tile Q(veh) | 0.2   | -   | -   | -     | 20.2     |

| Notes                      |                        |                            |                                |  |
|----------------------------|------------------------|----------------------------|--------------------------------|--|
| -: Volume exceeds capacity | \$: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |  |

13: W. 18th St & Parking Dr. 2  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 5.1  |      |      |      |      |      |
| Movement                 | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |
| Lane Configurations      |      | ↕    |      | ↕    | ↕    |      |
| Traffic Vol, veh/h       | 24   | 421  | 365  | 20   | 97   | 116  |
| Future Vol, veh/h        | 24   | 421  | 365  | 20   | 97   | 116  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | -    | 0    | 0    | -    | 0    | -    |
| Grade, %                 | -    | 0    | 0    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 26   | 458  | 397  | 22   | 105  | 126  |




| Major/Minor          | Major1 |   | Major2 |   | Minor2 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 418    | 0 | -      | 0 | 918    | 408   |
| Stage 1              | -      | - | -      | - | 408    | -     |
| Stage 2              | -      | - | -      | - | 510    | -     |
| Critical Hdwy        | 4.12   | - | -      | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | 2.218  | - | -      | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | 1141   | - | -      | - | 302    | 643   |
| Stage 1              | -      | - | -      | - | 671    | -     |
| Stage 2              | -      | - | -      | - | 603    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | 1141   | - | -      | - | 293    | 643   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 293    | -     |
| Stage 1              | -      | - | -      | - | 671    | -     |
| Stage 2              | -      | - | -      | - | 584    | -     |

| Approach             | EB  | WB | SB |
|----------------------|-----|----|----|
| HCM Control Delay, s | 0.4 | 0  | 24 |
| HCM LOS              |     |    | C  |

| Minor Lane/Major Mvmt | EBL   | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h)      | 1141  | -   | -   | -   | 416   |
| HCM Lane V/C Ratio    | 0.023 | -   | -   | -   | 0.557 |
| HCM Control Delay (s) | 8.2   | 0   | -   | -   | 24    |
| HCM Lane LOS          | A     | A   | -   | -   | C     |
| HCM 95th %tile Q(veh) | 0.1   | -   | -   | -   | 3.3   |

15: Brazos St & Parking Dr. 1  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection             |   |      |      |   |   |      |
|--------------------------|---|------|------|---|---|------|
| Int Delay, s/veh         | 9.7   |      |      |   |   |      |
| Movement                 | EBL   | EBR  | NBL  | NBT   | SBT   | SBR  |
| Lane Configurations      |  |      |      |  |  |      |
| Traffic Vol, veh/h       | 242   | 145  | 30   | 255   | 53  | 50   |
| Future Vol, veh/h        | 242   | 145  | 30   | 255   | 53  | 50   |
| Conflicting Peds, #/hr   | 0   | 0    | 0    | 0   | 0   | 0    |
| Sign Control             | Stop  | Stop | Free | Free  | Free  | Free |
| RT Channelized           | -   | None | -    | None  | -   | None |
| Storage Length           | 0   | -    | -    | -   | -   | -    |
| Veh in Median Storage, # | 0   | -    | -    | 0   | 0   | -    |
| Grade, %                 | 0   | -    | -    | 0   | 0   | -    |
| Peak Hour Factor         | 92  | 92   | 92   | 92  | 92  | 92   |
| Heavy Vehicles, %        | 2   | 2    | 2    | 2   | 2   | 2    |
| Mvmt Flow                | 263   | 158  | 33   | 277   | 58  | 54   |






| Major/Minor          | Minor2 | Major1 |       | Major2 |     |
|----------------------|--------|--------|-------|--------|-----|
| Conflicting Flow All | 427    | 85     | 112   | 0      | - 0 |
| Stage 1              | 85     | -      | -     | -      | -   |
| Stage 2              | 342    | -      | -     | -      | -   |
| Critical Hdwy        | 6.42   | 6.22   | 4.12  | -      | -   |
| Critical Hdwy Stg 1  | 5.42   | -      | -     | -      | -   |
| Critical Hdwy Stg 2  | 5.42   | -      | -     | -      | -   |
| Follow-up Hdwy       | 3.518  | 3.318  | 2.218 | -      | -   |
| Pot Cap-1 Maneuver   | 584    | 974    | 1478  | -      | -   |
| Stage 1              | 938    | -      | -     | -      | -   |
| Stage 2              | 719    | -      | -     | -      | -   |
| Platoon blocked, %   |        |        |       | -      | -   |
| Mov Cap-1 Maneuver   | 569    | 974    | 1478  | -      | -   |
| Mov Cap-2 Maneuver   | 569    | -      | -     | -      | -   |
| Stage 1              | 938    | -      | -     | -      | -   |
| Stage 2              | 700    | -      | -     | -      | -   |

| Approach             | EB   | NB  | SB |
|----------------------|------|-----|----|
| HCM Control Delay, s | 18.8 | 0.8 | 0  |
| HCM LOS              | C    |     |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1478  | -   | 674   | -   | -   |
| HCM Lane V/C Ratio    | 0.022 | -   | 0.624 | -   | -   |
| HCM Control Delay (s) | 7.5   | 0   | 18.8  | -   | -   |
| HCM Lane LOS          | A     | A   | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.1   | -   | 4.4   | -   | -   |

17: Trinity St & W. 18th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection             |      |   |      |      |   |      |   |   |   |      |      |      |
|--------------------------|------|---|------|------|---|------|---|---|---|------|------|------|
| Int Delay, s/veh         | 23.1 |   |      |      |   |      |   |   |   |      |      |      |
| Movement                 | EBL  | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
| Lane Configurations      |      |  |      |      |  |      |  |  |  |      |      |      |
| Traffic Vol, veh/h       | 288  | 0   | 0    | 0    | 0   | 0    | 176   | 605   | 0   | 0    | 0    | 0    |
| Future Vol, veh/h        | 288  | 0   | 0    | 0    | 0   | 0    | 176   | 605   | 0   | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0   | 18   | 0    | 0   | 0    | 21  | 0   | 0   | 0    | 0    | 0    |
| Sign Control             | Stop | Stop  | Stop | Free | Free  | Free | Free  | Free  | Free  | Stop | Stop | Stop |
| RT Channelized           | -    | -   | None | -    | -   | None | -   | -   | None  | -    | -    | None |
| Storage Length           | -    | -   | -    | -    | -   | -    | 115   | -   | -   | -    | -    | -    |
| Veh in Median Storage, # | -    | 0   | -    | -    | 0   | -    | -   | 0   | -   | -    | -    | -    |
| Grade, %                 | -    | 0   | -    | -    | 0   | -    | -   | 0   | -   | -    | 0    | -    |
| Peak Hour Factor         | 85   | 85  | 85   | 85   | 85  | 85   | 85  | 85  | 85  | 85   | 85   | 85   |
| Heavy Vehicles, %        | 2    | 2   | 2    | 2    | 2   | 2    | 2   | 2   | 2   | 2    | 2    | 2    |
| Mvmt Flow                | 339  | 0   | 0    | 0    | 0   | 0    | 207   | 712   | 0   | 0    | 0    | 0    |

| Major/Minor          | Minor2 | Major2 |   |       | Major1 |   |   |
|----------------------|--------|--------|---|-------|--------|---|---|
| Conflicting Flow All | 721    | 1148   | - | - - 0 | 22     | 0 | - |
| Stage 1              | 22     | 22     | - | - - - | -      | - | - |
| Stage 2              | 699    | 1126   | - | - - - | -      | - | - |
| Critical Hdwy        | 6.08   | 6.53   | - | - - - | 4.13   | - | - |
| Critical Hdwy Stg 1  | 5.43   | 5.53   | - | - - - | -      | - | - |
| Critical Hdwy Stg 2  | 6.03   | 5.53   | - | - - - | -      | - | - |
| Follow-up Hdwy       | 3.669  | 4.019  | - | - - - | 2.219  | - | - |
| Pot Cap-1 Maneuver   | 410    | 198    | 0 | 0 - - | 1593   | - | 0 |
| Stage 1              | 960    | 877    | 0 | 0 - - | -      | - | 0 |
| Stage 2              | 425    | 279    | 0 | 0 - - | -      | - | 0 |
| Platoon blocked, %   |        |        |   | - - - | -      | - | - |
| Mov Cap-1 Maneuver   | 343    | 0      | - | - - - | 1593   | - | - |
| Mov Cap-2 Maneuver   | 343    | 0      | - | - - - | -      | - | - |
| Stage 1              | 941    | 0      | - | - - - | -      | - | - |
| Stage 2              | 362    | 0      | - | - - - | -      | - | - |

| Approach             | EB   | WB | NB  |
|----------------------|------|----|-----|
| HCM Control Delay, s | 81.1 | 0  | 1.7 |
| HCM LOS              | F    |    |     |

| Minor Lane/Major Mvmt | NBL  | NBT | EBLn1 | WBT | WBR |
|-----------------------|------|-----|-------|-----|-----|
| Capacity (veh/h)      | 1593 | -   | 343   | -   | -   |
| HCM Lane V/C Ratio    | 0.13 | -   | 0.988 | -   | -   |
| HCM Control Delay (s) | 7.6  | -   | 81.1  | -   | -   |
| HCM Lane LOS          | A    | -   | F     | -   | -   |
| HCM 95th %tile Q(veh) | 0.4  | -   | 11    | -   | -   |

25: San Jacinto Blvd & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 80.3 |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    | ↑    |      | ↑    |      |      |      |      | ↑↑   | ↑    | ↑    |
| Traffic Vol, veh/h       | 0    | 148  | 161  | 37   | 44   | 0    | 0    | 0    | 0    | 108  | 1052 | 20   |
| Future Vol, veh/h        | 0    | 148  | 161  | 37   | 44   | 0    | 0    | 0    | 0    | 108  | 1052 | 20   |
| Conflicting Peds, #/hr   | 0    | 0    | 19   | 0    | 0    | 0    | 0    | 0    | 0    | 97   | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | 40   | -    | -    | -    | -    | -    | -    | -    | -    | 50   |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   | 85   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 174  | 189  | 44   | 52   | 0    | 0    | 0    | 0    | 127  | 1238 | 24   |

| Major/Minor          | Minor2 |       |      | Minor1 |      |   | Major2 |   |   |
|----------------------|--------|-------|------|--------|------|---|--------|---|---|
| Conflicting Flow All | -      | 1589  | 638  | 1076   | 1589 | - | 97     | 0 | 0 |
| Stage 1              | -      | 1492  | -    | 97     | 97   | - | -      | - | - |
| Stage 2              | -      | 97    | -    | 979    | 1492 | - | -      | - | - |
| Critical Hdwy        | -      | 6.54  | 6.94 | 7.54   | 6.54 | - | 4.14   | - | - |
| Critical Hdwy Stg 1  | -      | 5.54  | -    | -      | -    | - | -      | - | - |
| Critical Hdwy Stg 2  | -      | -     | -    | 6.54   | 5.54 | - | -      | - | - |
| Follow-up Hdwy       | -      | 4.02  | 3.32 | 3.52   | 4.02 | - | 2.22   | - | - |
| Pot Cap-1 Maneuver   | 0      | ~ 107 | 419  | 174    | 107  | 0 | 1494   | - | - |
| Stage 1              | 0      | 185   | -    | -      | -    | 0 | -      | - | - |
| Stage 2              | 0      | -     | -    | 268    | 185  | 0 | -      | - | - |
| Platoon blocked, %   | -      | -     | -    | -      | -    | - | -      | - | - |
| Mov Cap-1 Maneuver   | -      | ~ 69  | 419  | -      | 69   | - | 1494   | - | - |
| Mov Cap-2 Maneuver   | -      | ~ 69  | -    | -      | 69   | - | -      | - | - |
| Stage 1              | -      | ~ 132 | -    | -      | -    | - | -      | - | - |
| Stage 2              | -      | -     | -    | -      | 132  | - | -      | - | - |

| Approach             | EB       |  |  | WB |  |  | SB  |  |  |
|----------------------|----------|--|--|----|--|--|-----|--|--|
| HCM Control Delay, s | \$ 403.6 |  |  |    |  |  | 1.2 |  |  |
| HCM LOS              | F        |  |  |    |  |  |     |  |  |

| Minor Lane/Major Mvmt | EBLn1    | EBLn2 | WBLn1 | SBL   | SBT | SBR |
|-----------------------|----------|-------|-------|-------|-----|-----|
| Capacity (veh/h)      | 69       | 419   | -     | 1494  | -   | -   |
| HCM Lane V/C Ratio    | 2.523    | 0.452 | -     | 0.085 | -   | -   |
| HCM Control Delay (s) | \$ 820.4 | 20.5  | -     | 7.6   | 0.6 | -   |
| HCM Lane LOS          | F        | C     | -     | A     | A   | -   |
| HCM 95th %tile Q(veh) | 17       | 2.3   | -     | 0.3   | -   | -   |

| Notes  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|
| -: Volume exceeds capacity    \$: Delay exceeds 300s    +: Computation Not Defined    *: All major volume in platoon |  |  |  |  |  |  |  |  |  |

26: Trinity St & E. 17th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 4.1  |      |      |      |      |      |
| Movement                 | EBL  | EBR  | NBL  | NBT  | SBT  | SBR  |
| Lane Configurations      | ↓    |      |      | ↑↑↑  |      |      |
| Traffic Vol, veh/h       | 231  | 0    | 20   | 551  | 0    | 0    |
| Future Vol, veh/h        | 231  | 0    | 20   | 551  | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Free | Free | Free | Free |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | 0    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | -    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 83   | 83   | 83   | 83   | 83   | 83   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 278  | 0    | 24   | 664  | 0    | 0    |

| Major/Minor          | Minor2 |   | Major1 |   |
|----------------------|--------|---|--------|---|
| Conflicting Flow All | 314    | - | 0      | 0 |
| Stage 1              | 0      | - | -      | - |
| Stage 2              | 314    | - | -      | - |
| Critical Hdwy        | 5.74   | - | 5.34   | - |
| Critical Hdwy Stg 1  | -      | - | -      | - |
| Critical Hdwy Stg 2  | 6.04   | - | -      | - |
| Follow-up Hdwy       | 3.82   | - | 3.12   | - |
| Pot Cap-1 Maneuver   | 672    | 0 | -      | - |
| Stage 1              | -      | 0 | -      | - |
| Stage 2              | 654    | 0 | -      | - |
| Platoon blocked, %   | -      | - | -      | - |
| Mov Cap-1 Maneuver   | 672    | - | -      | - |
| Mov Cap-2 Maneuver   | 672    | - | -      | - |
| Stage 1              | -      | - | -      | - |
| Stage 2              | 654    | - | -      | - |

| Approach             | EB   |  | NB |  |
|----------------------|------|--|----|--|
| HCM Control Delay, s | 14.1 |  |    |  |
| HCM LOS              | B    |  |    |  |

| Minor Lane/Major Mvmt | NBL | NBT | EBLn1 |
|-----------------------|-----|-----|-------|
| Capacity (veh/h)      | -   | -   | 672   |
| HCM Lane V/C Ratio    | -   | -   | 0.414 |
| HCM Control Delay (s) | -   | -   | 14.1  |
| HCM Lane LOS          | -   | -   | B     |
| HCM 95th %tile Q(veh) | -   | -   | 2     |

27: Guadalupe St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 102  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↱    |      |      | ↱    |      |      |      |      | ↱↱   | ↱    | ↱    |
| Traffic Vol, veh/h       | 0    | 21   | 12   | 163  | 97   | 0    | 0    | 0    | 0    | 57   | 1289 | 24   |
| Future Vol, veh/h        | 0    | 21   | 12   | 163  | 97   | 0    | 0    | 0    | 0    | 57   | 1289 | 24   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 24   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 43   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 0    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | -    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   | 87   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 24   | 14   | 187  | 111  | 0    | 0    | 0    | 0    | 66   | 1482 | 28   |

| Major/Minor          | Minor2 |      | Minor1 |      | Major2 |    |
|----------------------|--------|------|--------|------|--------|----|
| Conflicting Flow All | -      | 1656 | 808    | 908  | 1656   | -  |
| Stage 1              | -      | 1656 | -      | 0    | 0      | -  |
| Stage 2              | -      | 0    | -      | 908  | 1656   | -  |
| Critical Hdwy        | -      | 6.54 | 6.94   | 7.54 | 6.54   | -  |
| Critical Hdwy Stg 1  | -      | 5.54 | -      | -    | -      | -  |
| Critical Hdwy Stg 2  | -      | -    | -      | 6.54 | 5.54   | -  |
| Follow-up Hdwy       | -      | 4.02 | 3.32   | 3.52 | 4.02   | -  |
| Pot Cap-1 Maneuver   | 0      | 97   | 324    | 230  | -      | 97 |
| Stage 1              | 0      | 154  | -      | -    | -      | 0  |
| Stage 2              | 0      | -    | -      | 296  | 154    | 0  |
| Platoon blocked, %   | -      | -    | -      | -    | -      | -  |
| Mov Cap-1 Maneuver   | -      | 93   | 311    | -    | 176    | -  |
| Mov Cap-2 Maneuver   | -      | 93   | -      | -    | 176    | -  |
| Stage 1              | -      | 148  | -      | -    | -      | -  |
| Stage 2              | -      | -    | -      | 237  | 148    | -  |

| Approach             | EB   | WB       | SB |
|----------------------|------|----------|----|
| HCM Control Delay, s | 45.9 | \$ 646.3 |    |
| HCM LOS              | E    | F        |    |

| Minor Lane/Major Mvmt | EBLn1WBLn1    | SBL | SBT | SBR |
|-----------------------|---------------|-----|-----|-----|
| Capacity (veh/h)      | 125 132       | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.303 2.264   | -   | -   | -   |
| HCM Control Delay (s) | 45.9 \$ 646.3 | -   | -   | -   |
| HCM Lane LOS          | E F           | -   | -   | -   |
| HCM 95th %tile Q(veh) | 1.2 25.3      | -   | -   | -   |

| Notes                      |                        |                            |                                |
|----------------------------|------------------------|----------------------------|--------------------------------|
| -: Volume exceeds capacity | \$: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

MS

Synchro 9 Report  
Page 9

29: Colorado St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection             |       |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|-------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 283.5 |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL   | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |       | ↱    |      |      | ↱    |      |      | ↱    |      |      | ↱    |      |
| Traffic Vol, veh/h       | 91    | 71   | 95   | 37   | 45   | 9    | 65   | 237  | 42   | 10   | 547  | 56   |
| Future Vol, veh/h        | 91    | 71   | 95   | 37   | 45   | 9    | 65   | 237  | 42   | 10   | 547  | 56   |
| Conflicting Peds, #/hr   | 0     | 0    | 0    | 0    | 0    | 15   | 88   | 0    | 0    | 0    | 0    | 88   |
| Sign Control             | Stop  | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -     | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -     | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -     | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -     | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 78    | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   | 78   |
| Heavy Vehicles, %        | 2     | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 117   | 91   | 122  | 47   | 58   | 12   | 83   | 304  | 54   | 13   | 701  | 72   |

| Major/Minor          | Minor2 |       | Minor1 |       | Major1 |       | Major2 |     |
|----------------------|--------|-------|--------|-------|--------|-------|--------|-----|
| Conflicting Flow All | 1398   | 1375  | 825    | 1366  | 1384   | 346   | 861    | 0   |
| Stage 1              | 851    | 851   | -      | 497   | 497    | -     | -      | -   |
| Stage 2              | 547    | 524   | -      | 869   | 887    | -     | -      | -   |
| Critical Hdwy        | 7.12   | 6.52  | 6.22   | 7.12  | 6.52   | 6.22  | 4.12   | -   |
| Critical Hdwy Stg 1  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -      | -   |
| Critical Hdwy Stg 2  | 6.12   | 5.52  | -      | 6.12  | 5.52   | -     | -      | -   |
| Follow-up Hdwy       | 3.518  | 4.018 | 3.318  | 3.518 | 4.018  | 3.318 | 2.218  | -   |
| Pot Cap-1 Maneuver   | 118    | 145   | 372    | 124   | 143    | 697   | 781    | -   |
| Stage 1              | 355    | 376   | -      | 555   | 545    | -     | -      | -   |
| Stage 2              | 521    | 530   | -      | 347   | 362    | -     | -      | -   |
| Platoon blocked, %   | -      | -     | -      | -     | -      | -     | -      | -   |
| Mov Cap-1 Maneuver   | -      | 55    | 113    | 341   | -      | 24    | 111    | 687 |
| Mov Cap-2 Maneuver   | -      | 55    | 113    | -     | -      | 24    | 111    | -   |
| Stage 1              | 282    | 338   | -      | 481   | 472    | -     | -      | -   |
| Stage 2              | 384    | 459   | -      | 160   | 325    | -     | -      | -   |

| Approach             | EB      | WB       | NB  | SB  |
|----------------------|---------|----------|-----|-----|
| HCM Control Delay, s | \$ 1123 | \$ 885.9 | 1.9 | 0.1 |
| HCM LOS              | F       | F        |     |     |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1WBLn1           | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|----------------------|-----|-----|-----|
| Capacity (veh/h)      | 781   | -   | -   | 100 46 1184          | -   | -   | -   |
| HCM Lane V/C Ratio    | 0.107 | -   | -   | 3.295 2.536 0.011    | -   | -   | -   |
| HCM Control Delay (s) | 10.2  | 0   | -   | \$ 1123 \$ 885.9 8.1 | 0   | -   | -   |
| HCM Lane LOS          | B     | A   | -   | F F A A              | -   | -   | -   |
| HCM 95th %tile Q(veh) | 0.4   | -   | -   | 32.5 12.4 0          | -   | -   | -   |

| Notes                      |                        |                            |                                |
|----------------------------|------------------------|----------------------------|--------------------------------|
| -: Volume exceeds capacity | \$: Delay exceeds 300s | +: Computation Not Defined | *: All major volume in platoon |

MS

Synchro 9 Report  
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30: N. Congress Ave  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 10   |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↑    |      |      | ↑    |      |      | ↑    |      |      | ↑    |      |
| Traffic Vol, veh/h       | 0    | 127  | 0    | 0    | 155  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Future Vol, veh/h        | 0    | 127  | 0    | 0    | 155  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 59   | 0    | 25   | 21   | 0    | 0    | 0    | 0    | 21   |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   | 81   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 0    | 157  | 0    | 0    | 191  | 0    | 0    | 0    | 0    | 0    | 0    | 0    |

| Major/Minor          | Minor2 |       | Minor1 |   | Major1 |   | Major2 |   |
|----------------------|--------|-------|--------|---|--------|---|--------|---|
| Conflicting Flow All | -      | 1     | -      | - | 1      | - | -      | 0 |
| Stage 1              | -      | 1     | -      | - | 0      | - | -      | - |
| Stage 2              | -      | 0     | -      | - | 1      | - | -      | - |
| Critical Hdwy        | -      | 6.52  | -      | - | 6.52   | - | -      | - |
| Critical Hdwy Stg 1  | -      | 5.52  | -      | - | 5.52   | - | -      | - |
| Critical Hdwy Stg 2  | -      | 5.52  | -      | - | 5.52   | - | -      | - |
| Follow-up Hdwy       | -      | 4.018 | -      | - | 4.018  | - | -      | - |
| Pot Cap-1 Maneuver   | 0      | 895   | 0      | 0 | 895    | 0 | 0      | - |
| Stage 1              | 0      | 895   | 0      | 0 | -      | 0 | 0      | - |
| Stage 2              | 0      | -     | 0      | 0 | 895    | 0 | 0      | - |
| Platoon blocked, %   | -      | -     | -      | - | -      | - | -      | - |
| Mov Cap-1 Maneuver   | -      | 895   | -      | - | 895    | - | -      | - |
| Mov Cap-2 Maneuver   | -      | 895   | -      | - | 895    | - | -      | - |
| Stage 1              | -      | 895   | -      | - | -      | - | -      | - |
| Stage 2              | -      | -     | -      | - | 895    | - | -      | - |

| Approach             | EB  |  | WB   |  | NB |  | SB |  |
|----------------------|-----|--|------|--|----|--|----|--|
| HCM Control Delay, s | 9.9 |  | 10.1 |  | 0  |  | 0  |  |
| HCM LOS              | A   |  | B    |  |    |  |    |  |

| Minor Lane/Major Mvmt | NBT | EBLn1 | WBLn1 | SBT |
|-----------------------|-----|-------|-------|-----|
| Capacity (veh/h)      | -   | 895   | 895   | -   |
| HCM Lane V/C Ratio    | -   | 0.175 | 0.214 | -   |
| HCM Control Delay (s) | -   | 9.9   | 10.1  | -   |
| HCM Lane LOS          | -   | A     | B     | -   |
| HCM 95th %tile Q(veh) | -   | 0.6   | 0.8   | -   |

MS

Synchro 9 Report  
Page 11

31: Brazos St & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh         | 2.9  |      |      |      |      |      |
| Movement                 | EBT  | EBR  | WBL  | WBT  | NBL  | NBR  |
| Lane Configurations      | ↑    |      |      | ↑    | ↑    |      |
| Traffic Vol, veh/h       | 82   | 0    | 15   | 67   | 43   | 0    |
| Future Vol, veh/h        | 82   | 0    | 15   | 67   | 43   | 0    |
| Conflicting Peds, #/hr   | 0    | 0    | 1    | 0    | 0    | 0    |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |
| RT Channelized           | -    | None | -    | None | -    | None |
| Storage Length           | -    | -    | -    | -    | 0    | -    |
| Veh in Median Storage, # | 0    | -    | -    | 0    | 0    | -    |
| Grade, %                 | 0    | -    | -    | 0    | 0    | -    |
| Peak Hour Factor         | 58   | 58   | 58   | 58   | 58   | 58   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 141  | 0    | 26   | 116  | 74   | 0    |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 0      | 0 | 142    | 0 | 309    | 142   |
| Stage 1              | -      | - | -      | - | 142    | -     |
| Stage 2              | -      | - | -      | - | 167    | -     |
| Critical Hdwy        | -      | - | 4.12   | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | -      | - | 2.218  | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | -      | - | 1441   | - | 683    | 906   |
| Stage 1              | -      | - | -      | - | 885    | -     |
| Stage 2              | -      | - | -      | - | 863    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | -      | - | 1441   | - | 669    | 905   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 669    | -     |
| Stage 1              | -      | - | -      | - | 884    | -     |
| Stage 2              | -      | - | -      | - | 847    | -     |

| Approach             | EB |  | WB  |  | NB   |  |
|----------------------|----|--|-----|--|------|--|
| HCM Control Delay, s | 0  |  | 1.4 |  | 11.1 |  |
| HCM LOS              |    |  |     |  | B    |  |




| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 669   | -   | -   | 1441  | -   |
| HCM Lane V/C Ratio    | 0.111 | -   | -   | 0.018 | -   |
| HCM Control Delay (s) | 11.1  | -   | -   | 7.5   | 0   |
| HCM Lane LOS          | B     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 0.4   | -   | -   | 0.1   | -   |

MS

Synchro 9 Report  
Page 12

32: San Jacinto Blvd & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection             |      |   |      |      |   |   |
|--------------------------|------|---|------|------|---|---|
| Int Delay, s/veh         | 0.9  |   |      |      |   |   |
| Movement                 | EBL  | EBR   | NBL  | NBT  | SBT   | SBR   |
| Lane Configurations      |      |  |      |      |  |  |
| Traffic Vol, veh/h       | 0    | 63  | 0    | 0    | 1298  | 53  |
| Future Vol, veh/h        | 0    | 63  | 0    | 0    | 1298  | 53  |
| Conflicting Peds, #/hr   | 0    | 0   | 0    | 0    | 0   | 15  |
| Sign Control             | Stop | Stop  | Free | Free | Free  | Free  |
| RT Channelized           | -    | None  | -    | None | -   | None  |
| Storage Length           | -    | 0   | -    | -    | -   | 50  |
| Veh in Median Storage, # | 0    | -   | -    | -    | 0   | -   |
| Grade, %                 | 0    | -   | -    | 0    | 0   | -   |
| Peak Hour Factor         | 89   | 89  | 89   | 89   | 89  | 89  |
| Heavy Vehicles, %        | 2    | 2   | 2    | 2    | 2   | 2   |
| Mvmt Flow                | 0    | 71  | 0    | 0    | 1458  | 60  |




| Major/Minor          | Minor2 | Major2 |
|----------------------|--------|--------|
| Conflicting Flow All | - 744  | - 0    |
| Stage 1              | - -    | - -    |
| Stage 2              | - -    | - -    |
| Critical Hdwy        | - 7.14 | - -    |
| Critical Hdwy Stg 1  | - -    | - -    |
| Critical Hdwy Stg 2  | - -    | - -    |
| Follow-up Hdwy       | - 3.92 | - -    |
| Pot Cap-1 Maneuver   | 0 306  | - -    |
| Stage 1              | 0 -    | - -    |
| Stage 2              | 0 -    | - -    |
| Platoon blocked, %   | - -    | - -    |
| Mov Cap-1 Maneuver   | - 302  | - -    |
| Mov Cap-2 Maneuver   | - -    | - -    |
| Stage 1              | - -    | - -    |
| Stage 2              | - -    | - -    |

| Approach             | EB   | SB |
|----------------------|------|----|
| HCM Control Delay, s | 20.5 | 0  |
| HCM LOS              | C    |    |

| Minor Lane/Major Mvmt | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-----|
| Capacity (veh/h)      | 302   | -   | -   |
| HCM Lane V/C Ratio    | 0.234 | -   | -   |
| HCM Control Delay (s) | 20.5  | -   | -   |
| HCM Lane LOS          | C     | -   | -   |
| HCM 95th %tile Q(veh) | 0.9   | -   | -   |

33: Colorado St & Parking Dr. 3  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection             |   |      |   |      |      |   |
|--------------------------|---|------|---|------|------|---|
| Int Delay, s/veh         | 3.7   |      |   |      |      |   |
| Movement                 | WBL   | WBR  | NBT   | NBR  | SBL  | SBT   |
| Lane Configurations      |  |      |  |      |      |  |
| Traffic Vol, veh/h       | 89  | 95   | 130   | 16   | 21   | 719   |
| Future Vol, veh/h        | 89  | 95   | 130   | 16   | 21   | 719   |
| Conflicting Peds, #/hr   | 0   | 0    | 0   | 0    | 0    | 0   |
| Sign Control             | Stop  | Stop | Free  | Free | Free | Free  |
| RT Channelized           | -   | None | -   | None | -    | None  |
| Storage Length           | 0   | -    | -   | -    | -    | -   |
| Veh in Median Storage, # | 0   | -    | 0   | -    | -    | 0   |
| Grade, %                 | 0   | -    | 0   | -    | -    | 0   |
| Peak Hour Factor         | 92  | 92   | 92  | 92   | 92   | 92  |
| Heavy Vehicles, %        | 2   | 2    | 2   | 2    | 2    | 2   |
| Mvmt Flow                | 97  | 103  | 141   | 17   | 23   | 782   |




| Major/Minor          | Minor1      | Major1 | Major2  |
|----------------------|-------------|--------|---------|
| Conflicting Flow All | 977 150     | 0 0    | 159 0   |
| Stage 1              | 150 -       | - -    | - -     |
| Stage 2              | 827 -       | - -    | - -     |
| Critical Hdwy        | 6.42 6.22   | - -    | 4.12 -  |
| Critical Hdwy Stg 1  | 5.42 -      | - -    | - -     |
| Critical Hdwy Stg 2  | 5.42 -      | - -    | - -     |
| Follow-up Hdwy       | 3.518 3.318 | - -    | 2.218 - |
| Pot Cap-1 Maneuver   | 278 896     | - -    | 1420 -  |
| Stage 1              | 878 -       | - -    | - -     |
| Stage 2              | 430 -       | - -    | - -     |
| Platoon blocked, %   | - -         | - -    | - -     |
| Mov Cap-1 Maneuver   | 270 896     | - -    | 1420 -  |
| Mov Cap-2 Maneuver   | 270 -       | - -    | - -     |
| Stage 1              | 878 -       | - -    | - -     |
| Stage 2              | 418 -       | - -    | - -     |

| Approach             | WB | NB | SB  |
|----------------------|----|----|-----|
| HCM Control Delay, s | 21 | 0  | 0.2 |
| HCM LOS              | C  |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1    | SBL | SBT |
|-----------------------|-----|-------------|-----|-----|
| Capacity (veh/h)      | - - | 422 1420    | -   | -   |
| HCM Lane V/C Ratio    | - - | 0.474 0.016 | -   | -   |
| HCM Control Delay (s) | - - | 21 7.6      | 0   | -   |
| HCM Lane LOS          | - - | C A         | A   | -   |
| HCM 95th %tile Q(veh) | - - | 2.5 0       | -   | -   |

62: Colorado St & Parking Dr. 4  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection             |   |      |      |   |   |      |
|--------------------------|---|------|------|---|---|------|
| Int Delay, s/veh         | 4.2   |      |      |   |   |      |
| Movement                 | EBL   | EBR  | NBL  | NBT   | SBT   | SBR  |
| Lane Configurations      |  |      |      |  |  |      |
| Traffic Vol, veh/h       | 79  | 79   | 15   | 209   | 661   | 17   |
| Future Vol, veh/h        | 79  | 79   | 15   | 209   | 661   | 17   |
| Conflicting Peds, #/hr   | 0   | 0    | 0    | 0   | 0   | 0    |
| Sign Control             | Stop  | Stop | Free | Free  | Free  | Free |
| RT Channelized           | -   | None | -    | None  | -   | None |
| Storage Length           | 0   | -    | -    | -   | -   | -    |
| Veh in Median Storage, # | 0   | -    | -    | 0   | 0   | -    |
| Grade, %                 | 0   | -    | -    | 0   | 0   | -    |
| Peak Hour Factor         | 92  | 92   | 92   | 92  | 92  | 92   |
| Heavy Vehicles, %        | 2   | 2    | 2    | 2   | 2   | 2    |
| Mvmt Flow                | 86  | 86   | 16   | 227   | 718   | 18   |

| Major/Minor          | Minor2 | Major1 |       | Major2 |     |
|----------------------|--------|--------|-------|--------|-----|
| Conflicting Flow All | 988    | 728    | 737   | 0      | - 0 |
| Stage 1              | 728    | -      | -     | -      | -   |
| Stage 2              | 260    | -      | -     | -      | -   |
| Critical Hdwy        | 6.42   | 6.22   | 4.12  | -      | -   |
| Critical Hdwy Stg 1  | 5.42   | -      | -     | -      | -   |
| Critical Hdwy Stg 2  | 5.42   | -      | -     | -      | -   |
| Follow-up Hdwy       | 3.518  | 3.318  | 2.218 | -      | -   |
| Pot Cap-1 Maneuver   | 274    | 423    | 869   | -      | -   |
| Stage 1              | 478    | -      | -     | -      | -   |
| Stage 2              | 783    | -      | -     | -      | -   |
| Platoon blocked, %   | -      | -      | -     | -      | -   |
| Mov Cap-1 Maneuver   | 268    | 423    | 869   | -      | -   |
| Mov Cap-2 Maneuver   | 268    | -      | -     | -      | -   |
| Stage 1              | 478    | -      | -     | -      | -   |
| Stage 2              | 767    | -      | -     | -      | -   |




| Approach             | EB   | NB  |  | SB |
|----------------------|------|-----|--|----|
| HCM Control Delay, s | 27.4 | 0.6 |  | 0  |
| HCM LOS              | D    |     |  |    |

| Minor Lane/Major Mvmt | NBL   | NBT | EBLn1 | SBT | SBR |
|-----------------------|-------|-----|-------|-----|-----|
| Capacity (veh/h)      | 869   | -   | 328   | -   | -   |
| HCM Lane V/C Ratio    | 0.019 | -   | 0.524 | -   | -   |
| HCM Control Delay (s) | 9.2   | 0   | 27.4  | -   | -   |
| HCM Lane LOS          | A     | A   | D     | -   | -   |
| HCM 95th %tile Q(veh) | 0.1   | -   | 2.9   | -   | -   |

69: Parking Dr. 5 & E. 16th St  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection             |   |      |      |   |   |      |
|--------------------------|---|------|------|---|---|------|
| Int Delay, s/veh         | 4.5   |      |      |   |   |      |
| Movement                 | EBT   | EBR  | WBL  | WBT   | NBL   | NBR  |
| Lane Configurations      |  |      |      |  |  |      |
| Traffic Vol, veh/h       | 200   | 21   | 16   | 150   | 121   | 63   |
| Future Vol, veh/h        | 200   | 21   | 16   | 150   | 121   | 63   |
| Conflicting Peds, #/hr   | 0   | 0    | 0    | 0   | 0   | 0    |
| Sign Control             | Free  | Free | Free | Free  | Stop  | Stop |
| RT Channelized           | -   | None | -    | None  | -   | None |
| Storage Length           | -   | -    | -    | -   | 0   | -    |
| Veh in Median Storage, # | 0   | -    | -    | 0   | 0   | -    |
| Grade, %                 | 0   | -    | -    | 0   | 0   | -    |
| Peak Hour Factor         | 92  | 92   | 92   | 92  | 92  | 92   |
| Heavy Vehicles, %        | 2   | 2    | 2    | 2   | 2   | 2    |
| Mvmt Flow                | 217   | 23   | 17   | 163   | 132   | 68   |

| Major/Minor          | Major1 |   | Major2 |   | Minor1 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 0      | 0 | 240    | 0 | 427    | 229   |
| Stage 1              | -      | - | -      | - | 229    | -     |
| Stage 2              | -      | - | -      | - | 198    | -     |
| Critical Hdwy        | -      | - | 4.12   | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | -      | - | 2.218  | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | -      | - | 1327   | - | 584    | 810   |
| Stage 1              | -      | - | -      | - | 809    | -     |
| Stage 2              | -      | - | -      | - | 835    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | -      | - | 1327   | - | 576    | 810   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 576    | -     |
| Stage 1              | -      | - | -      | - | 809    | -     |
| Stage 2              | -      | - | -      | - | 823    | -     |

| Approach             | EB | WB  |  | NB   |
|----------------------|----|-----|--|------|
| HCM Control Delay, s | 0  | 0.7 |  | 13.2 |
| HCM LOS              |    |     |  | B    |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL   | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h)      | 639   | -   | -   | 1327  | -   |
| HCM Lane V/C Ratio    | 0.313 | -   | -   | 0.013 | -   |
| HCM Control Delay (s) | 13.2  | -   | -   | 7.7   | 0   |
| HCM Lane LOS          | B     | -   | -   | A     | A   |
| HCM 95th %tile Q(veh) | 1.3   | -   | -   | 0     | -   |

71: E. 16th St & Parking Dr. 6  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |  |
|--------------------------|------|------|------|------|------|------|--|
| Int Delay, s/veh         | 4.1  |      |      |      |      |      |  |
| Movement                 | EBL  | EBT  | WBT  | WBR  | SBL  | SBR  |  |
| Lane Configurations      |      | ↕    | ↕    |      | ↕    |      |  |
| Traffic Vol, veh/h       | 16   | 126  | 252  | 19   | 95   | 80   |  |
| Future Vol, veh/h        | 16   | 126  | 252  | 19   | 95   | 80   |  |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    |  |
| Sign Control             | Free | Free | Free | Free | Stop | Stop |  |
| RT Channelized           | -    | None | -    | None | -    | None |  |
| Storage Length           | -    | -    | -    | -    | 0    | -    |  |
| Veh in Median Storage, # | -    | 0    | 0    | -    | 0    | -    |  |
| Grade, %                 | -    | 0    | 0    | -    | 0    | -    |  |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   |  |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    |  |
| Mvmt Flow                | 17   | 137  | 274  | 21   | 103  | 87   |  |

| Major/Minor          | Major1 |   | Major2 |   | Minor2 |       |
|----------------------|--------|---|--------|---|--------|-------|
| Conflicting Flow All | 295    | 0 | -      | 0 | 456    | 284   |
| Stage 1              | -      | - | -      | - | 284    | -     |
| Stage 2              | -      | - | -      | - | 172    | -     |
| Critical Hdwy        | 4.12   | - | -      | - | 6.42   | 6.22  |
| Critical Hdwy Stg 1  | -      | - | -      | - | 5.42   | -     |
| Critical Hdwy Stg 2  | -      | - | -      | - | 5.42   | -     |
| Follow-up Hdwy       | 2.218  | - | -      | - | 3.518  | 3.318 |
| Pot Cap-1 Maneuver   | 1266   | - | -      | - | 562    | 755   |
| Stage 1              | -      | - | -      | - | 764    | -     |
| Stage 2              | -      | - | -      | - | 858    | -     |
| Platoon blocked, %   | -      | - | -      | - | -      | -     |
| Mov Cap-1 Maneuver   | 1266   | - | -      | - | 554    | 755   |
| Mov Cap-2 Maneuver   | -      | - | -      | - | 554    | -     |
| Stage 1              | -      | - | -      | - | 764    | -     |
| Stage 2              | -      | - | -      | - | 845    | -     |

| Approach             | EB  | WB | SB   |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.9 | 0  | 13.1 |
| HCM LOS              |     |    | B    |

| Minor Lane/Major Mvmt | EBL   | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h)      | 1266  | -   | -   | -   | 631   |
| HCM Lane V/C Ratio    | 0.014 | -   | -   | -   | 0.301 |
| HCM Control Delay (s) | 7.9   | 0   | -   | -   | 13.1  |
| HCM Lane LOS          | A     | A   | -   | -   | B     |
| HCM 95th %tile Q(veh) | 0     | -   | -   | -   | 1.3   |

73: Colorado St & Parking Dr. 7/Parking Dr. 8  
TIA for Texas Capitol Complex Master Plan 2018 Update

2024 Background + Site  
Timing Plan: PM

| Intersection             |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh         | 7.7  |      |      |      |      |      |      |      |      |      |      |      |
| Movement                 | EBL  | EBT  | EBR  | WBL  | WBT  | WBR  | NBL  | NBT  | NBR  | SBL  | SBT  | SBR  |
| Lane Configurations      |      | ↕    |      |      | ↕    |      | ↕    |      |      |      | ↕    |      |
| Traffic Vol, veh/h       | 101  | 0    | 74   | 85   | 0    | 95   | 15   | 304  | 17   | 19   | 136  | 21   |
| Future Vol, veh/h        | 101  | 0    | 74   | 85   | 0    | 95   | 15   | 304  | 17   | 19   | 136  | 21   |
| Conflicting Peds, #/hr   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Sign Control             | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized           | -    | -    | None | -    | -    | None | -    | -    | None | -    | -    | None |
| Storage Length           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| Veh in Median Storage, # | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Grade, %                 | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    | -    | 0    | -    |
| Peak Hour Factor         | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   | 92   |
| Heavy Vehicles, %        | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    | 2    |
| Mvmt Flow                | 110  | 0    | 80   | 92   | 0    | 103  | 16   | 330  | 18   | 21   | 148  | 23   |

| Major/Minor          | Minor2 |       |       | Minor1 |       |       | Major1 |   |   | Major2 |   |   |
|----------------------|--------|-------|-------|--------|-------|-------|--------|---|---|--------|---|---|
| Conflicting Flow All | 625    | 583   | 159   | 613    | 584   | 340   | 171    | 0 | 0 | 349    | 0 | 0 |
| Stage 1              | 201    | 201   | -     | 372    | 372   | -     | -      | - | - | -      | - | - |
| Stage 2              | 424    | 382   | -     | 241    | 212   | -     | -      | - | - | -      | - | - |
| Critical Hdwy        | 7.12   | 6.52  | 6.22  | 7.12   | 6.52  | 6.22  | 4.12   | - | - | 4.12   | - | - |
| Critical Hdwy Stg 1  | 6.12   | 5.52  | -     | 6.12   | 5.52  | -     | -      | - | - | -      | - | - |
| Critical Hdwy Stg 2  | 6.12   | 5.52  | -     | 6.12   | 5.52  | -     | -      | - | - | -      | - | - |
| Follow-up Hdwy       | 3.518  | 4.018 | 3.318 | 3.518  | 4.018 | 3.318 | 2.218  | - | - | 2.218  | - | - |
| Pot Cap-1 Maneuver   | 397    | 424   | 886   | 405    | 423   | 702   | 1406   | - | - | 1210   | - | - |
| Stage 1              | 801    | 735   | -     | 648    | 619   | -     | -      | - | - | -      | - | - |
| Stage 2              | 608    | 613   | -     | 762    | 727   | -     | -      | - | - | -      | - | - |
| Platoon blocked, %   |        |       |       |        |       |       |        | - | - |        | - | - |
| Mov Cap-1 Maneuver   | 330    | 410   | 886   | 359    | 409   | 702   | 1406   | - | - | 1210   | - | - |
| Mov Cap-2 Maneuver   | 330    | 410   | -     | 359    | 409   | -     | -      | - | - | -      | - | - |
| Stage 1              | 790    | 721   | -     | 639    | 610   | -     | -      | - | - | -      | - | - |
| Stage 2              | 511    | 604   | -     | 680    | 713   | -     | -      | - | - | -      | - | - |

| Approach             | EB   | WB   | NB  | SB  |
|----------------------|------|------|-----|-----|
| HCM Control Delay, s | 18.8 | 17.4 | 0.3 | 0.9 |
| HCM LOS              | C    | C    |     |     |

| Minor Lane/Major Mvmt | NBL   | NBT | NBR | EBLn1 | WBLn1 | SBL   | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h)      | 1406  | -   | -   | 449   | 484   | 1210  | -   | -   |
| HCM Lane V/C Ratio    | 0.012 | -   | -   | 0.424 | 0.404 | 0.017 | -   | -   |
| HCM Control Delay (s) | 7.6   | 0   | -   | 18.8  | 17.4  | 8     | 0   | -   |
| HCM Lane LOS          | A     | A   | -   | C     | C     | A     | A   | -   |
| HCM 95th %tile Q(veh) | 0     | -   | -   | 2.1   | 1.9   | 0.1   | -   | -   |

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2020 Background (Optimized)  
Timing Plan: PM

|                         | ↖     | →     | ↘    | ↙    | ←     | ↖    | ↙     | ↗     | ↘     | ↓    | ↗    | ↘    |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
| Lane Configurations     | ↖     | ↖↖    |      |      | ↖↖    |      | ↖     | ↖     | ↖     |      |      |      |
| Traffic Volume (vph)    | 83    | 952   | 0    | 0    | 1116  | 51   | 214   | 314   | 337   | 0    | 0    | 0    |
| Future Volume (vph)     | 83    | 952   | 0    | 0    | 1116  | 51   | 214   | 314   | 337   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     |       |       | 33   |      |       | 87   | 17    |       | 148   |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       | 4    |       |       | 12    |      |      |      |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97 | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph)         | 86    | 981   | 0    | 0    | 1151  | 53   | 221   | 324   | 347   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       | 10%   |      |      |      |
| Lane Group Flow (vph)   | 86    | 981   | 0    | 0    | 1204  | 0    | 221   | 359   | 312   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 26.0  |      |      | 26.0  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (s)         | 15.0  | 75.0  |      |      | 60.0  |      | 60.0  | 60.0  | 60.0  |      |      |      |
| Total Split (%)         | 11.1% | 55.6% |      |      | 44.4% |      | 44.4% | 44.4% | 44.4% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 70.0  | 70.0  |      |      | 56.4  |      | 55.0  | 55.0  | 55.0  |      |      |      |
| Actuated g/C Ratio      | 0.52  | 0.52  |      |      | 0.42  |      | 0.41  | 0.41  | 0.41  |      |      |      |
| v/c Ratio               | 0.50  | 0.53  |      |      | 0.83  |      | 0.32  | 0.52  | 0.66  |      |      |      |
| Control Delay           | 48.5  | 13.1  |      |      | 21.3  |      | 36.9  | 41.5  | 40.6  |      |      |      |
| Queue Delay             | 0.0   | 0.1   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Delay             | 48.5  | 13.2  |      |      | 21.3  |      | 36.9  | 41.5  | 40.6  |      |      |      |
| LOS                     | D     | B     |      |      | C     |      | D     | D     | D     |      |      |      |
| Approach Delay          |       | 16.1  |      |      | 21.3  |      |       | 40.1  |       |      |      |      |
| Approach LOS            |       | B     |      |      | C     |      |       | D     |       |      |      |      |
| Queue Length 50th (ft)  | 32    | 114   |      |      | 181   |      | 148   | 268   | 200   |      |      |      |
| Queue Length 95th (ft)  | 97    | 137   |      |      | 223   |      | m209  | 364   | m316  |      |      |      |
| Internal Link Dist (ft) |       | 321   |      |      | 699   |      |       | 350   |       | 106  |      |      |
| Turn Bay Length (ft)    | 120   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 189   | 1835  |      |      | 1452  |      | 697   | 692   | 475   |      |      |      |
| Starvation Cap Reductn  | 0     | 130   |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.46  | 0.58  |      |      | 0.83  |      | 0.32  | 0.52  | 0.66  |      |      |      |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green  
Natural Cycle: 60

MS

Synchro 9 Report  
Page 1

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2020 Background (Optimized)  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 24.8

Intersection LOS: C

Intersection Capacity Utilization 76.8%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Trinity St & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 2

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2020 Background + Site (Optimized)  
Timing Plan: PM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↰     | ↰↰    |      |      | ↰↰    |      | ↰     | ↰     | ↰     |      | ↓    | ↰    |
| Traffic Volume (vph)    | 83    | 1097  | 0    | 0    | 1176  | 51   | 214   | 314   | 482   | 0    | 0    | 0    |
| Future Volume (vph)     | 83    | 1097  | 0    | 0    | 1176  | 51   | 214   | 314   | 482   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     |       |       | 33   |      |       | 87   | 17    |       | 148   |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       | 4    |       |       | 12    |      |      |      |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97 | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph)         | 86    | 1131  | 0    | 0    | 1212  | 53   | 221   | 324   | 497   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       | 22%   |      |      |      |
| Lane Group Flow (vph)   | 86    | 1131  | 0    | 0    | 1265  | 0    | 221   | 433   | 388   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 26.0  |      |      | 26.0  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (s)         | 15.0  | 75.0  |      |      | 60.0  |      | 60.0  | 60.0  | 60.0  |      |      |      |
| Total Split (%)         | 11.1% | 55.6% |      |      | 44.4% |      | 44.4% | 44.4% | 44.4% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 70.0  | 70.0  |      |      | 56.4  |      | 55.0  | 55.0  | 55.0  |      |      |      |
| Actuated g/C Ratio      | 0.52  | 0.52  |      |      | 0.42  |      | 0.41  | 0.41  | 0.41  |      |      |      |
| v/c Ratio               | 0.51  | 0.62  |      |      | 0.87  |      | 0.32  | 0.67  | 0.83  |      |      |      |
| Control Delay           | 52.7  | 13.4  |      |      | 24.5  |      | 34.9  | 43.9  | 54.0  |      |      |      |
| Queue Delay             | 0.0   | 0.1   |      |      | 0.0   |      | 0.2   | 0.0   | 0.0   |      |      |      |
| Total Delay             | 52.7  | 13.5  |      |      | 24.5  |      | 35.1  | 43.9  | 54.0  |      |      |      |
| LOS                     | D     | B     |      |      | C     |      | D     | D     | D     |      |      |      |
| Approach Delay          |       | 16.3  |      |      | 24.5  |      |       | 45.8  |       |      |      |      |
| Approach LOS            |       | B     |      |      | C     |      |       | D     |       |      |      |      |
| Queue Length 50th (ft)  | 41    | 130   |      |      | 203   |      | 142   | 324   | 288   |      |      |      |
| Queue Length 95th (ft)  | m95   | 150   |      |      | 249   |      | m204  | 455   | #484  |      |      |      |
| Internal Link Dist (ft) |       | 321   |      |      | 699   |      |       | 350   |       |      | 106  |      |
| Turn Bay Length (ft)    | 120   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 184   | 1835  |      |      | 1454  |      | 697   | 650   | 465   |      |      |      |
| Starvation Cap Reductn  | 0     | 108   |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 0     |      | 92    | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.47  | 0.65  |      |      | 0.87  |      | 0.37  | 0.67  | 0.83  |      |      |      |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green  
Natural Cycle: 60

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2020 Background + Site (Optimized)  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 28.0

Intersection LOS: C

Intersection Capacity Utilization 82.4%

ICU Level of Service E

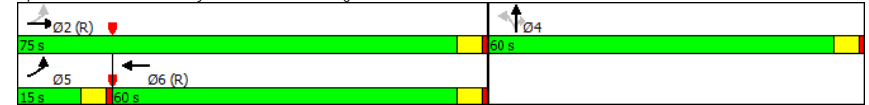
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Trinity St & Martin Luther King Jr. Blvd



8: Trinity St & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2022 Background (Optimized)  
Timing Plan: AM

|                         | ↖     | →     | ↘    | ↙    | ←     | ↖    | ↙     | ↘     | ↗     | ↘    | ↙    | ↗    |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
| Lane Configurations     | ↖     | ↖↖    |      |      | ↖↖    |      | ↖     | ↖     | ↖     |      |      |      |
| Traffic Volume (vph)    | 152   | 533   | 0    | 0    | 1805  | 58   | 67    | 84    | 108   | 0    | 0    | 0    |
| Future Volume (vph)     | 152   | 533   | 0    | 0    | 1805  | 58   | 67    | 84    | 108   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     |       |       | 35   |      |       | 58   | 34    |       | 28    |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       | 4    |       |       | 4     |      |      |      |
| Peak Hour Factor        | 0.89  | 0.89  | 0.89 | 0.95 | 0.95  | 0.95 | 0.89  | 0.89  | 0.89  | 0.89 | 0.89 | 0.89 |
| Adj. Flow (vph)         | 171   | 599   | 0    | 0    | 1900  | 61   | 75    | 94    | 121   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       | 17%   |      |      |      |
| Lane Group Flow (vph)   | 171   | 599   | 0    | 0    | 1961  | 0    | 75    | 115   | 100   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 1.0   | 10.0  |      |      | 1.0   |      | 10.0  | 10.0  | 10.0  |      |      |      |
| Minimum Split (s)       | 5.5   | 26.0  |      |      | 5.5   |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (s)         | 14.4  | 94.0  |      |      | 79.6  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (%)         | 12.0% | 78.3% |      |      | 66.3% |      | 21.7% | 21.7% | 21.7% |      |      |      |
| Yellow Time (s)         | 3.5   | 4.0   |      |      | 3.5   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 4.5   | 5.0   |      |      | 4.5   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 89.5  | 89.0  |      |      | 75.4  |      | 21.0  | 21.0  | 21.0  |      |      |      |
| Actuated g/C Ratio      | 0.75  | 0.74  |      |      | 0.63  |      | 0.18  | 0.18  | 0.18  |      |      |      |
| v/c Ratio               | 0.85  | 0.23  |      |      | 0.89  |      | 0.26  | 0.38  | 0.30  |      |      |      |
| Control Delay           | 78.2  | 1.0   |      |      | 8.5   |      | 40.9  | 39.7  | 9.4   |      |      |      |
| Queue Delay             | 0.0   | 0.1   |      |      | 1.5   |      | 0.3   | 0.0   | 0.0   |      |      |      |
| Total Delay             | 78.2  | 1.2   |      |      | 10.0  |      | 41.2  | 39.7  | 9.4   |      |      |      |
| LOS                     | E     | A     |      |      | A     |      | D     | D     | A     |      |      |      |
| Approach Delay          |       | 18.3  |      |      | 10.0  |      |       | 29.6  |       |      |      |      |
| Approach LOS            |       | B     |      |      | A     |      |       | C     |       |      |      |      |
| Queue Length 50th (ft)  | 99    | 13    |      |      | 105   |      | 49    | 74    | 4     |      |      |      |
| Queue Length 95th (ft)  | #204  | 16    |      |      | m54   |      | m72   | m108  | m23   |      |      |      |
| Internal Link Dist (ft) |       | 321   |      |      | 675   |      |       | 350   |       | 106  |      |      |
| Turn Bay Length (ft)    | 120   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 207   | 2624  |      |      | 2211  |      | 291   | 304   | 328   |      |      |      |
| Starvation Cap Reductn  | 0     | 980   |      |      | 81    |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 113   |      | 48    | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.83  | 0.36  |      |      | 0.93  |      | 0.31  | 0.38  | 0.30  |      |      |      |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green  
Natural Cycle: 90

MS

Synchro 9 Report  
Page 1

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2022 Background (Optimized)  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 14.0

Intersection LOS: B

Intersection Capacity Utilization 89.5%

ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Trinity St & Martin Luther King Jr. Blvd




MS

Synchro 9 Report  
Page 2

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2022 Background (Optimized)  
Timing Plan: PM

|                         |  |       |      |      |       |      |       |       |       |      |      |      |
|-------------------------|---|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
| Lane Configurations     |   |       |      |      |       |      |       |       |       |      |      |      |
| Traffic Volume (vph)    | 85  | 1116  | 0    | 0    | 1198  | 52   | 215   | 321   | 486   | 0    | 0    | 0    |
| Future Volume (vph)     | 85  | 1116  | 0    | 0    | 1198  | 52   | 215   | 321   | 486   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     |   |       | 34   |      |       | 89   | 17    |       | 151   |      |      |      |
| Confl. Bikes (#/hr)     |   |       |      |      |       | 4    |       |       | 13    |      |      |      |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97 | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph)         | 88  | 1151  | 0    | 0    | 1235  | 54   | 222   | 331   | 501   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |   |       |      |      |       |      |       |       | 22%   |      |      |      |
| Lane Group Flow (vph)   | 88  | 1151  | 0    | 0    | 1289  | 0    | 222   | 441   | 391   | 0    | 0    | 0    |
| Turn Type               | pm+pt   | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5   | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2   |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5   | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |   |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 26.0  |      |      | 26.0  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (s)         | 15.0  | 75.0  |      |      | 60.0  |      | 60.0  | 60.0  | 60.0  |      |      |      |
| Total Split (%)         | 11.1%   | 55.6% |      |      | 44.4% |      | 44.4% | 44.4% | 44.4% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 70.0  | 70.0  |      |      | 56.4  |      | 55.0  | 55.0  | 55.0  |      |      |      |
| Actuated g/C Ratio      | 0.52  | 0.52  |      |      | 0.42  |      | 0.41  | 0.41  | 0.41  |      |      |      |
| v/c Ratio               | 0.53  | 0.63  |      |      | 0.89  |      | 0.32  | 0.68  | 0.85  |      |      |      |
| Control Delay           | 53.8  | 13.5  |      |      | 24.5  |      | 36.2  | 46.4  | 57.5  |      |      |      |
| Queue Delay             | 0.0   | 0.1   |      |      | 0.0   |      | 0.2   | 0.0   | 0.0   |      |      |      |
| Total Delay             | 53.8  | 13.7  |      |      | 24.5  |      | 36.4  | 46.4  | 57.5  |      |      |      |
| LOS                     | D   | B     |      |      | C     |      | D     | D     | E     |      |      |      |
| Approach Delay          |   | 16.5  |      |      | 24.5  |      |       | 48.4  |       |      |      |      |
| Approach LOS            |   | B     |      |      | C     |      |       | D     |       |      |      |      |
| Queue Length 50th (ft)  | 43  | 133   |      |      | 195   |      | 152   | 356   | 310   |      |      |      |
| Queue Length 95th (ft)  | m95   | 153   |      |      | #704  |      | m218  | 485   | #493  |      |      |      |
| Internal Link Dist (ft) |   | 321   |      |      | 699   |      |       | 350   |       |      | 106  |      |
| Turn Bay Length (ft)    | 120   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 184   | 1835  |      |      | 1453  |      | 697   | 650   | 461   |      |      |      |
| Starvation Cap Reductn  | 0   | 108   |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0   | 0     |      |      | 0     |      | 101   | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0   | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.48  | 0.67  |      |      | 0.89  |      | 0.37  | 0.68  | 0.85  |      |      |      |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green  
Natural Cycle: 65

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2022 Background (Optimized)  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 28.8

Intersection LOS: C

Intersection Capacity Utilization 83.2%

ICU Level of Service E

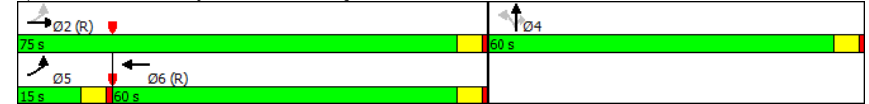
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Trinity St & Martin Luther King Jr. Blvd



8: Trinity St & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2022 Background + Site (Optimized)  
Timing Plan: AM

|                         | ↖     | →     | ↘    | ↙    | ←     | ↖    | ↙     | ↘     | ↗     | ↘    | ↙    | ↘    |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
| Lane Configurations     | ↖     | ↖     |      |      | ↖     |      | ↖     | ↖     | ↖     |      |      |      |
| Traffic Volume (vph)    | 152   | 542   | 0    | 0    | 1985  | 58   | 67    | 84    | 125   | 0    | 0    | 0    |
| Future Volume (vph)     | 152   | 542   | 0    | 0    | 1985  | 58   | 67    | 84    | 125   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     |       |       | 35   |      |       | 58   | 34    |       | 28    |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       | 4    |       |       | 4     |      |      |      |
| Peak Hour Factor        | 0.89  | 0.89  | 0.89 | 0.95 | 0.95  | 0.95 | 0.89  | 0.89  | 0.89  | 0.89 | 0.89 | 0.89 |
| Adj. Flow (vph)         | 171   | 609   | 0    | 0    | 2089  | 61   | 75    | 94    | 140   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       | 21%   |      |      |      |
| Lane Group Flow (vph)   | 171   | 609   | 0    | 0    | 2150  | 0    | 75    | 123   | 111   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 1.0   | 10.0  |      |      | 1.0   |      | 10.0  | 10.0  | 10.0  |      |      |      |
| Minimum Split (s)       | 5.5   | 26.0  |      |      | 5.5   |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (s)         | 14.4  | 94.0  |      |      | 79.6  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (%)         | 12.0% | 78.3% |      |      | 66.3% |      | 21.7% | 21.7% | 21.7% |      |      |      |
| Yellow Time (s)         | 3.5   | 4.0   |      |      | 3.5   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 4.5   | 5.0   |      |      | 4.5   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 89.5  | 89.0  |      |      | 75.4  |      | 21.0  | 21.0  | 21.0  |      |      |      |
| Actuated g/C Ratio      | 0.75  | 0.74  |      |      | 0.63  |      | 0.18  | 0.18  | 0.18  |      |      |      |
| v/c Ratio               | 0.85  | 0.23  |      |      | 0.97  |      | 0.26  | 0.41  | 0.33  |      |      |      |
| Control Delay           | 78.3  | 1.0   |      |      | 14.4  |      | 41.1  | 39.5  | 9.2   |      |      |      |
| Queue Delay             | 0.0   | 0.1   |      |      | 33.1  |      | 2.1   | 0.0   | 0.0   |      |      |      |
| Total Delay             | 78.3  | 1.1   |      |      | 47.5  |      | 43.2  | 39.5  | 9.2   |      |      |      |
| LOS                     | E     | A     |      |      | D     |      | D     | D     | A     |      |      |      |
| Approach Delay          |       | 18.1  |      |      | 47.5  |      |       | 29.5  |       |      |      |      |
| Approach LOS            |       | B     |      |      | D     |      |       | C     |       |      |      |      |
| Queue Length 50th (ft)  | 99    | 13    |      |      | 191   |      | 49    | 77    | 4     |      |      |      |
| Queue Length 95th (ft)  | #204  | 16    |      |      | m60   |      | m70   | m112  | m25   |      |      |      |
| Internal Link Dist (ft) |       | 321   |      |      | 675   |      |       | 350   |       | 106  |      |      |
| Turn Bay Length (ft)    | 120   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 207   | 2624  |      |      | 2213  |      | 291   | 303   | 337   |      |      |      |
| Starvation Cap Reductn  | 0     | 972   |      |      | 35    |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 220   |      | 128   | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.83  | 0.37  |      |      | 1.08  |      | 0.46  | 0.41  | 0.33  |      |      |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 110

MS

Synchro 9 Report  
Page 1

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2022 Background + Site (Optimized)  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.97

Intersection Signal Delay: 38.7

Intersection LOS: D

Intersection Capacity Utilization 94.4%

ICU Level of Service F

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Trinity St & Martin Luther King Jr. Blvd
























MS

Synchro 9 Report  
Page 2

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2022 Background + Site (Optimized)  
Timing Plan: PM

|                         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group              | EBL   | EBT   | EBR   | WBL   | WBT   | WBR   | NBL   | NBT   | NBR   | SBL   | SBT   | SBR   |   |   |   |
| Lane Configurations     |  |  |   |   |  |   |  |  |  |   |   |   |   |   |   |
| Traffic Volume (vph)    | 85  | 1169  | 0   | 0   | 1230  | 52  | 215   | 321   | 591   | 0   | 0   | 0   |   |   |   |
| Future Volume (vph)     | 85  | 1169  | 0   | 0   | 1230  | 52  | 215   | 321   | 591   | 0   | 0   | 0   |   |   |   |
| Confl. Peds. (#/hr)     |   |   | 34  |   |   | 89  | 17  |   | 151   |   |   |   |   |   |   |
| Confl. Bikes (#/hr)     |   |   |   |   |   | 4   |   |   | 13  |   |   |   |   |   |   |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  | 0.97  |   |   |   |
| Adj. Flow (vph)         | 88  | 1205  | 0   | 0   | 1268  | 54  | 222   | 331   | 609   | 0   | 0   | 0   |   |   |   |
| Shared Lane Traffic (%) |   |   |   |   |   |   |   |   | 27%   |   |   |   |   |   |   |
| Lane Group Flow (vph)   | 88  | 1205  | 0   | 0   | 1322  | 0   | 222   | 495   | 445   | 0   | 0   | 0   |   |   |   |
| Turn Type               | pm+pt   | NA  |   |   | NA  |   | Perm  | NA  | Perm  |   |   |   |   |   |   |
| Protected Phases        | 5   | 2   |   |   | 6   |   |   | 4   |   |   |   |   |   |   |   |
| Permitted Phases        | 2   |   |   |   |   |   | 4   |   | 4   |   |   |   |   |   |   |
| Detector Phase          | 5   | 2   |   |   | 6   |   | 4   | 4   | 4   |   |   |   |   |   |   |
| Switch Phase            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Minimum Initial (s)     | 3.0   | 10.0  |   |   | 10.0  |   | 5.0   | 5.0   | 5.0   |   |   |   |   |   |   |
| Minimum Split (s)       | 8.0   | 26.0  |   |   | 26.0  |   | 26.0  | 26.0  | 26.0  |   |   |   |   |   |   |
| Total Split (s)         | 15.0  | 75.0  |   |   | 60.0  |   | 60.0  | 60.0  | 60.0  |   |   |   |   |   |   |
| Total Split (%)         | 11.1%   | 55.6%   |   |   | 44.4%   |   | 44.4%   | 44.4%   | 44.4%   |   |   |   |   |   |   |
| Yellow Time (s)         | 4.0   | 4.0   |   |   | 4.0   |   | 4.0   | 4.0   | 4.0   |   |   |   |   |   |   |
| All-Red Time (s)        | 1.0   | 1.0   |   |   | 1.0   |   | 1.0   | 1.0   | 1.0   |   |   |   |   |   |   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |   |   | 0.0   |   | 0.0   | 0.0   | 0.0   |   |   |   |   |   |   |
| Total Lost Time (s)     | 5.0   | 5.0   |   |   | 5.0   |   | 5.0   | 5.0   | 5.0   |   |   |   |   |   |   |
| Lead/Lag                | Lead  |   |   |   | Lag   |   |   |   |   |   |   |   |   |   |   |
| Lead-Lag Optimize?      | Yes   |   |   |   | Yes   |   |   |   |   |   |   |   |   |   |   |
| Recall Mode             | None  | C-Max   |   |   | C-Max   |   | Max   | Max   | Max   |   |   |   |   |   |   |
| Act Effect Green (s)    | 70.0  | 70.0  |   |   | 56.4  |   | 55.0  | 55.0  | 55.0  |   |   |   |   |   |   |
| Actuated g/C Ratio      | 0.52  | 0.52  |   |   | 0.42  |   | 0.41  | 0.41  | 0.41  |   |   |   |   |   |   |
| v/c Ratio               | 0.53  | 0.66  |   |   | 0.91  |   | 0.32  | 0.79  | 0.97  |   |   |   |   |   |   |
| Control Delay           | 53.3  | 13.5  |   |   | 26.9  |   | 35.4  | 51.5  | 75.9  |   |   |   |   |   |   |
| Queue Delay             | 0.0   | 0.2   |   |   | 0.2   |   | 0.2   | 0.0   | 0.0   |   |   |   |   |   |   |
| Total Delay             | 53.3  | 13.6  |   |   | 27.1  |   | 35.6  | 51.5  | 75.9  |   |   |   |   |   |   |
| LOS                     | D   | B   |   |   | C   |   | D   | D   | E   |   |   |   |   |   |   |
| Approach Delay          |   | 16.3  |   |   | 27.1  |   |   | 57.8  |   |   |   |   |   |   |   |
| Approach LOS            |   | B   |   |   | C   |   |   | E   |   |   |   |   |   |   |   |
| Queue Length 50th (ft)  | 44  | 135   |   |   | 207   |   | 150   | 411   | 377   |   |   |   |   |   |   |
| Queue Length 95th (ft)  | m87   | 156   |   |   | #736  |   | m215  | 561   | #607  |   |   |   |   |   |   |
| Internal Link Dist (ft) |   | 321   |   |   | 699   |   |   | 350   |   |   | 106   |   |   |   |   |
| Turn Bay Length (ft)    | 120   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| Base Capacity (vph)     | 184   | 1835  |   |   | 1453  |   | 697   | 629   | 461   |   |   |   |   |   |   |
| Starvation Cap Reductn  | 0   | 104   |   |   | 0   |   | 0   | 0   | 0   |   |   |   |   |   |   |
| Spillback Cap Reductn   | 0   | 0   |   |   | 8   |   | 116   | 0   | 0   |   |   |   |   |   |   |
| Storage Cap Reductn     | 0   | 0   |   |   | 0   |   | 0   | 0   | 0   |   |   |   |   |   |   |
| Reduced v/c Ratio       | 0.48  | 0.70  |   |   | 0.91  |   | 0.38  | 0.79  | 0.97  |   |   |   |   |   |   |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 75

MS

Synchro 9 Report  
Page 1

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2022 Background + Site (Optimized)  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.97

Intersection Signal Delay: 32.9

Intersection LOS: C

Intersection Capacity Utilization 85.9%

ICU Level of Service E

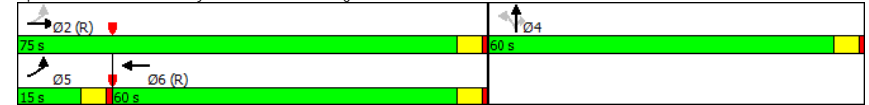
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Trinity St & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 2

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2024 Background (Optimized)  
Timing Plan: AM

| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑    |      | ↓     | ↑↑    |      |      |      |      | ↓     | ↑↑    | ↓     |
| Traffic Volume (vph)    | 0    | 744   | 172  | 625   | 1469  | 0    | 0    | 0    | 0    | 37    | 52    | 56    |
| Future Volume (vph)     | 0    | 744   | 172  | 625   | 1469  | 0    | 0    | 0    | 0    | 37    | 52    | 56    |
| Confl. Peds. (#/hr)     |      |       | 54   | 54    |       |      |      |      |      | 8     |       | 49    |
| Confl. Bikes (#/hr)     |      |       | 2    |       |       |      |      |      |      |       |       | 29    |
| Peak Hour Factor        | 0.93 | 0.93  | 0.93 | 0.99  | 0.97  | 0.93 | 0.93 | 0.93 | 0.93 | 0.93  | 0.93  | 0.93  |
| Adj. Flow (vph)         | 0    | 800   | 185  | 631   | 1514  | 0    | 0    | 0    | 0    | 40    | 56    | 60    |
| Shared Lane Traffic (%) |      |       |      | 23%   |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 985   | 0    | 486   | 1659  | 0    | 0    | 0    | 0    | 40    | 56    | 60    |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 5.0   |      |       | 10.0  |      |      |      |      | 10.0  | 10.0  | 10.0  |
| Minimum Split (s)       |      | 30.0  |      |       | 30.0  |      |      |      |      | 28.0  | 28.0  | 28.0  |
| Total Split (s)         |      | 55.0  |      |       | 92.0  |      |      |      |      | 28.0  | 28.0  | 28.0  |
| Total Split (%)         |      | 45.8% |      |       | 76.7% |      |      |      |      | 23.3% | 23.3% | 23.3% |
| Yellow Time (s)         |      | 4.0   |      |       | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      |       | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      |       | 0.0   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      |       | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      |       |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      |       |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      |       | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effect Green (s)    |      | 50.0  |      | 87.5  | 87.0  |      |      |      |      | 23.0  | 23.0  | 23.0  |
| Actuated g/C Ratio      |      | 0.42  |      | 0.73  | 0.72  |      |      |      |      | 0.19  | 0.19  | 0.19  |
| v/c Ratio               |      | 0.69  |      | 0.96  | 0.96  |      |      |      |      | 0.12  | 0.08  | 0.17  |
| Control Delay           |      | 23.8  |      | 42.1  | 23.5  |      |      |      |      | 41.4  | 40.3  | 2.2   |
| Queue Delay             |      | 0.9   |      | 42.0  | 23.7  |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             |      | 24.8  |      | 84.1  | 47.2  |      |      |      |      | 41.4  | 40.3  | 2.2   |
| LOS                     |      | C     |      | F     | D     |      |      |      |      | D     | D     | A     |
| Approach Delay          |      | 24.8  |      |       | 55.6  |      |      |      |      |       | 25.9  |       |
| Approach LOS            |      | C     |      |       | E     |      |      |      |      |       | C     |       |
| Queue Length 50th (ft)  |      | 152   |      | 245   | 264   |      |      |      |      | 26    | 18    | 0     |
| Queue Length 95th (ft)  |      | 174   |      | m264  | m281  |      |      |      |      | 58    | 37    | 8     |
| Internal Link Dist (ft) |      | 273   |      |       | 321   |      |      | 343  |      |       | 244   |       |
| Turn Bay Length (ft)    |      |       |      | 120   |       |      |      |      |      | 100   |       | 100   |
| Base Capacity (vph)     |      | 1426  |      | 506   | 1731  |      |      |      |      | 334   | 678   | 353   |
| Starvation Cap Reductn  |      | 199   |      | 90    | 134   |      |      |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 155   |      |      |      |      | 0     | 0     | 8     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       |      | 0.80  |      | 1.17  | 1.05  |      |      |      |      | 0.12  | 0.08  | 0.17  |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 100

MS

Synchro 9 Report  
Page 1

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2024 Background (Optimized)  
Timing Plan: AM

| Lane Group              | Ø1   | Ø9   |
|-------------------------|------|------|
| Lane Configurations     |      |      |
| Traffic Volume (vph)    |      |      |
| Future Volume (vph)     |      |      |
| Confl. Peds. (#/hr)     |      |      |
| Confl. Bikes (#/hr)     |      |      |
| Peak Hour Factor        |      |      |
| Adj. Flow (vph)         |      |      |
| Shared Lane Traffic (%) |      |      |
| Lane Group Flow (vph)   |      |      |
| Turn Type               |      |      |
| Protected Phases        | 1    | 9    |
| Permitted Phases        |      |      |
| Detector Phase          |      |      |
| Switch Phase            |      |      |
| Minimum Initial (s)     | 1.0  | 5.0  |
| Minimum Split (s)       | 5.5  | 9.5  |
| Total Split (s)         | 20.0 | 17.0 |
| Total Split (%)         | 17%  | 14%  |
| Yellow Time (s)         | 3.5  | 3.5  |
| All-Red Time (s)        | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |
| Total Lost Time (s)     |      |      |
| Lead/Lag                | Lead |      |
| Lead-Lag Optimize?      | Yes  |      |
| Recall Mode             | None | None |
| Act Effect Green (s)    |      |      |
| Actuated g/C Ratio      |      |      |
| v/c Ratio               |      |      |
| Control Delay           |      |      |
| Queue Delay             |      |      |
| Total Delay             |      |      |
| LOS                     |      |      |
| Approach Delay          |      |      |
| Approach LOS            |      |      |
| Queue Length 50th (ft)  |      |      |
| Queue Length 95th (ft)  |      |      |
| Internal Link Dist (ft) |      |      |
| Turn Bay Length (ft)    |      |      |
| Base Capacity (vph)     |      |      |
| Starvation Cap Reductn  |      |      |
| Spillback Cap Reductn   |      |      |
| Storage Cap Reductn     |      |      |
| Reduced v/c Ratio       |      |      |

Intersection Summary

MS

Synchro 9 Report  
Page 2

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2024 Background (Optimized)  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay: 44.9

Intersection LOS: D

Intersection Capacity Utilization 95.5%

ICU Level of Service F

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: San Jacinto Blvd & Martin Luther King Jr. Blvd



8: Trinity St & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2024 Background (Optimized)  
Timing Plan: AM

|                         | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     | ↰     | ↱     |      |      | ↱     |      | ↰     | ↱     | ↱     |      |      |      |
| Traffic Volume (vph)    | 155   | 552   | 0    | 0    | 2015  | 60   | 68    | 86    | 126   | 0    | 0    | 0    |
| Future Volume (vph)     | 155   | 552   | 0    | 0    | 2015  | 60   | 68    | 86    | 126   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     |       |       | 36   |      |       | 60   | 35    |       | 28    |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       | 4    |       |       | 4     |      |      |      |
| Peak Hour Factor        | 0.89  | 0.89  | 0.89 | 0.95 | 0.95  | 0.95 | 0.89  | 0.89  | 0.89  | 0.89 | 0.89 | 0.89 |
| Adj. Flow (vph)         | 174   | 620   | 0    | 0    | 2121  | 63   | 76    | 97    | 142   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       | 21%   |      |      |      |
| Lane Group Flow (vph)   | 174   | 620   | 0    | 0    | 2184  | 0    | 76    | 127   | 112   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 1.0   | 10.0  |      |      | 1.0   |      | 10.0  | 10.0  | 10.0  |      |      |      |
| Minimum Split (s)       | 5.5   | 26.0  |      |      | 5.5   |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (s)         | 13.6  | 94.0  |      |      | 80.4  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (%)         | 11.3% | 78.3% |      |      | 67.0% |      | 21.7% | 21.7% | 21.7% |      |      |      |
| Yellow Time (s)         | 3.5   | 4.0   |      |      | 3.5   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 4.5   | 5.0   |      |      | 4.5   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effct Green (s)     | 89.5  | 89.0  |      |      | 75.9  |      | 21.0  | 21.0  | 21.0  |      |      |      |
| Actuated g/C Ratio      | 0.75  | 0.74  |      |      | 0.63  |      | 0.18  | 0.18  | 0.18  |      |      |      |
| v/c Ratio               | 0.89  | 0.24  |      |      | 0.98  |      | 0.26  | 0.42  | 0.33  |      |      |      |
| Control Delay           | 87.4  | 1.2   |      |      | 15.5  |      | 41.6  | 40.4  | 9.2   |      |      |      |
| Queue Delay             | 0.0   | 0.2   |      |      | 25.9  |      | 1.1   | 0.0   | 0.0   |      |      |      |
| Total Delay             | 87.4  | 1.4   |      |      | 41.3  |      | 42.7  | 40.4  | 9.2   |      |      |      |
| LOS                     | F     | A     |      |      | D     |      | D     | D     | A     |      |      |      |
| Approach Delay          |       | 20.2  |      |      | 41.3  |      |       | 29.9  |       |      |      |      |
| Approach LOS            |       | C     |      |      | D     |      |       | C     |       |      |      |      |
| Queue Length 50th (ft)  | 104   | 14    |      |      | 197   |      | 51    | 82    | 4     |      |      |      |
| Queue Length 95th (ft)  | m#205 | 17    |      |      | m47   |      | m72   | m115  | m25   |      |      |      |
| Internal Link Dist (ft) |       | 321   |      |      | 675   |      |       | 350   |       |      | 106  |      |
| Turn Bay Length (ft)    | 120   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 196   | 2624  |      |      | 2226  |      | 291   | 303   | 338   |      |      |      |
| Starvation Cap Reductn  | 0     | 1073  |      |      | 68    |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 174   |      | 97    | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.89  | 0.40  |      |      | 1.06  |      | 0.39  | 0.42  | 0.33  |      |      |      |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 110

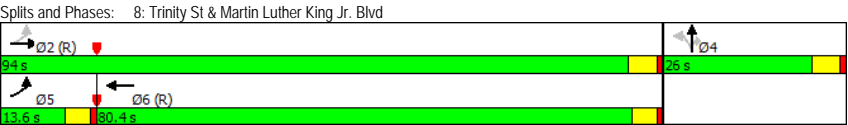
8: Trinity St & Martin Luther King Jr. Blvd

2024 Background (Optimized)

TIA for TFC Capitol Complex in Austin, Texas

Timing Plan: AM

|   |                        |
|---|------------------------|
| Control Type: Actuated-Coordinated                                |                        |
| Maximum v/c Ratio: 0.98   |                        |
| Intersection Signal Delay: 35.1                                   | Intersection LOS: D    |
| Intersection Capacity Utilization 95.5%                           | ICU Level of Service F |
| Analysis Period (min) 15  |                        |
| # 95th percentile volume exceeds capacity, queue may be longer.   |                        |
| Queue shown is maximum after two cycles.                          |                        |
| m Volume for 95th percentile queue is metered by upstream signal. |                        |



7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2024 Background (Optimized)  
Timing Plan: PM

| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑    |      | ↓     | ↑↑    |      |      |      |      | ↓     | ↑↑    | ↑     |
| Traffic Volume (vph)    | 0    | 1156  | 30   | 369   | 1152  | 0    | 0    | 0    | 0    | 39    | 204   | 144   |
| Future Volume (vph)     | 0    | 1156  | 30   | 369   | 1152  | 0    | 0    | 0    | 0    | 39    | 204   | 144   |
| Confl. Peds. (#/hr)     |      |       | 37   | 37    |       |      |      |      |      | 73    |       | 17    |
| Confl. Bikes (#/hr)     |      |       | 8    |       |       |      |      |      |      |       |       | 14    |
| Peak Hour Factor        | 0.93 | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93 | 0.93 | 0.93 | 0.93  | 0.93  | 0.93  |
| Adj. Flow (vph)         | 0    | 1243  | 32   | 397   | 1239  | 0    | 0    | 0    | 0    | 42    | 219   | 155   |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 1275  | 0    | 397   | 1239  | 0    | 0    | 0    | 0    | 42    | 219   | 155   |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      | 3.0   | 10.0  |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       |      | 32.0  |      | 8.0   | 30.0  |      |      |      |      | 30.0  | 30.0  | 30.0  |
| Total Split (s)         |      | 78.0  |      | 25.0  | 103.0 |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (%)         |      | 57.8% |      | 18.5% | 76.3% |      |      |      |      | 23.7% | 23.7% | 23.7% |
| Yellow Time (s)         |      | 4.0   |      | 4.0   | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      | 1.0   | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      | 0.0   | 0.0   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      | 5.0   | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      | Lead  |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      | Yes   |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      | None  | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effect Green (s)    |      | 73.0  |      | 98.0  | 98.0  |      |      |      |      | 27.0  | 27.0  | 27.0  |
| Actuated g/C Ratio      |      | 0.54  |      | 0.73  | 0.73  |      |      |      |      | 0.20  | 0.20  | 0.20  |
| v/c Ratio               |      | 0.67  |      | 1.03  | 0.48  |      |      |      |      | 0.13  | 0.31  | 0.40  |
| Control Delay           |      | 16.4  |      | 95.3  | 3.6   |      |      |      |      | 45.9  | 47.5  | 17.7  |
| Queue Delay             |      | 0.5   |      | 17.4  | 0.5   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             |      | 16.9  |      | 112.7 | 4.2   |      |      |      |      | 45.9  | 47.5  | 17.7  |
| LOS                     |      | B     |      | F     | A     |      |      |      |      | D     | D     | B     |
| Approach Delay          |      | 16.9  |      |       | 30.5  |      |      |      |      |       | 36.2  |       |
| Approach LOS            |      | B     |      |       | C     |      |      |      |      |       | D     |       |
| Queue Length 50th (ft)  |      | 271   |      | ~283  | 70    |      |      |      |      | 31    | 86    | 30    |
| Queue Length 95th (ft)  |      | 285   |      | m#357 | m83   |      |      |      |      | 65    | 127   | 96    |
| Internal Link Dist (ft) |      | 273   |      |       | 321   |      |      | 343  |      |       | 244   |       |
| Turn Bay Length (ft)    |      |       |      | 120   |       |      |      |      |      | 100   |       | 100   |
| Base Capacity (vph)     |      | 1904  |      | 385   | 2569  |      |      |      |      | 312   | 707   | 390   |
| Starvation Cap Reductn  |      | 260   |      | 18    | 810   |      |      |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       |      | 0.78  |      | 1.08  | 0.70  |      |      |      |      | 0.13  | 0.31  | 0.40  |

Intersection Summary

Cycle Length: 135  
Actuated Cycle Length: 135  
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 90

MS

Synchro 9 Report  
Page 1

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2024 Background (Optimized)  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.03

Intersection Signal Delay: 26.0

Intersection LOS: C

Intersection Capacity Utilization 86.8%

ICU Level of Service E

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

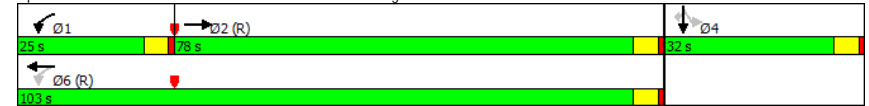
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: San Jacinto Blvd & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 2

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2024 Background (Optimized)  
Timing Plan: PM

| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Configurations     |       |       |      |      |       |      |       |       |       |      |      |      |
| Traffic Volume (vph)    | 87    | 1188  | 0    | 0    | 1253  | 53   | 217   | 327   | 595   | 0    | 0    | 0    |
| Future Volume (vph)     | 87    | 1188  | 0    | 0    | 1253  | 53   | 217   | 327   | 595   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     |       |       | 34   |      |       | 90   | 17    |       | 153   |      |      |      |
| Confl. Bikes (#/hr)     |       |       |      |      |       | 4    |       |       | 13    |      |      |      |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97 | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph)         | 90    | 1225  | 0    | 0    | 1292  | 55   | 224   | 337   | 613   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       | 27%   |      |      |      |
| Lane Group Flow (vph)   | 90    | 1225  | 0    | 0    | 1347  | 0    | 224   | 503   | 447   | 0    | 0    | 0    |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 26.0  |      |      | 26.0  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (s)         | 15.0  | 75.0  |      |      | 60.0  |      | 60.0  | 60.0  | 60.0  |      |      |      |
| Total Split (%)         | 11.1% | 55.6% |      |      | 44.4% |      | 44.4% | 44.4% | 44.4% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 70.0  | 70.0  |      |      | 56.3  |      | 55.0  | 55.0  | 55.0  |      |      |      |
| Actuated g/C Ratio      | 0.52  | 0.52  |      |      | 0.42  |      | 0.41  | 0.41  | 0.41  |      |      |      |
| v/c Ratio               | 0.54  | 0.67  |      |      | 0.93  |      | 0.32  | 0.80  | 0.97  |      |      |      |
| Control Delay           | 54.1  | 13.8  |      |      | 27.8  |      | 35.5  | 52.5  | 78.0  |      |      |      |
| Queue Delay             | 0.0   | 0.2   |      |      | 0.5   |      | 0.2   | 0.0   | 0.0   |      |      |      |
| Total Delay             | 54.1  | 13.9  |      |      | 28.3  |      | 35.7  | 52.5  | 78.0  |      |      |      |
| LOS                     | D     | B     |      |      | C     |      | D     | D     | E     |      |      |      |
| Approach Delay          |       | 16.7  |      |      | 28.3  |      |       | 59.0  |       |      |      |      |
| Approach LOS            |       | B     |      |      | C     |      |       | E     |       |      |      |      |
| Queue Length 50th (ft)  | 45    | 137   |      |      | 201   |      | 151   | 422   | 382   |      |      |      |
| Queue Length 95th (ft)  | m88   | 163   |      |      | #741  |      | m216  | 571   | #614  |      |      |      |
| Internal Link Dist (ft) |       | 321   |      |      | 699   |      |       | 350   |       |      | 106  |      |
| Turn Bay Length (ft)    | 120   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 184   | 1835  |      |      | 1451  |      | 697   | 629   | 459   |      |      |      |
| Starvation Cap Reductn  | 0     | 105   |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0     | 0     |      |      | 14    |      | 116   | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.49  | 0.71  |      |      | 0.94  |      | 0.39  | 0.80  | 0.97  |      |      |      |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 70

MS

Synchro 9 Report  
Page 3

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2024 Background (Optimized)  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.97

Intersection Signal Delay: 33.7

Intersection LOS: C

Intersection Capacity Utilization 86.8%

ICU Level of Service E

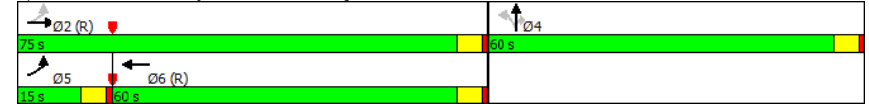
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Trinity St & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 4

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2024 Background + Site (Optimized)  
Timing Plan: AM

| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑    |      | ↓     | ↑↑    |      |      |      |      | ↓     | ↑↑    | ↓     |
| Traffic Volume (vph)    | 0    | 769   | 172  | 685   | 1591  | 0    | 0    | 0    | 0    | 37    | 52    | 56    |
| Future Volume (vph)     | 0    | 769   | 172  | 685   | 1591  | 0    | 0    | 0    | 0    | 37    | 52    | 56    |
| Confl. Peds. (#/hr)     |      |       | 54   | 54    |       |      |      |      |      | 8     |       | 49    |
| Confl. Bikes (#/hr)     |      |       | 2    |       |       |      |      |      |      |       |       | 29    |
| Peak Hour Factor        | 0.93 | 0.93  | 0.93 | 0.99  | 0.97  | 0.93 | 0.93 | 0.93 | 0.93 | 0.93  | 0.93  | 0.93  |
| Adj. Flow (vph)         | 0    | 827   | 185  | 692   | 1640  | 0    | 0    | 0    | 0    | 40    | 56    | 60    |
| Shared Lane Traffic (%) |      |       |      | 23%   |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 1012  | 0    | 533   | 1799  | 0    | 0    | 0    | 0    | 40    | 56    | 60    |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 5.0   |      |       | 10.0  |      |      |      |      | 10.0  | 10.0  | 10.0  |
| Minimum Split (s)       |      | 30.0  |      |       | 30.0  |      |      |      |      | 28.0  | 28.0  | 28.0  |
| Total Split (s)         |      | 55.0  |      |       | 92.0  |      |      |      |      | 28.0  | 28.0  | 28.0  |
| Total Split (%)         |      | 45.8% |      |       | 76.7% |      |      |      |      | 23.3% | 23.3% | 23.3% |
| Yellow Time (s)         |      | 4.0   |      |       | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      |       | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      |       | 0.0   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      |       | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      |       |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      |       |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      |       | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effect Green (s)    |      | 50.0  |      | 87.5  | 87.0  |      |      |      |      | 23.0  | 23.0  | 23.0  |
| Actuated g/C Ratio      |      | 0.42  |      | 0.73  | 0.72  |      |      |      |      | 0.19  | 0.19  | 0.19  |
| v/c Ratio               |      | 0.71  |      | 1.07  | 1.06  |      |      |      |      | 0.12  | 0.08  | 0.17  |
| Control Delay           |      | 15.5  |      | 64.7  | 40.4  |      |      |      |      | 41.4  | 40.3  | 2.2   |
| Queue Delay             |      | 4.2   |      | 14.8  | 17.8  |      |      |      |      | 0.0   | 0.0   | 21.4  |
| Total Delay             |      | 19.7  |      | 79.4  | 58.3  |      |      |      |      | 41.4  | 40.3  | 23.6  |
| LOS                     |      | B     |      | E     | E     |      |      |      |      | D     | D     | C     |
| Approach Delay          |      | 19.7  |      |       | 63.1  |      |      |      |      |       | 34.2  |       |
| Approach LOS            |      | B     |      |       | E     |      |      |      |      |       | C     |       |
| Queue Length 50th (ft)  |      | 293   |      | -305  | -239  |      |      |      |      | 26    | 18    | 0     |
| Queue Length 95th (ft)  |      | 405   |      | m#257 | m169  |      |      |      |      | 58    | 37    | 8     |
| Internal Link Dist (ft) |      | 273   |      |       | 321   |      |      | 343  |      |       | 244   |       |
| Turn Bay Length (ft)    |      |       |      | 120   |       |      |      |      |      | 100   |       | 100   |
| Base Capacity (vph)     |      | 1427  |      | 498   | 1700  |      |      |      |      | 334   | 678   | 353   |
| Starvation Cap Reductn  |      | 330   |      | 155   | 301   |      |      |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 76    |      |      |      |      | 0     | 0     | 277   |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       |      | 0.92  |      | 1.55  | 1.29  |      |      |      |      | 0.12  | 0.08  | 0.79  |

Intersection Summary

Cycle Length: 120  
Actuated Cycle Length: 120  
Offset: 30 (25%), Referenced to phase 2:EBT and 6:WBTL, Start of Green  
Natural Cycle: 120

MS

Synchro 9 Report  
Page 1

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2024 Background + Site (Optimized)  
Timing Plan: AM

| Lane Group              | 01   | 09   |
|-------------------------|------|------|
| Lane Configurations     |      |      |
| Traffic Volume (vph)    |      |      |
| Future Volume (vph)     |      |      |
| Confl. Peds. (#/hr)     |      |      |
| Confl. Bikes (#/hr)     |      |      |
| Peak Hour Factor        |      |      |
| Adj. Flow (vph)         |      |      |
| Shared Lane Traffic (%) |      |      |
| Lane Group Flow (vph)   |      |      |
| Turn Type               |      |      |
| Protected Phases        | 1    | 9    |
| Permitted Phases        |      |      |
| Detector Phase          |      |      |
| Switch Phase            |      |      |
| Minimum Initial (s)     | 1.0  | 5.0  |
| Minimum Split (s)       | 5.5  | 9.5  |
| Total Split (s)         | 20.0 | 17.0 |
| Total Split (%)         | 17%  | 14%  |
| Yellow Time (s)         | 3.5  | 3.5  |
| All-Red Time (s)        | 1.0  | 1.0  |
| Lost Time Adjust (s)    |      |      |
| Total Lost Time (s)     |      |      |
| Lead/Lag                | Lead |      |
| Lead-Lag Optimize?      | Yes  |      |
| Recall Mode             | None | None |
| Act Effect Green (s)    |      |      |
| Actuated g/C Ratio      |      |      |
| v/c Ratio               |      |      |
| Control Delay           |      |      |
| Queue Delay             |      |      |
| Total Delay             |      |      |
| LOS                     |      |      |
| Approach Delay          |      |      |
| Approach LOS            |      |      |
| Queue Length 50th (ft)  |      |      |
| Queue Length 95th (ft)  |      |      |
| Internal Link Dist (ft) |      |      |
| Turn Bay Length (ft)    |      |      |
| Base Capacity (vph)     |      |      |
| Starvation Cap Reductn  |      |      |
| Spillback Cap Reductn   |      |      |
| Storage Cap Reductn     |      |      |
| Reduced v/c Ratio       |      |      |

Intersection Summary

MS

Synchro 9 Report  
Page 2

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2024 Background + Site (Optimized)  
Timing Plan: AM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.07

Intersection Signal Delay: 49.3

Intersection LOS: D

Intersection Capacity Utilization 100.5%

ICU Level of Service G

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: San Jacinto Blvd & Martin Luther King Jr. Blvd



8: Trinity St & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2024 Background + Site (Optimized)  
Timing Plan: AM

|                         | ↖     | →     | ↘    | ↙    | ←     | ↖    | ↙     | ↘     | ↗     | ↖    | ↙    | ↘    | ↗ |
|-------------------------|-------|-------|------|------|-------|------|-------|-------|-------|------|------|------|---|
| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |   |
| Lane Configurations     | ↖     | ↖↗    |      |      | ↖↗    |      | ↖     | ↖     | ↖     |      |      |      |   |
| Traffic Volume (vph)    | 155   | 577   | 0    | 0    | 2198  | 60   | 68    | 86    | 126   | 0    | 0    | 0    |   |
| Future Volume (vph)     | 155   | 577   | 0    | 0    | 2198  | 60   | 68    | 86    | 126   | 0    | 0    | 0    |   |
| Confl. Peds. (#/hr)     |       |       | 36   |      |       | 60   | 35    |       | 28    |      |      |      |   |
| Confl. Bikes (#/hr)     |       |       |      |      |       | 4    |       |       | 4     |      |      |      |   |
| Peak Hour Factor        | 0.89  | 0.89  | 0.89 | 0.95 | 0.95  | 0.95 | 0.89  | 0.89  | 0.89  | 0.89 | 0.89 | 0.89 |   |
| Adj. Flow (vph)         | 174   | 648   | 0    | 0    | 2314  | 63   | 76    | 97    | 142   | 0    | 0    | 0    |   |
| Shared Lane Traffic (%) |       |       |      |      |       |      |       |       | 21%   |      |      |      |   |
| Lane Group Flow (vph)   | 174   | 648   | 0    | 0    | 2377  | 0    | 76    | 127   | 112   | 0    | 0    | 0    |   |
| Turn Type               | pm+pt | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |   |
| Protected Phases        | 5     | 2     |      |      | 6     |      |       | 4     |       |      |      |      |   |
| Permitted Phases        | 2     |       |      |      |       |      | 4     |       | 4     |      |      |      |   |
| Detector Phase          | 5     | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |   |
| Switch Phase            |       |       |      |      |       |      |       |       |       |      |      |      |   |
| Minimum Initial (s)     | 1.0   | 10.0  |      |      | 1.0   |      | 10.0  | 10.0  | 10.0  |      |      |      |   |
| Minimum Split (s)       | 5.5   | 26.0  |      |      | 5.5   |      | 26.0  | 26.0  | 26.0  |      |      |      |   |
| Total Split (s)         | 13.6  | 94.0  |      |      | 80.4  |      | 26.0  | 26.0  | 26.0  |      |      |      |   |
| Total Split (%)         | 11.3% | 78.3% |      |      | 67.0% |      | 21.7% | 21.7% | 21.7% |      |      |      |   |
| Yellow Time (s)         | 3.5   | 4.0   |      |      | 3.5   |      | 4.0   | 4.0   | 4.0   |      |      |      |   |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |   |
| Total Lost Time (s)     | 4.5   | 5.0   |      |      | 4.5   |      | 5.0   | 5.0   | 5.0   |      |      |      |   |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |   |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |   |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |   |
| Act Effect Green (s)    | 89.5  | 89.0  |      |      | 75.9  |      | 21.0  | 21.0  | 21.0  |      |      |      |   |
| Actuated g/C Ratio      | 0.75  | 0.74  |      |      | 0.63  |      | 0.18  | 0.18  | 0.18  |      |      |      |   |
| v/c Ratio               | 0.89  | 0.25  |      |      | 1.07  |      | 0.26  | 0.42  | 0.33  |      |      |      |   |
| Control Delay           | 75.7  | 2.7   |      |      | 47.3  |      | 41.4  | 40.1  | 9.1   |      |      |      |   |
| Queue Delay             | 0.0   | 0.3   |      |      | 12.3  |      | 0.4   | 0.0   | 0.0   |      |      |      |   |
| Total Delay             | 75.7  | 3.0   |      |      | 59.6  |      | 41.7  | 40.1  | 9.1   |      |      |      |   |
| LOS                     | E     | A     |      |      | E     |      | D     | D     | A     |      |      |      |   |
| Approach Delay          |       | 18.4  |      |      | 59.6  |      |       | 29.5  |       |      |      |      |   |
| Approach LOS            |       | B     |      |      | E     |      |       | C     |       |      |      |      |   |
| Queue Length 50th (ft)  | 113   | 21    |      |      | -351  |      | 50    | 83    | 4     |      |      |      |   |
| Queue Length 95th (ft)  | m#188 | 52    |      |      | m54   |      | m69   | m110  | m22   |      |      |      |   |
| Internal Link Dist (ft) |       | 321   |      |      | 675   |      |       | 350   |       |      |      | 106  |   |
| Turn Bay Length (ft)    | 120   |       |      |      |       |      |       |       |       |      |      |      |   |
| Base Capacity (vph)     | 196   | 2624  |      |      | 2227  |      | 291   | 303   | 338   |      |      |      |   |
| Starvation Cap Reductn  | 0     | 1258  |      |      | 23    |      | 0     | 0     | 0     |      |      |      |   |
| Spillback Cap Reductn   | 0     | 0     |      |      | 59    |      | 48    | 0     | 0     |      |      |      |   |
| Storage Cap Reductn     | 0     | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |   |
| Reduced v/c Ratio       | 0.89  | 0.47  |      |      | 1.10  |      | 0.31  | 0.42  | 0.33  |      |      |      |   |

Intersection Summary

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 140

8: Trinity St & Martin Luther King Jr. Blvd

2024 Background + Site (Optimized)

TIA for TFC Capitol Complex in Austin, Texas

Timing Plan: AM

|   |                        |
|---|------------------------|
| Control Type: Actuated-Coordinated                                |                        |
| Maximum v/c Ratio: 1.07   |                        |
| Intersection Signal Delay: 47.2                                   | Intersection LOS: D    |
| Intersection Capacity Utilization 100.5%                          | ICU Level of Service G |
| Analysis Period (min) 15  |                        |
| Volume exceeds capacity, queue is theoretically infinite.         |                        |
| Queue shown is maximum after two cycles.                          |                        |
| # 95th percentile volume exceeds capacity, queue may be longer.   |                        |
| Queue shown is maximum after two cycles.                          |                        |
| m Volume for 95th percentile queue is metered by upstream signal. |                        |

Splits and Phases: 8: Trinity St & Martin Luther King Jr. Blvd



7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2024 Background + Site  
Timing Plan: PM

| Lane Group              | EBL  | EBT   | EBR  | WBL   | WBT   | WBR  | NBL  | NBT  | NBR  | SBL   | SBT   | SBR   |
|-------------------------|------|-------|------|-------|-------|------|------|------|------|-------|-------|-------|
| Lane Configurations     |      | ↑↑    |      |       | ↑↑    |      |      |      |      | ↓     | ↑↑    | ↓     |
| Traffic Volume (vph)    | 0    | 1315  | 30   | 379   | 1174  | 0    | 0    | 0    | 0    | 39    | 204   | 144   |
| Future Volume (vph)     | 0    | 1315  | 30   | 379   | 1174  | 0    | 0    | 0    | 0    | 39    | 204   | 144   |
| Confl. Peds. (#/hr)     |      |       | 37   | 37    |       |      |      |      |      | 73    |       | 17    |
| Confl. Bikes (#/hr)     |      |       | 8    |       |       |      |      |      |      |       |       | 14    |
| Peak Hour Factor        | 0.93 | 0.93  | 0.93 | 0.93  | 0.93  | 0.93 | 0.93 | 0.93 | 0.93 | 0.93  | 0.93  | 0.93  |
| Adj. Flow (vph)         | 0    | 1414  | 32   | 408   | 1262  | 0    | 0    | 0    | 0    | 42    | 219   | 155   |
| Shared Lane Traffic (%) |      |       |      |       |       |      |      |      |      |       |       |       |
| Lane Group Flow (vph)   | 0    | 1446  | 0    | 408   | 1262  | 0    | 0    | 0    | 0    | 42    | 219   | 155   |
| Turn Type               |      | NA    |      | pm+pt | NA    |      |      |      |      | Perm  | NA    | Perm  |
| Protected Phases        |      | 2     |      | 1     | 6     |      |      |      |      |       | 4     |       |
| Permitted Phases        |      |       |      | 6     |       |      |      |      |      | 4     |       | 4     |
| Detector Phase          |      | 2     |      | 1     | 6     |      |      |      |      | 4     | 4     | 4     |
| Switch Phase            |      |       |      |       |       |      |      |      |      |       |       |       |
| Minimum Initial (s)     |      | 10.0  |      | 3.0   | 10.0  |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Minimum Split (s)       |      | 32.0  |      | 8.0   | 30.0  |      |      |      |      | 30.0  | 30.0  | 30.0  |
| Total Split (s)         |      | 78.0  |      | 25.0  | 103.0 |      |      |      |      | 32.0  | 32.0  | 32.0  |
| Total Split (%)         |      | 57.8% |      | 18.5% | 76.3% |      |      |      |      | 23.7% | 23.7% | 23.7% |
| Yellow Time (s)         |      | 4.0   |      | 4.0   | 4.0   |      |      |      |      | 4.0   | 4.0   | 4.0   |
| All-Red Time (s)        |      | 1.0   |      | 1.0   | 1.0   |      |      |      |      | 1.0   | 1.0   | 1.0   |
| Lost Time Adjust (s)    |      | 0.0   |      | 0.0   | 0.0   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |      | 5.0   |      | 5.0   | 5.0   |      |      |      |      | 5.0   | 5.0   | 5.0   |
| Lead/Lag                |      | Lag   |      | Lead  |       |      |      |      |      |       |       |       |
| Lead-Lag Optimize?      |      | Yes   |      | Yes   |       |      |      |      |      |       |       |       |
| Recall Mode             |      | C-Max |      | None  | C-Max |      |      |      |      | Max   | Max   | Max   |
| Act Effect Green (s)    |      | 73.0  |      | 98.0  | 98.0  |      |      |      |      | 27.0  | 27.0  | 27.0  |
| Actuated g/C Ratio      |      | 0.54  |      | 0.73  | 0.73  |      |      |      |      | 0.20  | 0.20  | 0.20  |
| v/c Ratio               |      | 0.76  |      | 1.19  | 0.49  |      |      |      |      | 0.13  | 0.31  | 0.40  |
| Control Delay           |      | 19.0  |      | 150.0 | 3.6   |      |      |      |      | 45.9  | 47.5  | 19.0  |
| Queue Delay             |      | 0.4   |      | 0.4   | 0.6   |      |      |      |      | 0.0   | 0.0   | 0.0   |
| Total Delay             |      | 19.3  |      | 150.3 | 4.1   |      |      |      |      | 45.9  | 47.5  | 19.0  |
| LOS                     |      | B     |      | F     | A     |      |      |      |      | D     | D     | B     |
| Approach Delay          |      | 19.3  |      |       | 39.9  |      |      |      |      |       | 36.7  |       |
| Approach LOS            |      | B     |      |       | D     |      |      |      |      |       | D     |       |
| Queue Length 50th (ft)  |      | 428   |      | ~365  | 70    |      |      |      |      | 31    | 86    | 34    |
| Queue Length 95th (ft)  |      | 402   |      | m#441 | m81   |      |      |      |      | 65    | 127   | 100   |
| Internal Link Dist (ft) |      | 273   |      |       | 321   |      |      | 343  |      |       | 244   |       |
| Turn Bay Length (ft)    |      |       |      | 120   |       |      |      |      |      | 100   |       | 100   |
| Base Capacity (vph)     |      | 1906  |      | 344   | 2569  |      |      |      |      | 312   | 707   | 386   |
| Starvation Cap Reductn  |      | 112   |      | 11    | 810   |      |      |      |      | 0     | 0     | 0     |
| Spillback Cap Reductn   |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Storage Cap Reductn     |      | 0     |      | 0     | 0     |      |      |      |      | 0     | 0     | 0     |
| Reduced v/c Ratio       |      | 0.81  |      | 1.23  | 0.72  |      |      |      |      | 0.13  | 0.31  | 0.40  |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBTL, Start of Green

Natural Cycle: 90

MS

Synchro 9 Report  
Page 1

7: San Jacinto Blvd & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2024 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.19

Intersection Signal Delay: 31.1

Intersection LOS: C

Intersection Capacity Utilization 91.7%

ICU Level of Service F

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.

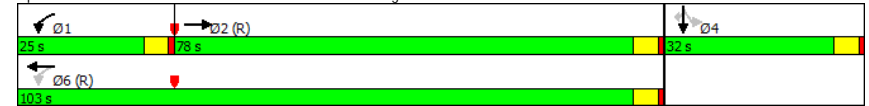
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: San Jacinto Blvd & Martin Luther King Jr. Blvd




MS

Synchro 9 Report  
Page 2

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2024 Background + Site  
Timing Plan: PM

|                         |  |       |      |      |       |      |       |       |       |      |      |      |
|-------------------------|---|-------|------|------|-------|------|-------|-------|-------|------|------|------|
| Lane Group              | EBL   | EBT   | EBR  | WBL  | WBT   | WBR  | NBL   | NBT   | NBR   | SBL  | SBT  | SBR  |
| Lane Configurations     |   |       |      |      |       |      |       |       |       |      |      |      |
| Traffic Volume (vph)    | 87  | 1347  | 0    | 0    | 1285  | 53   | 217   | 327   | 595   | 0    | 0    | 0    |
| Future Volume (vph)     | 87  | 1347  | 0    | 0    | 1285  | 53   | 217   | 327   | 595   | 0    | 0    | 0    |
| Confl. Peds. (#/hr)     |   |       | 34   |      |       | 90   | 17    |       | 153   |      |      |      |
| Confl. Bikes (#/hr)     |   |       |      |      |       | 4    |       |       | 13    |      |      |      |
| Peak Hour Factor        | 0.97  | 0.97  | 0.97 | 0.97 | 0.97  | 0.97 | 0.97  | 0.97  | 0.97  | 0.97 | 0.97 | 0.97 |
| Adj. Flow (vph)         | 90  | 1389  | 0    | 0    | 1325  | 55   | 224   | 337   | 613   | 0    | 0    | 0    |
| Shared Lane Traffic (%) |   |       |      |      |       |      |       |       | 27%   |      |      |      |
| Lane Group Flow (vph)   | 90  | 1389  | 0    | 0    | 1380  | 0    | 224   | 503   | 447   | 0    | 0    | 0    |
| Turn Type               | pm+pt   | NA    |      |      | NA    |      | Perm  | NA    | Perm  |      |      |      |
| Protected Phases        | 5   | 2     |      |      | 6     |      |       | 4     |       |      |      |      |
| Permitted Phases        | 2   |       |      |      |       |      | 4     |       | 4     |      |      |      |
| Detector Phase          | 5   | 2     |      |      | 6     |      | 4     | 4     | 4     |      |      |      |
| Switch Phase            |   |       |      |      |       |      |       |       |       |      |      |      |
| Minimum Initial (s)     | 3.0   | 10.0  |      |      | 10.0  |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Minimum Split (s)       | 8.0   | 26.0  |      |      | 26.0  |      | 26.0  | 26.0  | 26.0  |      |      |      |
| Total Split (s)         | 15.0  | 75.0  |      |      | 60.0  |      | 60.0  | 60.0  | 60.0  |      |      |      |
| Total Split (%)         | 11.1%   | 55.6% |      |      | 44.4% |      | 44.4% | 44.4% | 44.4% |      |      |      |
| Yellow Time (s)         | 4.0   | 4.0   |      |      | 4.0   |      | 4.0   | 4.0   | 4.0   |      |      |      |
| All-Red Time (s)        | 1.0   | 1.0   |      |      | 1.0   |      | 1.0   | 1.0   | 1.0   |      |      |      |
| Lost Time Adjust (s)    | 0.0   | 0.0   |      |      | 0.0   |      | 0.0   | 0.0   | 0.0   |      |      |      |
| Total Lost Time (s)     | 5.0   | 5.0   |      |      | 5.0   |      | 5.0   | 5.0   | 5.0   |      |      |      |
| Lead/Lag                | Lead  |       |      |      | Lag   |      |       |       |       |      |      |      |
| Lead-Lag Optimize?      | Yes   |       |      |      | Yes   |      |       |       |       |      |      |      |
| Recall Mode             | None  | C-Max |      |      | C-Max |      | Max   | Max   | Max   |      |      |      |
| Act Effect Green (s)    | 70.0  | 70.0  |      |      | 56.3  |      | 55.0  | 55.0  | 55.0  |      |      |      |
| Actuated g/C Ratio      | 0.52  | 0.52  |      |      | 0.42  |      | 0.41  | 0.41  | 0.41  |      |      |      |
| v/c Ratio               | 0.54  | 0.76  |      |      | 0.95  |      | 0.32  | 0.80  | 0.97  |      |      |      |
| Control Delay           | 51.8  | 15.9  |      |      | 31.3  |      | 35.8  | 52.7  | 78.2  |      |      |      |
| Queue Delay             | 0.0   | 0.3   |      |      | 2.6   |      | 0.9   | 0.0   | 0.0   |      |      |      |
| Total Delay             | 51.8  | 16.2  |      |      | 33.9  |      | 36.7  | 52.7  | 78.2  |      |      |      |
| LOS                     | D   | B     |      |      | C     |      | D     | D     | E     |      |      |      |
| Approach Delay          |   | 18.4  |      |      | 33.9  |      |       | 59.4  |       |      |      |      |
| Approach LOS            |   | B     |      |      | C     |      |       | E     |       |      |      |      |
| Queue Length 50th (ft)  | 45  | 146   |      |      | 213   |      | 152   | 422   | 381   |      |      |      |
| Queue Length 95th (ft)  | m73   | 242   |      |      | #771  |      | m217  | 573   | #612  |      |      |      |
| Internal Link Dist (ft) |   | 321   |      |      | 699   |      |       | 350   |       |      | 106  |      |
| Turn Bay Length (ft)    | 120   |       |      |      |       |      |       |       |       |      |      |      |
| Base Capacity (vph)     | 184   | 1835  |      |      | 1452  |      | 697   | 629   | 459   |      |      |      |
| Starvation Cap Reductn  | 0   | 93    |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Spillback Cap Reductn   | 0   | 0     |      |      | 35    |      | 258   | 0     | 0     |      |      |      |
| Storage Cap Reductn     | 0   | 0     |      |      | 0     |      | 0     | 0     | 0     |      |      |      |
| Reduced v/c Ratio       | 0.49  | 0.80  |      |      | 0.97  |      | 0.51  | 0.80  | 0.97  |      |      |      |

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 75

MS

Synchro 9 Report  
Page 3

8: Trinity St & Martin Luther King Jr. Blvd  
TIA for TFC Capitol Complex in Austin, Texas

2024 Background + Site  
Timing Plan: PM

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.97

Intersection Signal Delay: 35.6

Intersection LOS: D

Intersection Capacity Utilization 91.7%

ICU Level of Service F

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Trinity St & Martin Luther King Jr. Blvd



MS

Synchro 9 Report  
Page 4



### Council Question and Answer

Related To

Item #14

Meeting Date

June 22, 2017

### Additional Answer Information

**QUESTION:** Questions from Work Session.

**ANSWER:**

1) Please provide copies of previous Council resolutions related to work with the Facilities Commission. MAYOR PRO TEM TOVO

Linked below are Council Resolutions related to work with the Texas Facilities Commission:

- [Resolution No. 20101118-061:](#) Approve a resolution authorizing the City Manager to negotiate and execute an Interlocal Agreement in an amount not to exceed \$200,000 to partner in the Texas Facilities Commission's master planning effort. (Council Member Sheryl Cole/ Council Member Randi Shade/ Council Member Riley)
- [Resolution No. 20121108-054:](#) Approve a resolution directing the City Manager to negotiate and execute an interlocal agreement with the Texas Facilities Commission to participate in the Texas Facilities Commission's master planning efforts for sites located in the City. (Mayor Pro Tem Sheryl Cole/ Council Member William Spelman/ Council Member Chris Riley)
- [Resolution No. 20121206-063:](#) Approve a resolution directing the City Manager to negotiate and execute an interlocal agreement with the Texas Facilities Commission to participate in the Texas Facilities Commission's Capitol Area Development Strategy for sites located in the City. (Mayor Pro Tem Sheryl Cole/ Council Member William Spelman/ Council Member Chris Riley)
- [Resolution No. 20121206-064:](#) Approve a resolution directing the City Manager to provide notice about, and to submit to the first available land use commission meeting for public hearing, project proposals that have been submitted for consideration to the Texas Facilities Commission for properties within the City of Austin for which City comments are required pursuant to Texas Government Code Section 2267.055. (Mayor Pro Tem Sheryl Cole/ Council Member William Spelman/ Council Member Chris Riley)
- [Resolution No. 20130822-085:](#) Approve a resolution directing the City Manager to review and analyze recently enacted State laws relating to Public-Private Partnership proposals and identify any needed adjustments to City policies and procedures. (Council Member Morrison/ Council Member Kathie Tovo/ Council Member Mike Martinez)

2) Please provide copies of any legal memos that may have been distributed in response to the resolutions referenced in the previous question. MAYOR PRO TEM TOVO

Pending

*3) Is the Texas Facilities Commission willing to consider incorporating labor standards as a part of Phase One project specifications? MAYOR PRO TEM TOVO*

The following response was provided by the Texas Facilities Commission (TFC).

TFC is willing to discuss but notes that it is bound by statute to require a minimum prevailing wage rate on all State capital improvement projects, see Texas Government Code 2258. The rates are typically determined by the most recent (to time of bidding) federal Davis-Bacon surveys for the county of the project location, refer to federal wage guidelines: <https://www.wdol.gov/dba.aspx>.

Additional information can be found in the Texas Facilities Commission 2015 Uniform General Conditions, Article 2. Wage Rates and Other Laws Governing Construction, see:  
<http://www.tfc.state.tx.us/divisions/facilities/prog/construct/formsindex/2015%20UGC%2003.07.2017.Final.pdf>

*4) Please provide additional information regarding direct costs to the City. COUNCIL MEMBER HOUSTON*

With regard to process, TFC will be responsible for all costs of service (includes direct staff time) associated with review, processing, and inspections for Phase One, including the costs noted in the attachment referenced in the response to question #2. The estimate assumes that the review and permitting will occur under the General Permit Program, which costs \$5,000 and will be paid by the TFC.

As described previously, the TFC request for expedited review would primarily be fulfilled through the utilization of the General Permit Program. This program was also made available to Capital Metro and the University of Texas in recent interlocal agreements.

Outside of the General Permit Program, City staff would prioritize related project submittals and is not committed to any specific days for review other than those that are established by each department. The intent of prioritization is that a TFC project submittal “gets put at the top of the stack” once the submittal is received.

With regard to transportation impacts, the City anticipates partnering with the TFC on what we have noted as “System Improvements” on a pro rata basis, consistent with City policy, in a future phase of the development. “System Improvements” are characterized by Austin Transportation (ATD) as improvements triggered by conditions that are external to the site and considered shared non-project traffic. For discussion purposes only, ATD provided high level cost estimates for the referenced improvements based on preliminary review of the Traffic Impact Analysis. ATD estimates the City would be responsible for a proportionate cost share of approximately \$740K during Phase Two or Three of the Capitol Complex Project. See Slide 10.

*5) Please provide additional information regarding proposed vehicular circulation routes in the project area as they relate to cycling vehicles in and out of the proposed parking garages entrances and exits. COUNCIL MEMBER HOUSTON*

The following response was provided by the Texas Facilities Commission (TFC).

The new underground parking garage will be primarily accessed on 17th Street, east and west bound. Designated visitor access will be from Brazos Street adjacent to Martin Luther King Jr. Blvd. Additional above grade parking is accessed from 18th street, adjacent to Brazos Street. Conversion of existing one way streets to two way circulation will increase the carrying capacity of the streets within the Capitol Complex and allow multiple paths to the surrounding collector streets. A new traffic signal at Colorado Street and Martin Luther King Jr. Blvd. will aid traffic entering and exiting from this collector. Traffic Impact Analysis reveals that the Phase One Project will cause a manageable loss of service for short durations during peak periods, primarily in the morning and evening. Additional traffic control measures will be implemented under the two proposed future phases.

*6) Please provide additional information regarding the fee waivers requested by the Texas Facilities Commission. COUNCIL MEMBER POOL*

The Texas Facilities Commission (TFC) has requested a waiver of fees associated with the subterranean easements required for construction of the underground utility tunnels extending from the Central Utility Plant, located at 201 East 14<sup>th</sup> Street, to the new building proposed for 1801 Congress Avenue (see Slide 5). Staff estimates the value at approximately 5% of the fee simple interest. At \$250/ square foot for 21,867 square feet, the estimated fee is \$273,338.

TFC has also requested a waiver of the fees associated with right-of-way usage in the project area over the 4 ½ year project term. The fee structure for right-of-way usage includes tiers for which the cost is calculated based on square footage and duration. Fees were estimated over a 5-year period and rounded up to account for the potential for unanticipated issues during the construction stage. The projected total is approximately \$6.6M. Attached is a spreadsheet that details those calculations.

The total amount requested is \$6.9M. Neither fee type is considered a direct staff cost nor a cost to the City; they are considered unrealized revenue. This is consistent with the previously approved interlocal agreement with the University of Texas.

Utility relocations associated with this project will be reviewed and approved by the City and subject to City design standards. TFC will be responsible for all project related costs.

**ATTACHMENT 2**

*7) Please provide additional information regarding State development activities that do not require City consent. COUNCIL MEMBER POOL*

State agencies are not required to comply with City development regulations on State-owned properties. In this case, the Texas Facilities Commission is seeking City support on the project packages that extend beyond State property and into City right-of-way.

*8) Please provide additional information regarding planned public access to the parking facilities proposed as a part of Phase One. Specifically, will the spaces will be publicly accessible and if so, during what timeframe and at what cost (if applicable)? COUNCIL MEMBER POOL*

The following response was provided by the Texas Facilities Commission (TFC).

TFC is statutorily required to monetize its parking facilities after regular business hours. TFC has the ability to waive this requirement for not for profit events. TFC has a long history of collaboration in the planning of, and provision of free parking for major events such as the MS-150, Run for the Cure, and other large events. During regular business hours, a portion of the new garage will be devoted for visitor parking, at a fee. This visitor parking is set aside for the museum district but its capacity can be increased for special events. Parking fees collected by the State can be used to offset maintenance costs resulting from the use of the garages.

*9) Please provide additional detail regarding the \$581M Phase One project costs. COUNCIL MEMBER POOL*

The following response was provided by the Texas Facilities Commission (TFC).

TFC project cost estimates that are pertinent to the work in the City's ROW and vacated Congress Avenue total \$107.2 M and include:

- a. Utility Relocation: \$20.7 M
- b. Excavation: \$15 M
- c. Underground Parking: \$60.1 M
- d. Mall: \$11.4 M

*10) Please provide a list of right-of-way sections that the City might be interested in acquiring from the State, including the section that has recently been under discussion near the Grove Planned Unit Development (PUD) property.* COUNCIL MEMBER ALTER

The following response was provided by the Texas Facilities Commission (TFC).

TFC has no control over, or knowledge of, rights of way owned or controlled by the State that could be available for sale to the City. TFC does not own the land adjacent to the planned PUD. It is owned by the Texas State Library and Archives Commission. Any agreement that would obligate the holdings of another State agency in connection with TFC's Capitol Complex development would require legislative action.

**Capitol Complex Phase One**  
**Right-of-Way Usage Estimates- 5yr period**

| <b>TIER 1 - (day 1 - 180)</b>       | length | width | # of days | fee per sq.ft | Total                 |
|-------------------------------------|--------|-------|-----------|---------------|-----------------------|
| Sidewalk Space (1700 Brazos)        | 345    | 10    | 180       | 0.01          | \$6,210.00            |
| Sidewalk Space (E MLK)              | 390    | 10    | 180       | 0.01          | \$7,020.00            |
| Sidewalk Space (E 18th)             | 390    | 10    | 180       | 0.01          | \$7,020.00            |
| Sidewalk Space (E 17th N)           | 150    | 10    | 180       | 0.01          | \$2,700.00            |
| Sidewalk Space (E 17th S)           | 150    | 10    | 180       | 0.01          | \$2,700.00            |
| Sidewalk Space (E 16th N)           | 280    | 10    | 180       | 0.01          | \$5,040.00            |
| Sidewalk Space (W 17th N)           | 190    | 10    | 180       | 0.01          | \$3,420.00            |
| Sidewalk Space (W 17th S)           | 190    | 10    | 180       | 0.01          | \$3,420.00            |
| 1st Traffic Lane (E 17th)           | 150    | 22    | 180       | 0.1           | \$59,400.00           |
| 1st Traffic Lane (W 17th)           | 190    | 22    | 180       | 0.1           | \$75,240.00           |
| total                               |        |       |           |               | <b>\$172,170.00</b>   |
| <b>TIER 2 - (day 181 - 365)</b>     | length | width | # of days | fee per sq.ft | Total                 |
| Sidewalk Space (W MLK)              | 345    | 10    | 185       | 0.05          | \$31,912.50           |
| Sidewalk Space (1800 Colorado)      | 390    | 10    | 185       | 0.05          | \$36,075.00           |
| Sidewalk Space (W 18th n/c)         | 390    | 10    | 185       | 0.05          | \$36,075.00           |
| Sidewalk Space (W 18th s/c)         | 150    | 10    | 185       | 0.05          | \$13,875.00           |
| Sidewalk Space (1700 Colorado)      | 150    | 10    | 185       | 0.05          | \$13,875.00           |
| Sidewalk Space (W 17th n/c)         | 280    | 10    | 185       | 0.05          | \$25,900.00           |
| Sidewalk Space (W 17th s/c)         | 190    | 10    | 185       | 0.05          | \$17,575.00           |
| Sidewalk Space (1600 Colorado)      | 190    | 10    | 185       | 0.05          | \$17,575.00           |
| 1st Traffic Lane (W 18th)           | 150    | 22    | 185       | 0.14          | \$85,470.00           |
| 1st Traffic Lane (W 17th)           | 190    | 22    | 185       | 0.14          | \$108,262.00          |
| total                               |        |       |           |               | <b>\$386,594.50</b>   |
| <b>TIER 3 - (day 366 - 545)</b>     | length | width | # of days | fee per sq.ft | Total                 |
| Sidewalk Space (W MLK)              | 345    | 10    | 180       | 0.09          | \$55,890.00           |
| Sidewalk Space (1800 Colorado)      | 390    | 10    | 180       | 0.09          | \$63,180.00           |
| Sidewalk Space (W 18th n/c)         | 390    | 10    | 180       | 0.09          | \$63,180.00           |
| Sidewalk Space (W 18th s/c)         | 150    | 10    | 180       | 0.09          | \$24,300.00           |
| Sidewalk Space (1700 Colorado)      | 150    | 10    | 180       | 0.09          | \$24,300.00           |
| Sidewalk Space (W 17th n/c)         | 280    | 10    | 180       | 0.09          | \$45,360.00           |
| Sidewalk Space (W 17th s/c)         | 190    | 10    | 180       | 0.09          | \$30,780.00           |
| Sidewalk Space (W 16th n/c)         | 190    | 10    | 180       | 0.09          | \$30,780.00           |
| 1st Traffic Lane (W 18th)           | 150    | 22    | 180       | 0.18          | \$106,920.00          |
| 1st Traffic Lane (W 17th)           | 190    | 22    | 180       | 0.18          | \$135,432.00          |
| total                               |        |       |           |               | <b>\$580,122.00</b>   |
| <b>TIER 4 - (546 days and over)</b> | length | width | # of days | fee per sq.ft | Total                 |
| Sidewalk Space (W MLK)              | 345    | 10    | 1280      | 0.13          | \$574,080.00          |
| Sidewalk Space (1800 Colorado)      | 390    | 10    | 1280      | 0.13          | \$648,960.00          |
| Sidewalk Space (W 18th n/c)         | 390    | 10    | 1280      | 0.13          | \$648,960.00          |
| Sidewalk Space (W 18th s/c)         | 150    | 10    | 1280      | 0.13          | \$249,600.00          |
| Sidewalk Space (1700 Colorado)      | 150    | 10    | 1280      | 0.13          | \$249,600.00          |
| Sidewalk Space (W 17th n/c)         | 280    | 10    | 1280      | 0.13          | \$465,920.00          |
| Sidewalk Space (W 17th s/c)         | 190    | 10    | 1280      | 0.13          | \$316,160.00          |
| Sidewalk Space (W 16th n/c)         | 190    | 10    | 1280      | 0.13          | \$316,160.00          |
| 1st Traffic Lane (W 18th)           | 150    | 22    | 1280      | 0.2           | \$844,800.00          |
| 1st Traffic Lane (W 17th)           | 190    | 22    | 1280      | 0.2           | \$1,070,080.00        |
| total                               |        |       |           |               | <b>\$5,384,320.00</b> |

**ESTIMATED TOTAL: \$6,523,206.50**



### Council Question and Answer

| Related To | Item #18 | Meeting Date | June 15, 2017 |
|------------|----------|--------------|---------------|
|------------|----------|--------------|---------------|

### Additional Answer Information

**QUESTION:** Will this program be included in the baseline research being proposed in item 15 from Economic Development? Please provide detail on outcome measures and outcome achievements for the program from the start of the program to the current cohort. Are participants given the opportunity to participate multiple times and build on their skill sets? COUNCIL MEMBER ALTER'S OFFICE

**ANSWER:**

The Emerging Leaders Summer Internship Program (ELSIP), along with all youth programs initiated by the City, will be included in the baseline research to determine if the programs meet the criteria related to item 15 regarding an interlocal agreement with the University of Texas at Austin's Ray Marshall Center. The baseline metrics this interlocal will evaluate are current youth focused programs in Science, Technology, Engineering, Mathematics, Creative and Entrepreneurship (STEM-CE) for study and careers. While the ELSIP may not meet the baseline metrics, it will be part of the evaluation process.

The ELSIP strives to provide Austin youth with opportunities where they can develop leadership skills while learning services that the City of Austin offers. The internships are designed to provide students with a learning environment where they can explore career fields they may want to pursue in the future. ELISP works to create workforce development opportunities for the youth. The students gain work experience in a professional environment, knowledge of money management, personal responsibilities that align with going to work, patterns of responsible behavior, and the knowledge of appropriate work attire.

The program began in 2013 and youth employed through the ELSIP program has increased since the first year. Interns gain skills from their work placement, leadership days, as well as through the final project which summarizes the overall internship experience. Each year the program is evaluated in order to increase the intern experience. Evaluations are put into place to receive input and feedback from supervisors and interns that participate in the program to better the overall internship experience. The overall evaluation of each intern includes site visits, surveys, student highlights, and a debriefing meeting. These evaluations show the success of the program by providing employment for the students, and also providing opportunities and real life experience.

The following chart shows the growth in participants since it began:

|      |    |
|------|----|
| 2013 | 14 |
| 2014 | 32 |
| 2015 | 37 |
| 2016 | 37 |
| 2017 | 50 |

As funding increases for this program, staff continues to recruit more students to participate. The additional funding received in 2017 will allow for a total of 50 students in the ELSIP program.

Student participants can reapply each summer if they meet the requirements. Students must be a rising sophomore,

junior, or senior in high school to participate. After completing an interview and all required paperwork, interns are placed in an internship for 6 weeks. There are no restrictions for students to participate in multiple years.

**Mexic-Arte Museum**  
**Museum Building Project**  
**As of June 2017**

**Funding Raised by the Museum for the Project**

|             |  |                       |
|-------------|--|-----------------------|
| <b>2001</b> | <b>Private Donations</b>   | \$300000              |
|             | Manuel and Jane Zuniga - \$100000  |                       |
|             | Mitte Foundation - \$100000  |                       |
|             | Long Foundation - \$100000   |                       |
| <b>2004</b> | <b>Houston Endowment</b>   | \$100,000             |
|             | Strategic Plan Outlook and Building Program  |                       |
| <b>2010</b> | <b>National Endowment for the Humanities Grant</b>   |                       |
|             | Art Storage Needs Assessment   | \$4000                |
| <b>2010</b> | <b>Economic Development Administration Grant</b>   | \$500,000             |
|             | Feasibility Study design, plans to prepare Mexic-Arte Museum to begin the renovation and construction of the museum. |                       |
| <b>2015</b> | <b>Private Inheritance Donation</b>  | \$185271              |
| <b>2016</b> | <b>Private Donation</b>  | \$25000               |
|             |  | <b>\$1,114,271.00</b> |
|             | <b>Bond Funds</b>  | \$5,000,000.00        |

**Future Funding to be Raised**

**Fall 2016** – Butler Nonprofit Consulting determined that Mexic-Arte can likely complete a capital campaign goal of between **\$1,704,000 to \$3,720,000**

In 2016 Mexic-Arte Museum hired a third party, Butler Non-Profit Consulting to conduct a capital campaign feasibility analysis. At the same time, we looked at different scopes and facets of the project. We hope to settle on a final design soon and will then kick off a capital campaign. We hope to do this with the confidence that we have the \$5 million from the City bonds. We look forward to working with the City of Austin in the transformation of a great downtown for the community.



### Council Question and Answer

Related To

Item #58

Meeting Date

June 15, 2017

### Additional Answer Information

**QUESTION:** 1) What are the differences between the proposed agreement with Austin Independent School District and the existing agreement? 2) Is it accurate SOS compliance would limit the site to 15% impervious cover, the existing AISD/City agreement provides for 20-25%, and current proposal would allow 40% or more impervious cover? 3) Please provide more detail/accounting on the arrangement for mitigating impervious cover. What will be the final total impervious cover for the tract calculated as a percent of net site area? 4) Are area tracts of land being used to offset existing impervious cover on the Bowie High School site? If yes, which sites and are they secured? Are the transfer credits for the sites available or have they already been dedicated? 5) Council's resolution provided for including the Travis Country tract for transfer of impervious cover for AISD and there appeared to be an understanding that AISD and City staff agreed the Travis Country tract is suitable for transfer of development rights within the Barton Springs Zone. Why is the agreement/exhibit without reference to this tract of land? COUNCIL MEMBER KITCHEN'S OFFICE

**ANSWER:**

*What are the differences between the proposed agreement with Austin Independent School District and the existing agreement?*

The current agreement requires AISD to comply with 1994 regulations except as modified by the agreement. Except for specific campuses named in the agreement, the current agreement includes the following requirements for development of campuses in the Barton Springs Zone (BSZ):

- Impervious cover is limited to 25% of net site area or the amount allowed under SOS regulations (15-25% of net site area), whichever is greater, or, if the property was owned by AISD prior to May 18, 1986, the maximum impervious cover in effect on that date.
- Transfers of impervious cover to exceed 25% are prohibited.
- For Critical Environmental Feature (CEF) buffers that are left undisturbed, AISD receives an additional 20,000 square feet of impervious cover. Current code prohibits development or expansion of existing development within a CEF buffer.
- Three campuses (Travis Country, Village at Western Oaks, Boone) are allowed 50% (net site) impervious cover. Kiker is allowed 38% (net site).

Generally, the current agreement is set up to facilitate construction of new schools and not redevelopment of existing schools. Bowie H.S. was constructed in the mid-1980's before the first agreement between the City and AISD was signed in 1994.

The proposed agreement requires AISD to develop Bowie High School under current watershed regulations (Ch. 25-8) or the regulations in effect at the time of site plan application. Otherwise, the current agreement remains in place. Current regulations for redevelopment in the Barton Springs Zone include:

- No increase in impervious cover.
- No increase in non-compliance within creek buffers and CEF buffers.

- SOS water quality treatment for the entire site if existing impervious cover is 40% or less, and sedimentation/filtration treatment if the site has over 40% impervious cover.
- If over 40% impervious cover, any area with sedimentation/filtration treatment must be mitigated to 20% impervious cover through dedication of land or payment to the City for purchase of land.
- Council approval is required for a civic use.

AISD estimates that the Bowie campus has 39.8% impervious cover. However, the proposed agreement requires SOS water quality treatment even if later surveys find additional impervious cover that would allow sedimentation/filtration treatment. Because AISD will likely have to acquire adjacent properties to provide sufficient space for SOS water quality treatment, the actual impervious cover is likely to be significantly lower.

*Is it accurate SOS compliance would limit the site to 15% impervious cover, the existing AISD/City agreement provides for 20-25%, and current proposal would allow 40% or more impervious cover?*

An undeveloped, private tract at the Bowie location would be allowed 15% impervious cover. The current agreement provides for 25% impervious cover, but that appears to have been intended for undeveloped sites. The current proposal would limit impervious cover to only what currently exists on site (estimated 39.8%) consistent with current regulations, and would prohibit moving existing impervious cover to new areas within the creek or CEF buffers.

*Please provide more detail/accounting on the arrangement for mitigating impervious cover. What will be the final total impervious cover for the tract calculated as a percent of net site area?*

No mitigation is currently proposed because it would not be required by current code since AISD has agreed to provide SOS water quality treatment even if final surveys find that impervious cover exceeds 40%.

Final impervious cover will not exceed what exists on site today (estimated 39.8%).

*Are area tracts of land being used to offset existing impervious cover on the Bowie High School site? If yes, which sites and are they secured? Are the transfer credits for the sites available or have they already been dedicated?*

No, AISD is considering acquiring adjacent tracts to use for irrigation for the proposed SOS water quality treatment. There are no transfers proposed. Transfers within the Barton Springs Zone are prohibited by current code and the current agreement with AISD..


*Council's resolution provided for including the Travis Country tract for transfer of impervious cover for AISD and there appeared to be an understanding that AISD and City staff agreed the Travis Country tract is suitable for transfer of development rights within the Barton Springs Zone. Why is the agreement/exhibit without reference to this tract of land?*

Council's Resolution No. 20170420-028 directs staff to negotiate an agreement with AISD "for the purpose of facilitating the expansion and redevelopment of Bowie High School." It goes on to direct that the agreement should include "[a]n option for transferring development rights from one or more parcels in Travis County to Bowie High School in a manner that is beneficial to AISD and the City[.]" The Travis Country tract was not included in the agreement because a transfer of development rights is not necessary to facilitate the expansion and redevelopment of Bowie High School proposed by AISD. City and AISD staff determined that the project can comply with current City SOS water quality requirements and all other current watershed regulations, thus mitigation is unnecessary. Please see the June 12, 2017 memo from Interim Assistant City Manager Hensley to Council for additional detail.



## MEMORANDUM

**TO:** Mayor and Council Members

**FROM:** Sara Hensley, Interim Assistant City Manager 

**DATE:** June 12, 2017

**SUBJECT:** Update Regarding Agreement with Austin Independent School District Regarding Bowie High School (Council Resolution 20170420-028)

Resolution 20170420-028 initiated a process to amend the City's Land Development Standards Agreement with Austin Independent School District (AISD) to facilitate the expansion and redevelopment of Bowie High School. At the time of the April 20, 2017 resolution, AISD believed it would need to transfer impervious cover from their Travis Country property to use as mitigation for excess impervious cover at Bowie High School.

Subsequent analysis of the project by AISD and City staff has determined that Bowie can be redeveloped in compliance with the City's current environmental regulations contained in the Barton Springs Zone Redevelopment Exception (City Code section 25-8-26), making the transfer of impervious cover unnecessary for the expansion of Bowie High School. Consequently, a less complicated agreement with AISD to allow use of 25-8-26 for the redevelopment of Bowie High School will be presented to Council for consideration on June 22<sup>nd</sup>. The agreement will include a requirement for beneficial use of stormwater, as requested by public stakeholders.

AISD remains interested in a broader amendment to the Land Development Standards Agreement (LDSA) to allow the transfer of impervious cover to facilitate future school redevelopment projects within the Barton Springs Zone. Staff from the Office of Real Estate Services, Law and Watershed Protection Departments are working with AISD to develop an amendment to the LSDA to be presented to Council at a later date. The amendment would allow transfers of impervious cover from Travis Country and other AISD parcels within the Barton Springs Zone which have been restricted to prevent development. The transfer would require adherence to appropriate conditions to address environmental protection. If you have any questions please contact Chuck Lesniak, Environmental Officer, or Andy Linseisen, Assistant Director, Development Services Department, at your convenience.

**Cc:** Elaine Hart, Acting City Manager  
Bert Lumbreras, Assistant City Manager  
Joe Pantalione, P.E., Director, Watershed Protection Department  
Rodney Gonzales, Director, Development Services Department  
Andy Linseisen, P.E., Assistant Director, Development Services Department  
Chuck Lesniak, Environmental Officer, Watershed Protection Department  
Mitzi Cotton, Law Department



## Council Question and Answer

**Related To**

Item #62

**Meeting Date**

June 15, 2017

### Additional Answer Information

**QUESTION:** Has this topic in the resolution: “City boards and commissions, including terms of Planning Commission members,” already been treated by the Board and Commissions Transition Taskforce? 2) What were their findings and what is left for this commission to explore? 3) Has this type of commission existed in the past for the City? If so, please provide a copy of their work products. 4) Please provide context for the establishment of this commission at this juncture. COUNCIL MEMBER ALTER'S OFFICE

**ANSWER:**

- (1) Has this topic in the resolution: “City boards and commissions, including terms of Planning Commission members,” already been treated by the Board and Commissions Transition Taskforce?

The Board and Commissions Transition Taskforce, in 2014, deliberated whether to merge the Planning Commission with the Zoning & Platting Commission and looked at possible re-allocation of workload. The specific issue of “terms of Planning Commission members” does not appear to have been considered.

- (2) What were their findings and what is left for this commission to explore?

Findings are included in their final report at the following link:  
<http://www.austintexas.gov/edims/document.cfm?id=209716>

Directing general and/or specific areas of inquiry would be the province of Council via resolution.

Previous discussions/questions relating to “terms for Planning Commission members” have highlighted the issue that the Planning Commission terms (unlike almost all other boards/commissions) are set in Article X of the City Charter rather than in the Code. The Charter requirement is for a fixed 2-year term and for a stagger. With the unique situation of an entirely new 10-1 council being sworn in at the same time in 2014, the stagger does not now exist. Because the Planning Commission term is contained in the Charter rather than the Code, the terms do not run in consonance with the terms of appointing council members.

- (3) Has this type of commission existed in the past for the City? If so, please provide a copy of their work products.

Yes. Attached are older resolutions from 1997, 1983, 1993, and 2001 establishing Charter Review Commissions.

The most recent have been a Charter Review Commission established by Council Resolution 20110804-028 to propose ballot items for the 2012 election relating to single-member district representation, and a Charter Review Commission established by Council Resolution 20070405-029 to propose ballot items for the 2008 election also relating to geographical representation for election for council members.

Those resolutions are at the following links:

Resolution 20110804-028 - <http://www.austintexas.gov/department/city-council/2011/20110804-reg.htm#028>

Resolution 20070405-029 - <http://www.austintexas.gov/department/city-council/2007/20070405-reg.htm#029>

Historically, in Austin as well as in other similarly-situated home rule cities operating under charters, charter review commissions are constituted every several years to make “technical” recommendations and “substantive” recommendations to Council for possible inclusion on an upcoming ballot so that the electorate can vote whether to amend the existing charter. Some charters contain a provision for mandatory constitution of a commission at designated time intervals, but the City of Austin Charter does not. “Technical” recommendations involve provisions which have been superseded by state law or judicial interpretation, which contain obsolete references to state statutes, or which have been rendered meaningless due to passage of time (i.e. transition sections). Adoption of technical recommendations do not make any actual change in the prevailing law. Instead, they merely remove from the charter all provisions which are directly misleading because they conflict with superior authority, or which are clutter. In contrast, “substantive” recommendations are those which would actually result in some change in the city’s governing law.

The following link is to materials provided by the National League of Cities, which contains background information on charter review commissions: <http://mrsc.org/getmedia/64cb955c-fb66-4fb9-9f71-e21c9ce257d5/chartercommissions.pdf.aspx>

As previously provided in (2) above, the final report of the 2012 Charter Review Commission can be found at the following link:

<http://www.austintexas.gov/edims/document.cfm?id=209716>

We have not as yet been able to locate a final report from the 2008 Charter Review Commission. A description of Council action limiting the scope of study, number of members, and method for expansion of scope can be found at the following link:

<http://www.austintexas.gov/department/city-council/2007/20070405-reg.htm#029>

(4) Please provide context for the establishment of this commission at this juncture

The Law Department and the City Clerk’s Office collaborated to prepare a draft resolution in response to an Item from Council (IFC) from Council Member Pool’s office. We are unable to provide further context. The timing is likely to be related to the general practice of a Charter Review Commission working about a year out from anticipated election. The next general municipal election will be November 2018.

**RESOLUTION** 970814-29

**BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:**

The City Council establishes a Charter Revision Committee composed of nine members for the sole purpose of advising the City Council whether the City Charter should be amended to provide for changes in the method of the election of Council Members with emphasis on election from single-member districts. Members of the Committee shall be representative of the community and shall be appointed by the Council on a consensus basis. The Committee shall begin its work as soon as all members are appointed but no later than September 8, 1997, and shall work expeditiously with the goal of proposing appropriate amendments for consideration by the City Council. The City Manager shall provide appropriate resources to the Charter Revision Committee and televise all Committee meetings.

**ADOPTED:** August 14, 1997

**ATTEST:** James E. Aldridge  
James E. Aldridge  
City Clerk

JS/rjn  
0814cha.res

**SUMMARY OF RECOMMENDATIONS  
CHARTER REVISION COMMITTEE  
CITY OF AUSTIN**

**JANUARY 15, 2000**

The Charter Revision Committee recommends to the Austin City Council that a Charter Election be held in May, 2000 in order for the voters to vote on the following recommendations:

1. That the City Council consist of a mayor elected at large and ten members elected from neighborhood (single member) districts; that all district members have three year terms and must live in the districts from they are elected for at least six months prior to the filing deadline for the election in which they are candidates; that one third of the district representatives be elected each year except for the first year of implementation when all district candidates will be elected with terms for each district determined by lot; that the number of districts be increased to twelve when the population of the city increases by 25,000 above the population determined by the year 2000 Federal decennial census.
2. That the term of office of the Mayor be four years.
3. That an independent Redistricting Committee be appointed by the City Council to perform the decennial and interim redistrictings.
4. That, in the year preceding the year in which the Federal decennial census is conducted, the City Council appoint a Charter Revision Committee to examine and recommend on possible changes to the method of election of the City Council.
5. That Instant Runoff Voting be used to resolve general elections in which no candidates receives the required majority of the votes cast and that this item be a separate ballot item from the above.

## INTRODUCTION

The Charter Revision Committee was established by the Austin City Council in August, 1997. Its charge was to advise the City Council as to whether the City Charter should be amended to provide for changes in the method of election of Council members, with emphasis on election from single member districts. Because of changes in the membership of the Committee and an intervening Charter amendment election in November, 1997, the Committee did not start meeting regularly until November, 1998. Since that time, it has met at least monthly, frequently with election experts, consultants, and people from other cities and has held five focus groups and seven public hearings with the citizens of Austin. (See appendix A for details).

Although the charge to the Committee focussed on election of the City Council from single member districts, the Committee looked at a broad spectrum of possible methods of election as it became apparent that the growth of the city both in area and in population and the dispersion of minority populations into the general population could have an impact on the dynamics of any system of election. The deliberations of the Committee were somewhat hampered by uncertainty about the dispersion of minority populations throughout the community as the most reliable data available is 1990 census data. Additionally, in the course of its research, the Committee found that state law precludes the use of a number of election systems which might address the issue of dispersion of minorities – whether ethnic or opinion groups – throughout the city. These include: at large elections without places; proportional voting; cumulative voting; and multimember districts with at large elections within the districts. In other words, the choices available to the city at the present time are the current system of at-large city wide election by place; single member neighborhood districts; multi member districts with places and mixed systems involving a combination of districts and at large Council members, again all being elected by place.

In addition to the system of election to the City Council, the Committee also considered related issues such as length of term of office, whether or not the Council should be elected on a staggered basis, term limits, when elections should be held, the need for periodic review of the election system, who should be responsible for drawing the lines of districts and later redistricting, and the possible use of instant runoff voting.

An issue that the City Council will have to face is the date on which to hold a Charter election. While the Committee believes that the election should be held in May, 2000 prior to the drawing of district lines, a number of people have expressed the view that they could not vote on a Charter amendment unless they knew where district lines would be drawn. We believe that our recommendation for a Redistricting Committee may help to assuage some of these concerns. The alternative would be to hold the Charter election in May, 2002 after the year 2000 census data has been received and district lines can be drawn. We believe that this approach could focus the voters on possible district boundaries rather than on the issue itself, to change the way we elect Council members. This would also subject the city to the large expense associated with drawing district lines with no assurance that the plan would pass. It would also delay implementation to May, 2003 if the plan is passed.

The Committee wishes to acknowledge the assistance of Kathy Donellan, Executive Assistant in the City Manager's Office; John Steiner Assistant City Attorney; and Ryan Robinson, Demographer, PECSD. They have provided the Committee with technical and administrative support without which we could not have completed our work. We also thank the many citizens of Austin who testified at the public hearings and attended the focus groups.

Barbara S. Hankins, Chair  
Charles Miles, Vice Chair  
Raymond Chan, Secretary  
Robert Chapa  
Jim Harrington

Fred Lewis  
Mark Anthony McCray  
Eddie Rodriguez  
Diane Spencer

## Detailed Recommendations

### Recommendation #1

**That the City Council consist of a mayor elected at large and ten members elected from neighborhood (single member) districts; that all district members have three year terms and must live in the districts from they are elected for at least six months prior to the filing deadline for the election in which they are candidates; that one third of the district representatives be elected each year except for the first year of implementation when all district candidates will be elected with terms for each district determined by lot; and that number of districts be increased to twelve when the population of the city increases by 25,000 above the population determined by the year 2000 Federal decennial census.**

On a vote of 5 in favor, 3 against, with 1 abstention, the Committee voted to recommend a City Council of 12 neighborhood district representatives (later amended to 10 districts with an increase to 12 with increasing population) and a mayor for the following reasons:

- a. There is common agreement that the current system needs to be changed. Almost no one who attended our meetings, focus groups or public hearings defended the current system. Criticisms included the rapid growth of the city which precludes Council members from knowing the concerns of the various parts of the city; the high cost to candidates of getting elected; and the feeling on the part of minority voters that people elected under the so-called "gentlemen's agreement" are dependent on votes from the majority population and, thus, may not represent the interests of minorities much less neighborhoods, areas of the city, subgroups or interest groups. In the course of its research, the Committee learned that Austin is the only large city in Texas that elects its City Council purely at large. It is also one of a small handful of larger cities nationally to do so. Austin also has the smallest City Council of any city with which we might compare. It is the only city which has three year terms of office. (Appendices C and D)
- b. The need for City Council members to be accountable to a constituency was the highest ranked criteria by all focus groups (Appendix B) and was endorsed at all public hearings. Participants agreed that any system adopted should assure such accountability.
- c. The desire for geographic representation appears to be city-wide. Committee members were struck by the number of people from throughout the city who appear to be angry and alienated because they feel that the needs of their areas are not being heard or attended to by the City staff or City Council. An analysis of the residences of City Council members who were elected in the past twelve years shows that the majority of Council members have lived in central and west Austin and that all parts of south Austin, east Austin, southwest Austin, and north west Austin have been underrepresented.
- d. Smaller in area, more numerous neighborhood districts allow candidates of limited means to compete more successfully for election. They also may increase voter participation since residents of each district will feel that their votes will have more impact on who is elected. In addition, a larger number of neighborhood districts will allow for population growth – that is, the number of residents per district will not be excessive, even in the face of a growing population. While the final recommendation of the Committee is for ten neighborhood districts, the need to accommodate population growth is reflected in the suggested increase to twelve districts when the City Council decides that the city has grown by 25,000 people above the number determined by the year 2000 Federal decennial census. The city of Houston's charter contains a similar provision allowing for the automatic addition of two additional districts when a certain population level is reached.

e. There is a strong desire on the part of meeting participants for greater diversity on the City Council. This diversity encompasses geographic, ethnic, and political differences. We asked the participants in our focus groups to rank a number of criteria against which one can compare election systems. After accountability to a constituency, participants ranked representation of geographic areas, representation of ethnic groups, and representation of various points of view, as their highest priorities. (Appendix B.). Participants in the public hearings agreed with these priorities.

f. According to a 1993 analysis by the City Demographer's office, while it is mathematically possible to draw viable districts with fewer than 12, at least 12 single member neighborhood districts would be required to more fairly represent the demographics of Austin. While many members of the minority community expressed a desire to "get beyond race," the Voting Rights Act of 1964 requires that the voting strength of ethnic minority populations may not be diluted. It is estimated that a system of 12 single member districts would likely result in the election of at least one candidate preferred by the African American community and at least two candidates preferred by the Hispanic community.

g. Although Austin is unique in having three year terms of office for members of the City Council, there was little sentiment to change them. It is the belief of many that two year terms require too frequent elections and put too much pressure on Council members since they must raise campaign funds and begin campaigning not long after they are elected. It is also believed that the added year of experience allows Council members to function more effectively.

A minority of Committee members supported a City Council of 11 members, seven elected from single member districts, three Council members and the mayor elected at large from places. Arguments in favor of this system included:

a. A pure single member district system can lead to parochialism on the Council. At least some members of the Council, in addition to the mayor, should have a more city wide or global view.

b. Some minorities, such as Asian Americans, are geographically quite diverse. Under a pure single member district system, they would be unable to influence any member of the Council. If at least some members are elected at large, these minorities may have influence on the Council members elected city-wide since they will be part of the electorate for those members.

c. Some people have expressed the desire to vote for more than one Council person in addition to the mayor. They believe that Council members who do not rely on them for votes will unsympathetic to their needs which may or may not be supported by their district representative.

d. In order for minorities to retain their power under a single member district system, they may be forced to remain somewhat racially segregated. This is contrary to what is actually happening in the city and, in fact, is contrary to what is considered by many to be a positive trend toward greater dispersion of all minorities into the general population.

Two other plans were proposed but did not receive a majority of the votes. The first was a plan with six dual member districts with district representatives elected from places and a mayor elected city-wide. This plan would have allowed people to vote for more than one representative and might allow for diversity of representation from each district. The second plan consisted of nine single member districts, three "super" districts each encompassing three of the single member districts and a mayor elected city-wide. This plan also would allow for people to vote for more than one representative. Supporters of these plans now favor the majority recommendation.

## **Recommendation #2**

### **That the term of office of the Mayor be four years.**

The Committee voted unanimously to recommend that the term of office of the Mayor be increased from three to four years. There was concern among Committee members that there would be a disproportionate impact on the elections of district representatives in the year in which the Mayor is elected. The four year term would, at least, shift the impact from one set of district representatives to another. It is not uncommon, in other cities, for mayors to have a different length of term from other members of their City Councils.

## **Recommendation #3**

### **That an independent Redistricting Committee be appointed by the City Council to perform the decennial and interim redistrictings.**

The Committee voted 6-0 (three members absent) to recommend the following provisions for such a committee.

The City Council should create an independent redistricting body at the time of each decennial census and at other times when it is necessary to redistrict the city (such as large annexations, districts declared invalid or other extraordinary circumstance). The Committee shall consist of 13 members, each member of the City Council making one appointment. The seven sitting City Council members would each appoint a member of the first Committee and the Committee itself would select the other six.

Restrictions on those who could serve on the Redistricting Committee:

Committee members would not be permitted to hold or have held any public office, be a City of Austin employee, a paid political consultant or a paid campaign worker within two years prior to selection;

Or be a relative (to the third degree of affinity or consanguinity) of an Austin City Council member; or and employee of an Austin City Council member, of a commissioner or county officeholder from Travis County; or of a state legislator; or U. S. representative;

Or be or have been a registered lobbyist at any city, county or state within the last two years.

Committee members would not be permitted to hold a seat on the Austin City Council for three years after the effective date of the plan;

Or be a paid or registered lobbyist for three years after the effective date of the plan.

The Committee would be appointed not later than February 1st of each year ending in one. Its work would be required to be completed within six months of receipt of the Federal decennial census data.

Criteria for Redistricting Lines:

Districts will be of equal population with a maximum deviation from the average of no more than 5%; be compact and contiguous; and comply with the intent of the Voting Rights Act. No district shall be drawn for the purpose of favoring a political party, incumbent Council member or other person or group or for the purpose of augmenting or diluting the voting strength of a language or racial minority group.

In redistricting, no use should be made of data relating to the political affiliation of registered voters.

The Committee makes this recommendation because of concerns raised by some citizens as to who would be responsible for drawing the districts. This concern seems to exist, at least in part, because of unhappiness with the way that school district boundaries have been drawn as well as because of the general alienation discussed above. Although districting can never please everyone, the use of a device such as a redistricting committee as described above can remove some of the perception that the process of drawing lines is "political." Both El Paso and Dallas provide for redistricting commissions in their charters.

#### **Recommendation #4**

**That in the year preceding the year in which the Federal decennial census is conducted, the City Council appoint a Charter Revision Committee to examine and recommend on possible changes to the method of election of the City Council.**

With the rapid growth and changing demographics of the city, it is very possible that any election system will become obsolete. It is also possible that the Texas Legislature will make changes to the Election Code which would permit other, possibly more appropriate, election systems. The Committee believes that a thorough review every decade is a way to insure that the needs of the city can continue to be met. This process also structures a way for continuing evaluation and input by Austin citizens about election methods.

#### **Recommendation #5**

**That Instant Runoff Voting be used to resolve general elections in which no candidate receives the required majority of the votes cast and that this item be a separate ballot item from the above recommendations.**

Instant Runoff Voting (IRV) is a method of voting devised to eliminate the need for runoffs when no candidate receives the required percentage of votes to be elected (in Texas this is more than 50% of the votes cast). Under IRV, voters rank as many candidates as they wish by writing 1, 2, 3, etc. next to their names instead of voting for just one candidate. If any candidate receives a majority of the first choice votes, the candidate is elected. If no one receives a majority, the candidate with the fewest votes is eliminated, and votes cast for that candidate are transferred to the next choice candidate listed on the ballot. This process continues until one candidate receives a majority of the vote. This system is used in Europe and by some nongovernmental organizations. This method allows for election of people who get the most votes, rather than postponing the run-off for three weeks.

The advantage of this system is that it eliminates the very substantial cost both to the candidates and to the city of a runoff election. Also, the number of voters who vote in run off elections generally drops significantly from the number of voters in the general election. In theory, candidates will have to make more broad based appeals since they may have to depend on second or third place votes to get elected. It also can solve the problem of groups of voters splitting their votes among similar candidates, allowing a candidate with only minority support to win.

Because this is a novel recommendation, we suggest that it be a separate ballot item from the other proposals so that voters can clearly indicate whether they wish to incorporate this voting method into the City Charter.

**Term Limits**

The Committee considered the question of the term limit provisions currently in the City Charter. It decided not to make any recommendations on this issue although we recognize that the provisions are quite weak. This is an issue that the Council might wish to consider. There did not appear to be a groundswell of opinion on this subject at the various public meetings we held.

## **Appendix A**

### **Meetings Held by the Charter Revision Committee**

|                    |   |
|--------------------|---|
| November 19, 1998  | Organizational Meeting  |
| December 10, 1998  | George Korbel, Attorney, Texas Rural Legal Aid  |
| January 12, 1999   | Robert Wilson, Professor, LBJ School of Public Affairs, University of Texas at Austin   |
| February 9, 1999   | Rob Richie, Executive Director, Center for Voting and Democracy, Washington D.C.<br>Ryan Robinson, City Demographer, City of Austin                                     |
| February 24, 1999  | Committee Deliberations   |
| March 9, 1999      | Jay Greene, Professor of Government, University of Texas at Austin<br>Terrell Blodgett, Professor Emeritus, LBJ School of Public Affairs, University of Texas at Austin |
| April 13, 1999     | Juan Garza, Former City Manager, Corpus Christi TX  |
| May 11, 1999       | Chandler Davis, Professor of Government, Rice University, Houston TX  |
| Jun 8, 1999        | John Steiner, City Attorney's Office<br>Committee Deliberations   |
| July 13, 1999      | Committee Deliberations   |
| September 28, 1999 | Committee Deliberations   |
| October 12, 1999   | Committee Deliberations   |
| October 26, 1999   | Committee Deliberations   |
| November 4, 1999   | Committee Deliberations   |
| November 18, 1999  | Committee Deliberations   |
| December 6, 1999   | Committee Deliberations   |
| December 21, 1999  | Committee Deliberations   |
| January 13, 2000   | Committee Deliberations   |

### **Focus Groups Held By the Charter Revision Committee**

|                |                                    |
|----------------|------------------------------------|
| March 23, 1999 | Asian American Community           |
| March 30, 1999 | Civic Groups                       |
| May 25, 1999   | Umbrella Neighborhood Associations |

|                |                            |
|----------------|----------------------------|
| August 2, 1999 | African American Community |
| August 3, 1999 | Hispanic Community         |

**Public Hearings Held By the Charter Revision Committee**

|                 |                                     |
|-----------------|-------------------------------------|
| August 9, 1999  | Hampton Branch Library, Oak Hill    |
| August 16, 1999 | University Hills Public Library     |
| August 17, 1999 | Parque Zaragosa Recreation Center   |
| August 23, 1999 | Rosewood Recreation Center          |
| August 24, 1999 | Spicewood Springs Branch Library    |
| August 30, 1999 | Yarbrough Branch Library            |
| August 31, 1999 | South Austin Senior Activity Center |

## Appendix B

### Ranking of Election System Characteristics By Focus Groups

|  | Asian-Am<br>12 responses | Civic Orgs<br>4 responses | Neigh Orgs<br>5 responses | African-Am<br>3 responses | Hispanics<br>3 responses | Avg.<br>responses | Rank |
|--|--------------------------|---------------------------|---------------------------|---------------------------|--------------------------|-------------------|------|
| Accountability to a constituency                 | 1.67                     | 2.00                      | 1.20                      | 2.00                      | 2.33                     | 1.84              | 1    |
| Ability to vote for more than one Council member | 4.58                     | 5.25                      | 4.80                      | 3.00                      | 7.33                     | 4.99              | 5    |
| Cost of elections to candidates                  | 6.33                     | 5.75                      | 4.40                      | 6.33                      | 5.00                     | 5.56              | 6    |
| Representation of ethnic groups                  | 2.75                     | 5.50                      | 4.40                      | 5.33                      | 3.33                     | 4.26              | 3    |
| Representation of geographic areas               | 4.17                     | 2.50                      | 5.80                      | 1.33                      | 3.00                     | 3.36              | 2    |
| Representation of various points of view         | 3.75                     | 2.75                      | 4.20                      | 5.00                      | 6.67                     | 4.47              | 4    |
| Ease/understandability of election system        | 6.83                     | 5.25                      | 7.20                      | 6.67                      | 6.33                     | 6.46              | 7    |
| Cost to administer elections                     | 8.00                     | 8.25                      | 7.40                      | 7.00                      | 7.00                     | 7.53              | 9    |
| Number of elections in a year                    | 6.92                     | 7.75                      | 5.60                      | 8.33                      | 4.00                     | 6.52              | 8    |

**Appendix C**  
**Comparison of Austin with Larger Texas Cities**

|                                 | <b>Houston</b>  | <b>Dallas</b>  | <b>San Antonio</b>                           | <b>Fort Worth</b>                           | <b>El Paso</b>                              | <b>Corpus Christi</b>  | <b>Austin</b>                    |
|---------------------------------|---|--|--|---|---|--|----------------------------------|
| <b>Population (7/1/96 est.)</b> | 1,744 mill  | 1,053 mill   | 1,067 mill                                   | 480 K                                       | 600 K                                       | 280 K  | 540 K                            |
| <b>Size of Council</b>          | 14 + Mayor in 1980<br>If pop exceeds 2.1 mill, goes to 16 + Mayor | 14 + Mayor   | 10 + Mayor                                   | 8 + Mayor                                   | 8 + Mayor                                   | 8 + Mayor  | 6 + Mayor                        |
| <b>Selection Method</b>         | 5 at large + Mayor citywide<br>9 from single members districts    | Mayor at large<br>14 single member districts           | Mayor at large<br>10 single member districts | Mayor at large<br>8 single member districts | Mayor at large<br>8 single member districts | Mayor – at large – majority vote<br>3 at large-plurality vote (at least 12% of total)<br>5 single member districts – majority vote | All at large in places           |
| <b>Pop/District</b>             | 194,000   | 75,000   | 106,000                                      | 60,000                                      | 75,000                                      | 35,000   | N/A                              |
| <b>Terms of Office</b>          | 2 years   | Mayor 4 yrs.<br>Max 2 terms Council 2 yrs, max 4 terms |  | 2 years                                     | 2 years                                     |  | 3 years staggered max of 2 terms |

|                               | Houston   | Dallas   | San Antonio   | Fort Worth  | El Paso  | Corpus Christi   | Austin   |
|-------------------------------|---|--|---|---|--|--|--|
| <b>Districting</b>            | City Council Review in each year in which a general city election is to be held | City Council with rec. from Redistricting Commission | City Council  | City Council  | City Council with rec. from Redistricting Commission | City Council   | City Council   |
| <b>Must Live in District?</b> | yes   | yes – at least 6 mos.                                | yes – at least 6 mos. – 1 year in the city                    | yes – at least 6 mos.- 1 year in the city           | yes – at least 6 mos.                                | yes  | At least 6 mos. in the city and 12 mos. in the state |
| <b>Council Salaries</b>       | Member \$42,800<br>Mayor \$160,500 (strong mayor system)                        | Member/ Mayor \$50 per diem for each meeting         | Member/ Mayor \$20/meeting, \$700/mo exp. \$400/mo car allow. | Member/ Mayor \$75/meeting \$2500/year expense all. | Member \$17,000<br>Mayor \$27,500                    | Member \$6,000<br>Mayor \$9,000<br>Total of \$3,400 for Council travel | Member \$30,000<br>Mayor \$35,000                    |
| <b>Staff/Council Member</b>   | 5/member<br>12 mayor  | 2/member<br>5 mayor                                  | 3-4/member<br>5 mayor   | 1/member<br>4 mayor                                 | 2/member<br>5 mayor                                  | 7 total in City Clerk's office which also supports Council             | 2/member<br>4-5 mayor                                |

**Appendix D**  
**Form of Election**  
**Texas Large Cities and Other Cities**  
**of Comparable Size to Austin**

At Large With Places  
Austin

Pure At Large  
Seattle (proportional representation)

Single Member Districts  
Dallas – 14 districts, 75,000 pop./district  
San Antonio – 10 districts, 106,000 pop/district  
Fort Worth – 8 districts, 60,000 pop/district  
El Paso – 8 districts, 75,000 pop/district  
Milwaukee – 16 districts, 37,000 pop/district  
Cleveland – 20 districts, 25,000 pop/district

Mixed Systems  
Houston – 5 at large + Mayor and 9 districts, 194,000 pop/district  
Corpus Christi – 3 at large + Mayor and 5 districts, 35,000 pop/districts  
Boston – 3 at large + Mayor and 9 districts, 62,000 pop/district  
Washington DC – 4 at large + Mayor and 9 districts, 68,000 pop/district  
Nashville – 5 at large + Mayor and 35 districts, 15,000 pop/district

## **Appendix E**

### **Demographic Summary**

The City of Austin's population has increased from 465,000 to an estimated 631,000 since the 1990 census, a more than a 35% increase. Because of this high growth, we cannot be completely accurate in what we know about the city's demographics. We are more comfortable with total numbers than we are with where people are located.

Most big cities are majority minority. Austin, as yet, is not although it may become so in the future.

Austin growth is caused by rapid increase in its Hispanic population and substantial in-migration of Anglos and Asian-Americans. About half of Austin's growth can be attributed to in-migration. Most of the rest of the growth is from natural increase of births over deaths. A small percentage is from annexation. (28,000 in 1997 or about 4% of the total population was by far the greatest increase due to annexation).

The proportion of African Americans in the Austin population has been the approximately the same for 40 years - 11.5%

The Hispanic population is now 27.3 % or, possibly a little higher, percentage of Austin's population. This population is expected to continue to increase faster than the general population.

Asian Americans are currently approximately 4% of the population but this population is growing rapidly and is expected to reach 6% after the turn of the century, possibly by 2010. Asian Americans are the most geographically dispersed minority population.

We seem to be becoming less racially segregated primarily due to economic mobility. Economic status sometimes appears to be more of a factor than race or ethnicity in where people are living. African Americans are currently more residentially segregated than Hispanics. Asian Americans are least residentially segregated. As Austin becomes more diverse, it will become increasingly difficult to draw districts that are homogeneous in race or ethnicity.

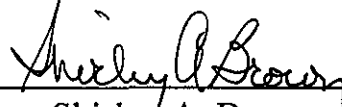
**RESOLUTION NO. 010405-36**

**BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:**

The City Council establishes a Charter Revision Committee composed of not less than nine members for the purpose of advising the City Council on proposed amendments to the City Charter. Members of the Committee shall be representative of the community and shall be appointed by the Council on a consensus basis. The Committee shall begin its work as soon as all members are appointed and shall work expeditiously with the goal of recommending the appropriate amendments for consideration by the City Council for the Charter amendment ballot. The City Manager shall provide appropriate resources to the Charter Committee and televise all Committee meetings.

**ADOPTED:** April 5, 2001

**ATTEST:**

  
Shirley A. Brown  
City Clerk

930401-55

**RESOLUTION**

**BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:**

That the City Council of the City of Austin hereby establishes a Charter Revision Committee composed of nine (9) members for the purpose of recommending to the City Council whether certain provisions of the City Charter should be revised. The Mayor and each Councilmember may appoint one member to the Committee with the remaining members appointed by a majority vote of the City Council. New Councilmember(s) elected to the City Council, will automatically have one appointment to the Charter Revision Committee. If the additional appointments lead to an even number of Committee members, one additional member shall be appointed on a consensus basis. The Charter Revision Committee shall be appointed and operational by April 15, 1993, and shall work expeditiously with the goal of proposing amendments to the City Charter for consideration by the City Council by November 1, 1993, in accordance with the schedule attached hereto; and

**BE IT FURTHER RESOLVED:**

That the City Manager is directed to provide the appropriate resources to the Charter Revision Committee and televise all Charter Revision Committee meetings.

ADOPTED: April 1, 1993 ATTEST: James E. Aldridge  
James E. Aldridge  
City Clerk

#55

# Timeline For Amendments

to

City Charter

- \* Requires election on uniform election dates
- \* Assumes first available date of January 1994
- \* Assumes use of Citizens Committee to develop amendments

| Date                 | Action                                | By                | Remarks   |
|----------------------|---------------------------------------|-------------------|---|
| April 8, 1993        | Proposed amendments                   | City Staff        | Staff proposals to City Manager                     |
| April 15, 1993       | Proposed amendments                   | City Manager      | Staff proposals to City Council                     |
| April 15, 1993       | Appoint Citizen Committee             | City Council      | Council appointments include support and directions |
| May - September 1993 | Public Hearings                       | Citizen Committee |   |
| October 1993         | Presentation to City Council          | Citizen Committee |   |
| November 1993        | Determine amendments & order election | City Council      | Must be 45 days before election                     |
| December 1993        | Publish amendments                    | City Clerk        | Twice at least 2 weeks before election              |
| January 1994         | Election                              | Voters            | Accept/reject amendments<br>AISD Election           |

930617-34  
RESOLUTION

**BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:**

That the City Council hereby dissolves the Charter Revision Commission established April 1, 1993, and May 6, 1993, and hereby establishes a new Charter Revision Committee composed of fifteen (15) members. The Mayor and each Council Member may nominate two members each to the Committee. The Mayor will nominate a person to serve as chairperson. All appointed Committee members must be approved by a majority of the City Council at its regular meeting of July 1, 1993 and shall work expeditiously with a goal of proposing amendments to the City Charter for consideration by the City Council by November 4, 1993.

**BE IT FURTHER RESOLVED:**

That the City Manager is directed to provide the appropriate resources to the Charter Revision Committee and televise all Charter Revision Committee meetings.

ADOPTED: June 17, 1993.

ATTEST:

*James E. Aldridge*  
James E. Aldridge  
City Clerk

17JUNE93  
CAB

#34

930506-28

R E S O L U T I O N

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:

That the City Council of the City of Austin hereby establishes a Charter Revision Committee composed of nine (9) members with one member appointed by the Mayor and each member of the Council and two additional members appointed by a majority of the Council for the purpose of recommending to the City Council whether certain provisions of the City Charter should be revised. The Charter Revision Committee shall be appointed and operational by April 15, 1993, and shall work expeditiously with the goal of proposing amendments to the City Charter for consideration by the City Council by November 1, 1993, in accordance with the schedule attached hereto; and

BE IT FURTHER RESOLVED:

That the City Manager is directed to provide the appropriate resources to the Charter Revision Committee to include publicity for Charter Revision Committee meetings and public hearings; and

BE IT FURTHER RESOLVED:

That the following are appointed as Charter Revision Committee members:

Joel Bennett by Mayor Pro-Tem Urdy;  
Pat Robbins by Council Member Epstein;  
Malcolm Milburn by Council Member Larson; and  
Robert Mendoza by Council Member Reynolds.

ADOPTED: May 6, 1993 ATTEST: James E. Aldridge  
James E. Aldridge  
City Clerk

06MAY93  
CAB:rjn/17683

# 28

# Timeline For Amendments

to

City Charter

- \* Requires election on uniform election dates
- \* Assumes first available date of January 1994
- \* Assumes use of Citizens Committee to develop amendments

| Date                 | Action                                | By                | Remarks   |
|----------------------|---------------------------------------|-------------------|---|
| April 8, 1993        | Proposed amendments                   | City Staff        | Staff proposals to City Manager                     |
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| November 1993        | Determine amendments & order election | City Council      | Must be 45 days before election                     |
| December 1993        | Publish amendments                    | City Clerk        | Twice at least 2 weeks before election              |
| January 1994         | Election                              | Voters            | Accept/reject amendments<br>AISD Election           |

830505-29  
R E S O L U T I O N

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:

That a Charter Revision Committee be and is hereby established to be appointed by the City Council to consist of at least seven (7) members.

ADOPTED: May 5, 1983. ATTEST: James E. Aldridge  
James E. Aldridge  
Acting City Clerk

ADLR:rs