



# I-35 Capital Express Program

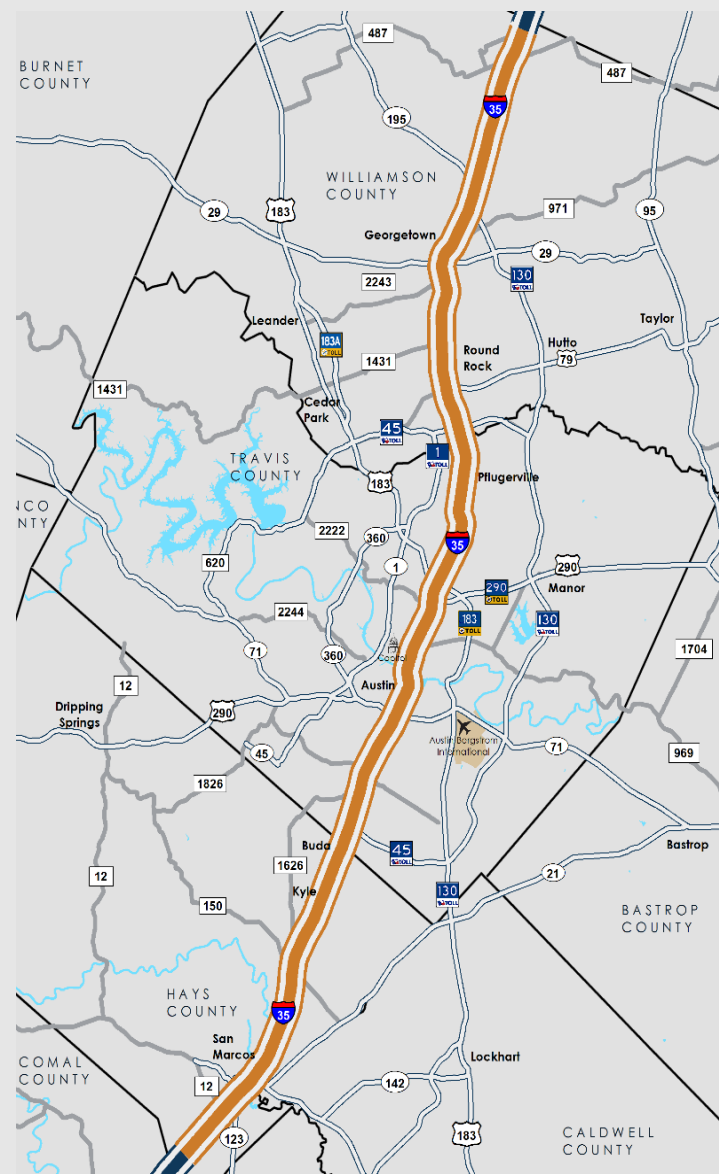
Susan Fraser, P.E.  
Mobility35 Program Manager



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# MOBILITY35 PROGRAM

- A region-wide effort to improve safety and mobility on 79 miles of I-35 through Williamson, Travis and Hays counties including five segments listed on the 100 most congested roadways in Texas.
- Constraints to improving I-35 include:
  - Highly constrained urban environment
  - Need to maintain mobility during construction
  - Need for east/west connectivity
  - Diverse interests
  - Funding
- 30+ projects in Mobility35 Program, including the I-35 Capital Express Program, as part of the region's ongoing transportation system upgrade
  - \$8 billion in construction costs for active or future projects
  - 20+ contracts totaling ~\$90 million in environmental and design



- Optimize the existing roadway
- Enhance safety
- Increase capacity
- Minimize need for additional right of way
- Manage traffic better
- Improve east/west connectivity
- Improve compatibility with neighborhoods
- Enhance bicycle, pedestrian, and transit-user options



I-35 from US 79 to SH 45N (Northbound):  
Braided entrance and exit ramps beam set



I-35 from US 79 to SH 45N (Northbound):  
Braided ramps completed



- Williamson County
  - 4 projects in construction
  - 2 projects in PS&E
  - 4 projects in schematic/environmental
- Travis County
  - 4 projects in construction
  - 1 project in PS&E
  - 3 projects in schematic/environmental
- Hays County
  - 1 project in construction
  - 3 projects in PS&E
  - 1 project in schematic/environmental

<http://www.my35.org/capital.htm>



- **SUP Completed**

- 3 projects
- 4 miles of SUP

- **SUP Under Construction**

- 4 projects
- 10 miles of SUP

- **SUP Under Design**

- 10 projects
- 73 miles of SUP



I-35 from RM 1431 to FM 3406 (Southbound)

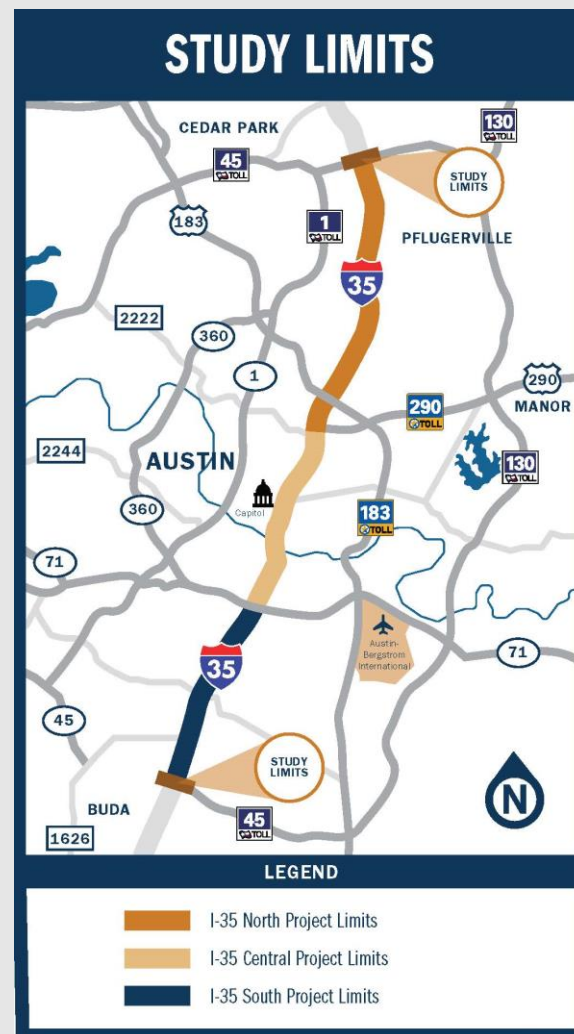


I-35 from Stassney Lane to William Cannon Drive

# **I-35 CAPITAL EXPRESS PROGRAM**



- Three stand-alone projects between SH 45 North and SH 45 Southeast – North, Central and South
  - 28 miles of highway
  - Project design underway for all three projects
- Includes mobility and safety improvements:
  - Non-tolled managed lanes, such as high-occupancy vehicle lanes
    - HOV is lane reserved for vehicles with multiple occupants, including carpools, vanpools and transit vehicles, and first responders
  - Bicycle and pedestrian improvements along frontage roads and east-west crossings





## NORTH

- **Limits:** SH 45 North to US 290 East
- **Details:**
  - Construct one non-tolled managed lane in each direction
  - Reconstruct bridges
  - Improve bicycle and pedestrian paths
- **Estimated construction cost:** \$400 million
- **Anticipated construction start:** 2022





## CENTRAL

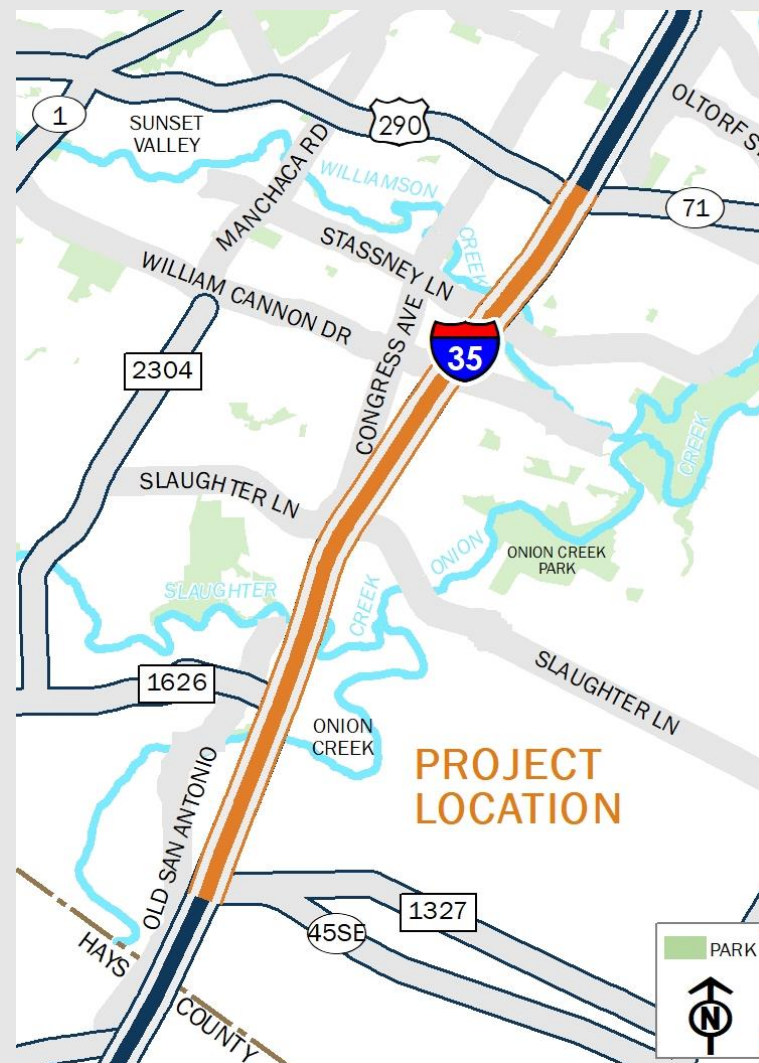
- **Limits:** US 290 East to SH 71
- **Details:**
  - Construct two non-tolled managed lanes in each direction
  - Reconstruct bridges
  - Improve bicycle and pedestrian paths
- **Estimated construction cost:** \$4.9 billion
- **Anticipated construction start:** 2025





## SOUTH

- **Limits:** SH 71 to SH 45 Southeast
- **Details:**
  - Construct two non-tolled managed lanes in each direction
  - Reconstruct bridges
  - Improve bicycle and pedestrian paths
- **Estimated construction cost:** \$300 million
- **Anticipated construction start:** 2022







- **SUP Completed – 2.4 miles**
  - I-35 at 51st Street
  - I-35 at Oltorf Street
- **SUP Under Construction – 8.3 miles**
  - I-35 at Parmer Lane
  - I-35 from Rundberg Lane to US 290 East
  - I-35 from Stassney Lane to William Cannon Drive
- **SUP Under Design – 43.6 miles**
  - I-35 Capital Express North
  - I-35 Capital Express Central
  - I-35 Capital Express South



I-35 at 51st Street



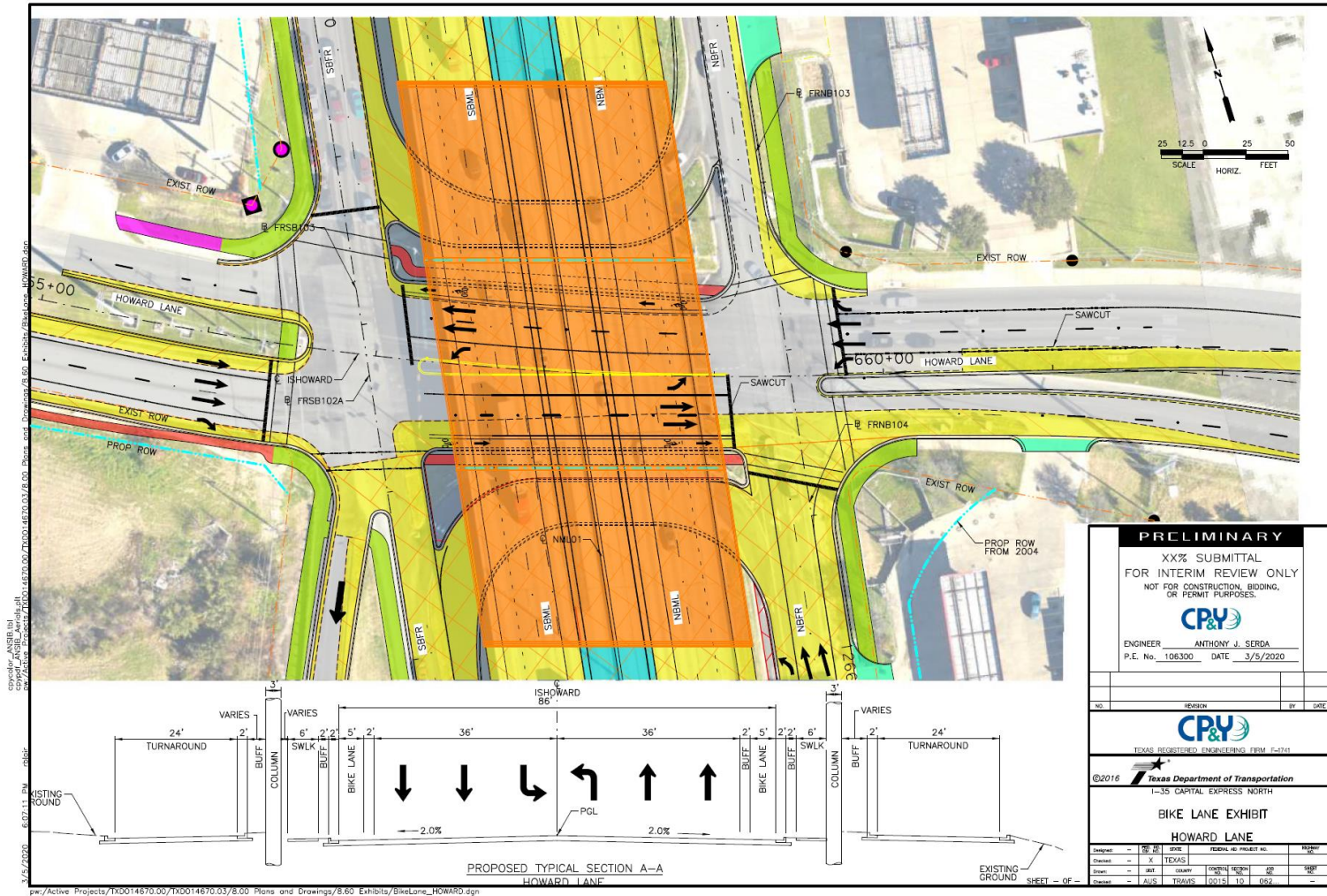
I-35 at Oltorf Street



# I-35 Capital Express Bicycle and Pedestrian Example

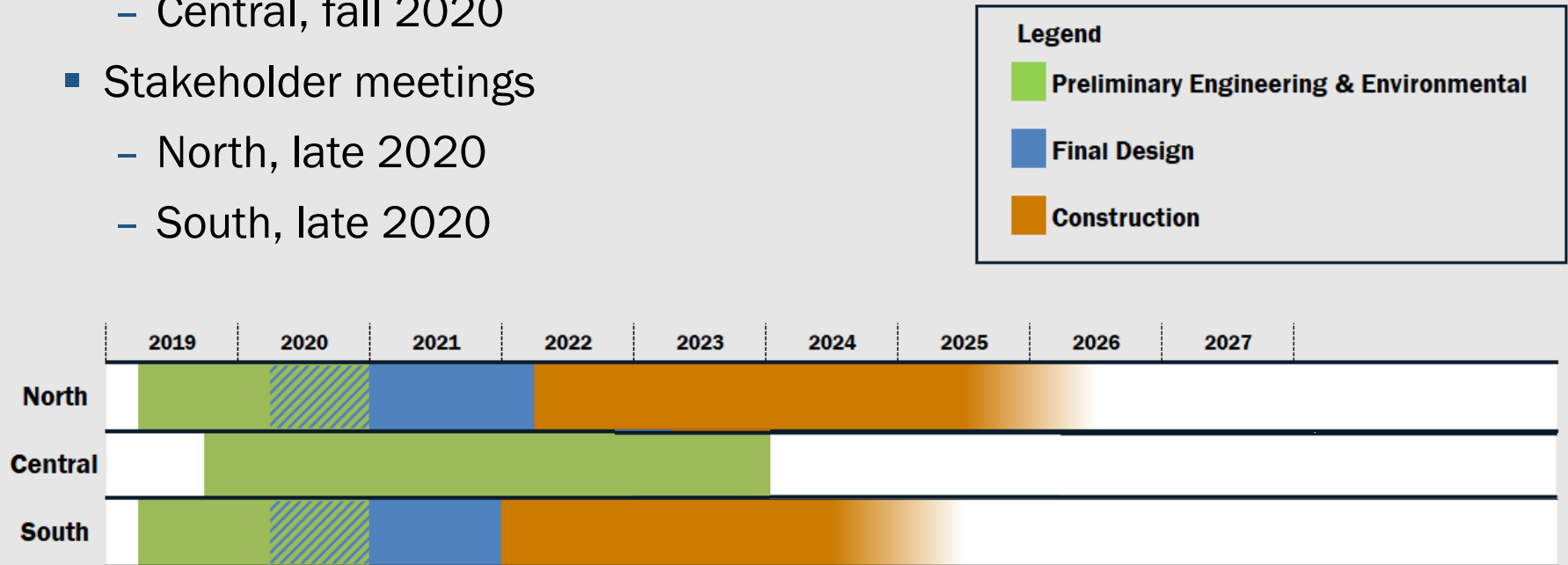


## I-35 at Howard Lane





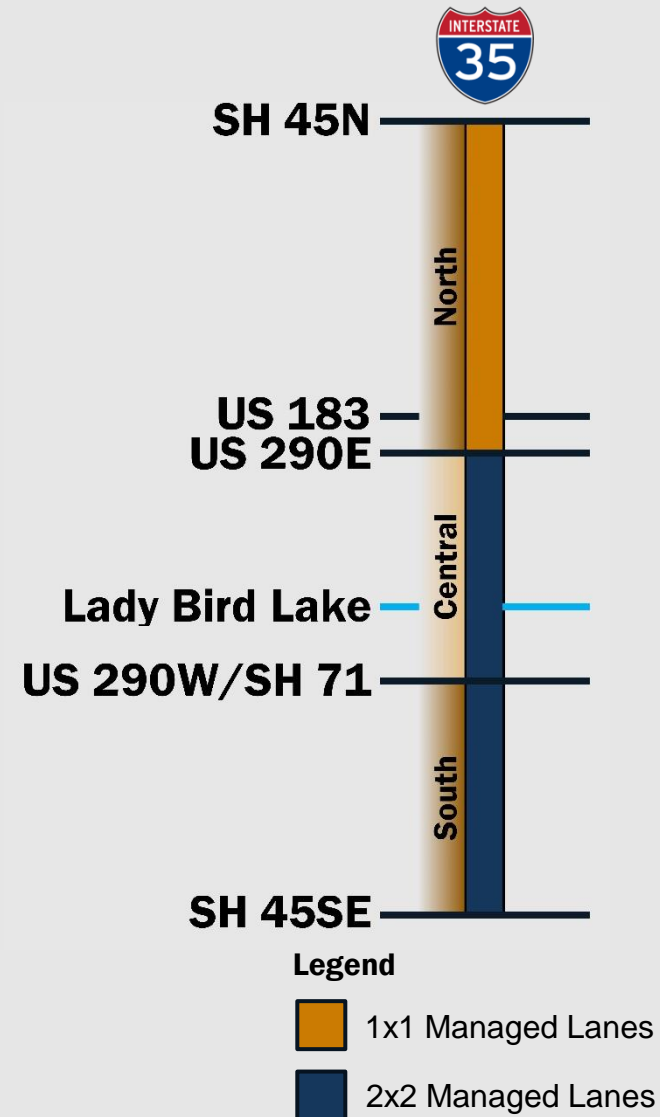
- Public Hearing
  - North, early 2021
  - South, late 2020
- Scoping Meeting
  - Central, fall 2020
- Stakeholder meetings
  - North, late 2020
  - South, late 2020



Preliminary Schedule – SUBJECT TO CHANGE



- I-35 Capital Express North & South funding allocated in 2020 UTP on Aug. 29, 2019
  - North: \$400 million construction
  - South: \$300 million construction
- I-35 Capital Express Central funding
  - \$560 million existing allocation (approved as part of 2020 UTP on Aug. 29, 2019)
  - \$3.4 billion additional allocation (approved as part of 2020 UTP amendment on April 30, 2020)
  - \$633 million CAMPO/TxDOT reallocation (approved by CAMPO on April 20/June 8, 2020)
  - Unfunded remainder: \$307 million
    - Proposed 2021 UTP allocation



# STAKEHOLDER COORDINATION



- Partner agencies and organizations:

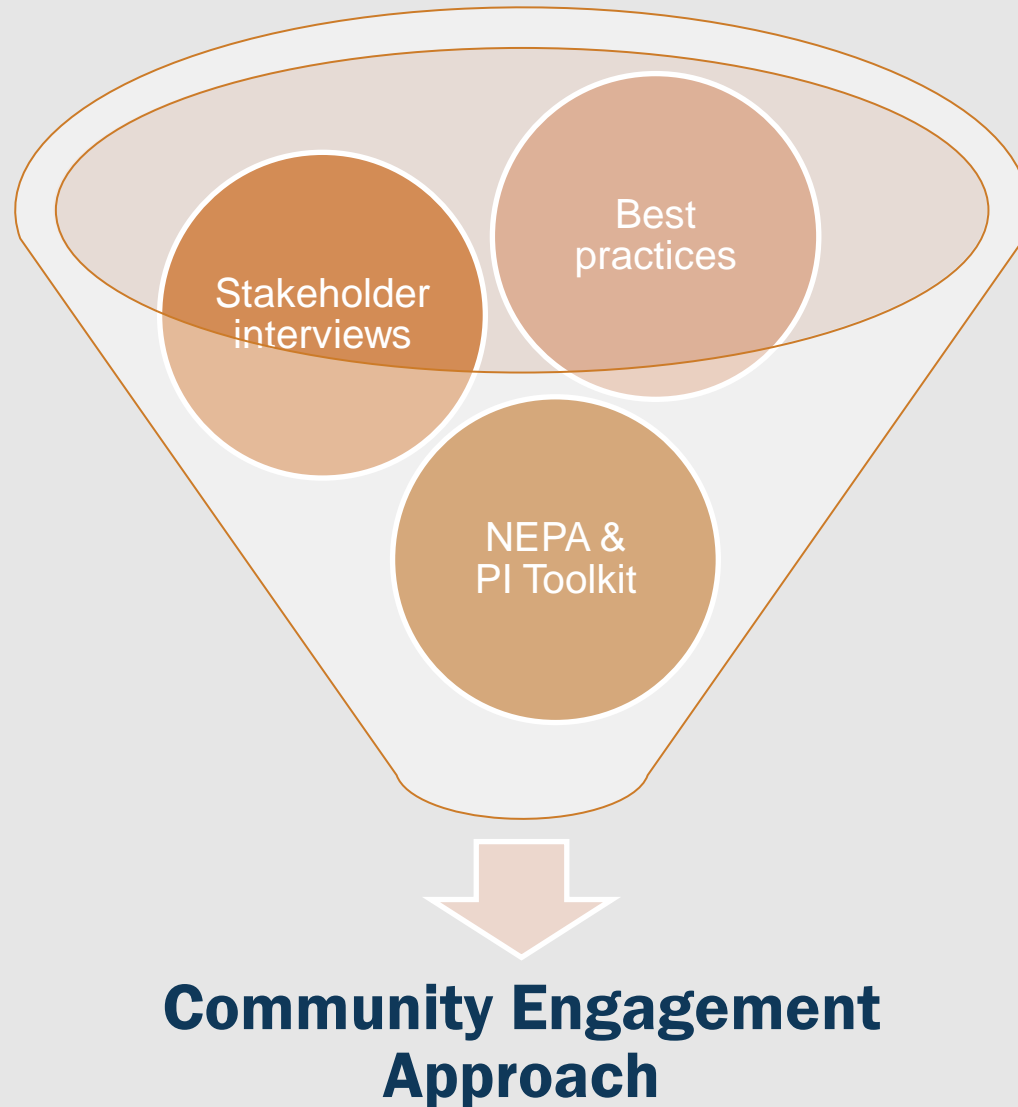
- CAMPO
- City of Austin
- Capital Metro
- University of Texas
- FHWA
- Downtown Austin Alliance (DAA)
- CTRMA



- Planning review and coordination:

- Austin Strategic Mobility Plan
- Bicycle Master Plan
- Sidewalk Master Plan
- Urban Trails Master Plan
- University of Texas Facilities Master Plan & Moody Center







- 1 Provide meaningful input opportunities at every phase of the design process
- 2 Make input opportunities accessible and family friendly
- 3 Be clear about relationship between Capital Express project and surface-level enhancements
- 4 Include agencies and organizations in the process



## Digital

- New programmatic website
- Virtual open houses
- Social media
- Email

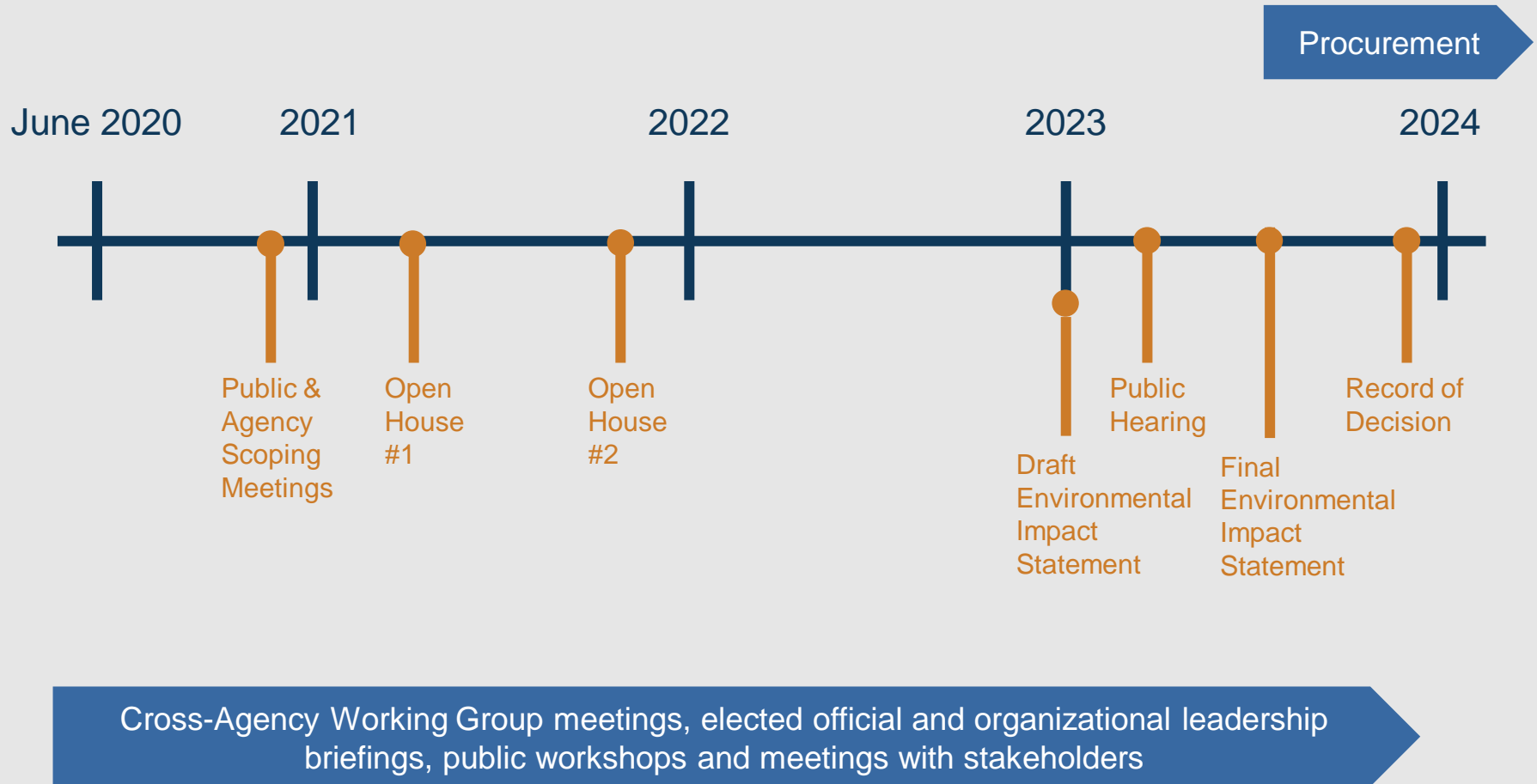
## In-Person

- Public and agency scoping meetings
- Open house meetings
- Public hearing
- Workshops
- Meetings with stakeholders
- Community presentations

## Coordination

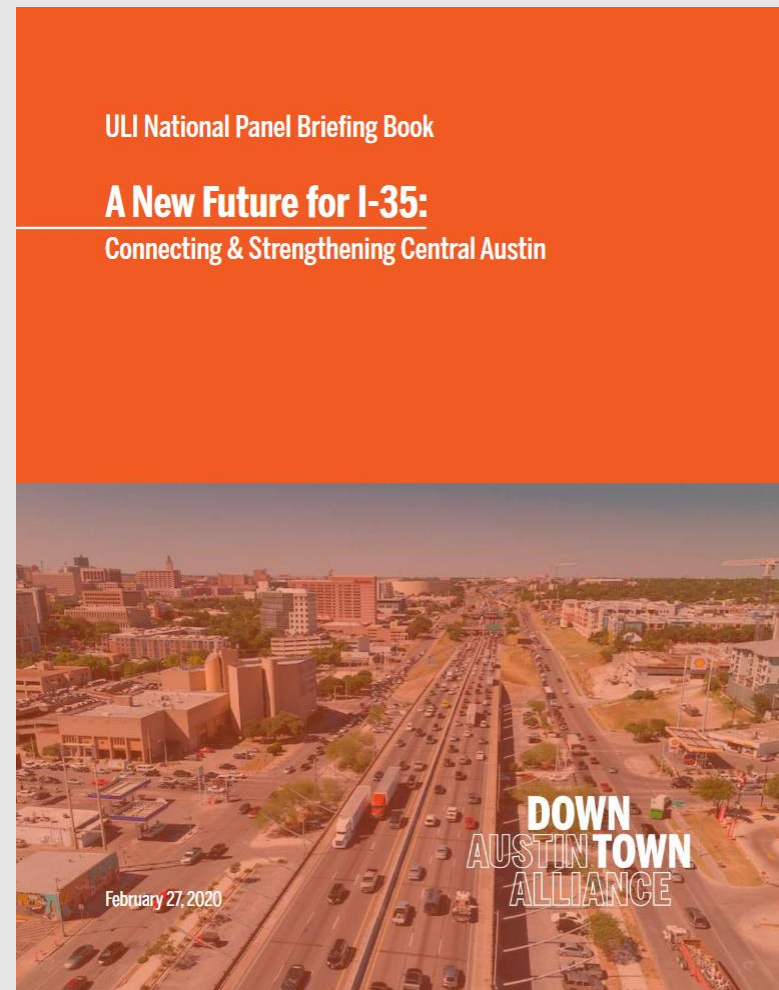
- Cross-Agency Working Group
- Elected official and organizational leadership briefings
- Ongoing meetings with agencies, organizations and partner entities

# I-35 Capital Express Central Project Public Engagement Timeline





- DAA organized “A New Future For I-35” Task Force
  - Downtown Austin Alliance (DAA); TxDOT; City of Austin; University of Texas; Capital Metro; and Federal Highway Administration (FHWA); Central Texas Regional Mobility Authority (CTRMA); community members
  - Monthly meetings held from Oct. 2019 to Feb. 2020
- Focused on studying a segment from Airport Boulevard to Lady Bird Lake for “surface level enhancements”
- DAA engaged the Urban Land Institute’s (ULI) national advisory services to bring a panel of diverse experts to Austin
- DAA hired a consultant team in late 2019 to help the ULI panel understand the constraints of the enhancement project







- Evaluation of potential cap locations
- Capping affects access and operations:
  - Ramp placement and spacing
  - Ramp lengths and grades
  - Structural support
  - Vertical clearances
- Tunnel elements and systems would need to be considered
- TxDOT's scope does not include designing or funding surface-level enhancements such as caps or stitches



Source: Dallas Morning News

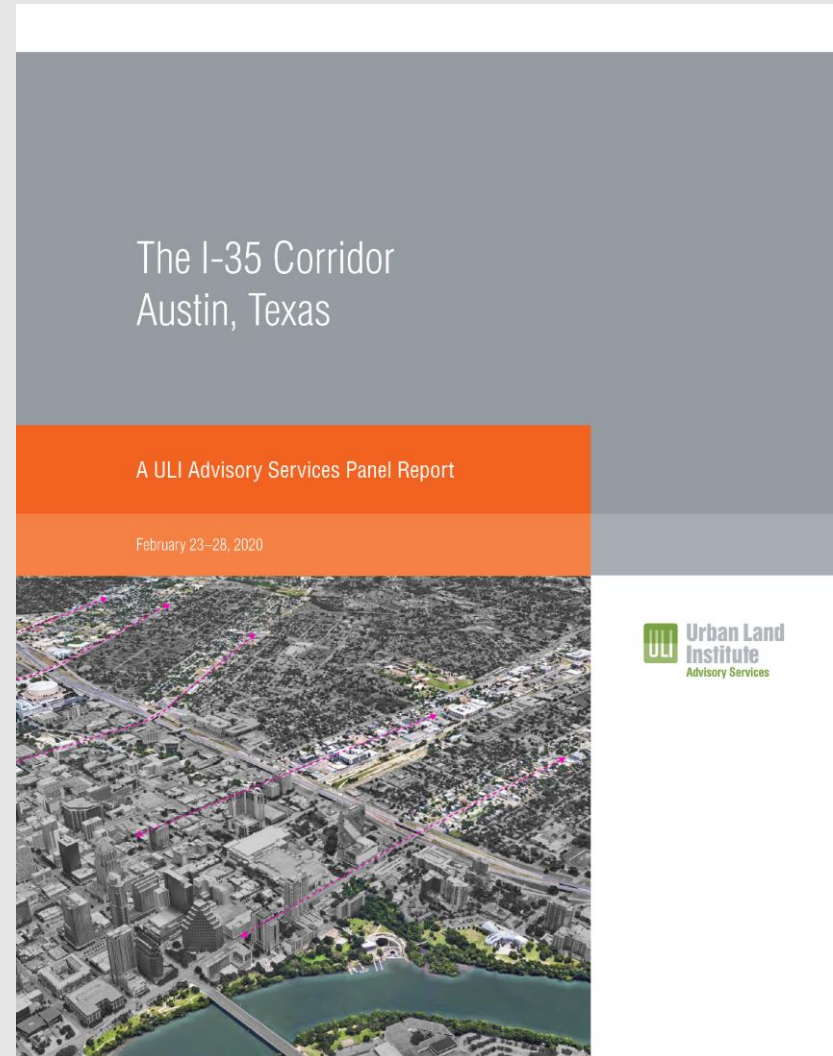
Klyde Warren Park over Woodall Rogers Freeway, Dallas



Source: ARCADIS, Inc.

Fifth Street Bridge over I-75/85, Atlanta

- In February 2020, the ULI panel engaged stakeholders, gathering input and ideas for the future of the I-35 corridor
- ULI panel objectives:
  - Enhance multi-modal access bringing people into the urban core
  - Meaningfully address the affordability impacts and create equitable development
  - Cultivate a community vision that represents diverse voices
- Preliminary recommendations presented at Huston-Tillotson University on Feb. 28, 2020



# **MOBILITY35**

## **BIKE/PED DESIGN GUIDANCE**

## ■ Team developed:

- Mobility35 Shared-Use Path (SUP) Design Guidance
- Mobility35 SUP Striping, Signage and Design Treatments Guidance

## ■ Collaborative effort:

- City of Austin
- BAC
- PAC
- FHWA
- TxDOT

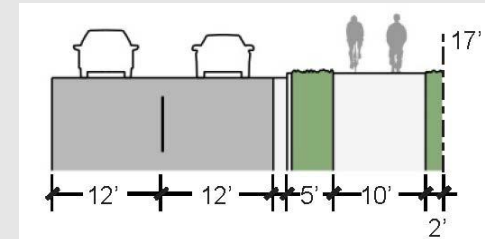
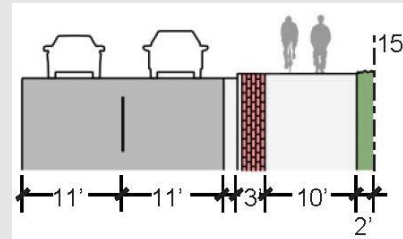
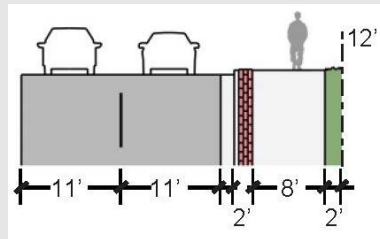
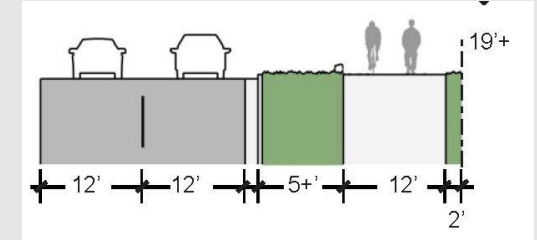
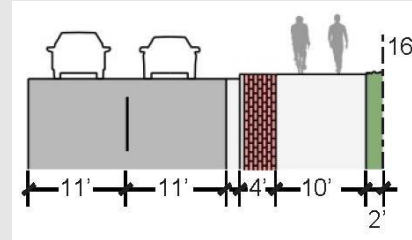
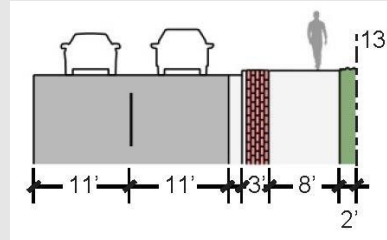
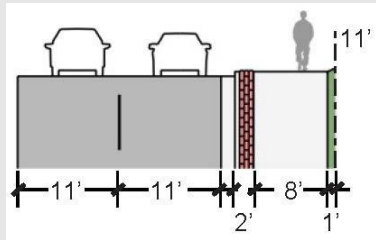
Recommended Bicycle and Pedestrian Facilities Along I-35 (Curbed)			
<p><b>MOST DESIRABLE</b></p> <p>100' SUPs along parkway</p>		<p>Available Width Back of Curb to Right Of Way (ROW)</p>	<p>Set back Shared Use Path (SUP) and widen to 12 ft. only in high-volume bicycle/pedestrian locations, on a case-by-case basis, and with approval from TxDOT.</p>
			<p>If pedestrian volumes are expected to be significant, physical separation between pedestrians and cyclists may be considered.</p>
			<p>Frontage road lanes should be narrowed to 11 ft. when SUP and buffer are less than 10 ft. and 5 ft. respectively.</p>
			<p>Switch to landscape colored and textured buffer pavers or stamped concrete when less than 5 ft. between the BOC and the path; min. 2 ft. clearance required.</p>
			<p>Reducing the path to less than 8 ft. should be done only when all other reasonable alternatives have been exhausted and will require specific TxDOT APPROVAL.</p>
<p><b>LEAST DESIRABLE</b></p>			
<p>Notes</p> <ol style="list-style-type: none"> <li>1. High-speed roadways are defined as operating at or over 45 MPH. Limited access is defined as limited opportunities for crossing the highway and infrequent driveway conflicts (ex. freeway/frontage roads and major highways).</li> <li>2. The SUP shall be unobstructed (signs, utilities, etc.) and properly designed, with proper sight distances, driveways, and intersections.</li> <li>3. Unless grading needs or utility conflicts will occur, the SUP should be located 2 ft. min. from the ROW.</li> <li>4. All SUP widths less than 10 feet require a design waiver.</li> <li>5. An SUP width less than 8 feet shall not be used without specific TxDOT approval, as noted above.</li> </ol>			
Condition	Minimum (Default) Treatment	Shared Use Path Approach & Crossing	I-35 From
Driveways, private roads, and alleys without signals	No treatment beyond that required.	For new construction, the local city and developer may consider: painted crosswalk ("Continental").	For new construction, the local city and developer may consider: driveway.
Public streets without signals	Stop sign/bar for vehicles in ADVANCE (upstream) of painted crosswalk.	Consider: R10-8 As a general note, use sparingly, for example if crash history indicates some benefit.	See minimum, plus, in conflict with c.
Public streets with signals	Signal, stop bar, and pedestrian signals (with sound) as required plus: painted crosswalk ("Continental").	Consider: R10-12 When signal includes a permissive left turn or a right-turn where yield compliance is low, give SUP a head-start (leading pedestrian interval).	See minimum, plus, in advance of street.

NOTE: The Engineer is responsible for applying this guidance to specific cases conforming with current law, engineering judgment, and TxDOT concurrence.

Version date: 6/20/2018

**Least Desirable**

**Most Desirable**



# I-35 AT 4<sup>TH</sup> STREET UPDATE



## **Bicycle Advisory Council (BAC) Recommendation:**

### **Improved Pedestrian & Bicycle Crossing at I-35 Frontage Road and 4th Street**

WHEREAS, the purpose of the BAC is to advise the City of Austin and other jurisdictions on all matters relating to the use of the bicycle, bicycle infrastructure, and individuals of all ages and abilities who utilize bicycles;

WHEREAS, the bicycle path at the crossing of 4<sup>th</sup> Street and the I-35 frontage road is a major connection for cyclists and pedestrians seeking to cross the highway corridor;

WHEREAS, the 2014 Bicycle Master Plan commits to an all ages and abilities network and the City of Austin's Vision Zero goals commit to safety for all road users first;

WHEREAS, the existing crossing of the bicycle path at 4<sup>th</sup> Street and the I-35 frontage road presents a unique danger due to rapidly moving traffic, limited signage to indicate a pedestrian/bicycle crossing, and obscured sight lines depending on parking load;

WHEREAS, the BAC acknowledges that the I-35 frontage road is a TxDOT managed road and currently is in the midst of a long-term redesign;

WHEREAS, a new section of the Lance Armstrong Bikeway and Red Line Trail will be completed through the Plaza Saltillo development by June 2019 to create a continuous shared-use path from Downtown to Chicon St., with further extensions that will connect a 200+ mile urban trail network.

NOW, THEREFORE, BE IT RESOLVED, the BAC recommends that short-term solutions be implemented as soon as possible to maximize bicycle and pedestrian safety, including but not limited to: removing existing parking on northbound frontage road, illumination of the crosswalk and existing signage, speed regulation and enforcement, temporary hardscape improvements to reduce each frontage road direction to two travel lanes, raised crosswalks, dynamic speed display devices, traffic direction during peak periods;

AND, BE IT FURTHER RESOLVED, the BAC recommends that upon the completion of the Red Line Trail through the Plaza Saltillo development connecting to the Lance Armstrong Bikeway across I-35, that vehicular traffic traveling westbound on 4<sup>th</sup> Street be diverted south on Brushy Street to 3<sup>rd</sup> Street to continue westbound to eliminate conflict between trail users and westbound drivers turning right but looking left at the northbound frontage road;

AND, BE IT FURTHER RESOLVED, the BAC requests that a traffic signal be installed at 4<sup>th</sup> Street and both the northbound and southbound I-35 frontage roads as soon as possible and that current and latent demand be considered;

AND, BE IT FURTHER RESOLVED, the BAC requests that TxDOT adhere to an all ages and abilities framework with elements such as maximum 30 mph design speed, retaining a maximum of two lanes on each frontage road with minimal crossing distances, raised crosswalks, illumination of crossings, and inclusion of traffic signals when implementing the long-term redesign for this

crossing, and that TxDOT bring any design change for this crossing to the BAC at 30% preliminary design stage.

Date of Approval: January 15, 2019

Vote: 6-0 with Heinen, Nguyen, and Ortega absent

Attest:



Kathryn Flowers, BAC Chair



- Counts/Warrant analysis:
  - Performed spring 2019
  - Warrant met for signals at I-35 northbound and southbound frontage roads at Fourth Street
  - Safety improvements for users along Lance Armstrong Bikeway
  - TxDOT gave approval for implementation of signal Dec. 17, 2019
- Current status:
  - City of Austin and Capital Metro are funding design and construction of signal
  - City of Austin has procured a design engineer to begin signal design

# TXDOT PEDESTRIAN SAFETY INITIATIVES

- May 2019: Texas Transportation Commission approved goal to end all fatalities on Texas roads by 2050
  - \$600 million Road to Zero funds dedicated to safety projects
- TxDOT Be Safe Be Seen initiative and #EndTheStreak educational campaigns
  - November 2019: partnered with City of Austin on Daylight Saving Time awareness
    - Distributed 400 pieces of #EndTheStreak and Vision Zero educational materials to drivers at high-crash intersections



**#EndTheStreakTX**  
End the streak of daily deaths on Texas roadways.

- Be Safe Be Seen launched in 2017
- Purpose:
  - Improve pedestrian safety and reduce fatalities and injuries along I-35
- Achievements:
  - Partnered with 100+ businesses along I-35 to display “Stay Alive, Don’t Cross I-35” table tents and window clings in English and Spanish
  - Distributed 12,000+ Be Safe Be Seen bags to students and people experiencing homelessness





- Installation of pedestrian barrier along I-35
- 3.3-mile stretch
  - 51st Street to Rundberg Lane
- Adding additional 2 feet to median barrier
- Purpose: Deter pedestrians from crossing I-35
- Cost: \$700,000
- Completion of install expected this summer





# **I-35 AT MLK JR. BOULEVARD INTERIM IMPROVEMENTS**

## Existing Condition - Martin Luther King Jr. Boulevard



- Desire to improve present pedestrian and bicyclist experience
- Interim project currently not funded but now included in the ADA Pedestrian Access database for evaluation and ranking for safety funds
- University of Texas, Professor Gian-Claudia Sciara, Graduate Bicycle and Pedestrian Design class



# Existing Condition - Martin Luther King Jr. Boulevard



# THANK YOU

## RESOURCES

- [My35CapEx.org](http://My35CapEx.org) (available in July)
- [My35.org/Capital](http://My35.org/Capital)
- [My35Construction.org](http://My35Construction.org)