



## MEMORANDUM

**TO:** Mayor and Council

**FROM:** Greg Canally, Deputy Finance Officer

**DATE:** September 29, 2020

**SUBJECT:** **Project Connect: Report on Integrated Financial Model**

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In August 2019 the Austin City Council approved [Resolution No. 20190808-081](#), directing the City Manager to “analyze and report on options for the City and other entities to leverage resources to the creation, operation, and maintenance of a high-capacity transit system”. After a series of joint work sessions and meetings with the Capital Metro Board of Directors regarding Project Connect, the Austin City Council approved [Resolution No. 20200727-002](#) directing the City Manager to include 8.75 cents in the Fiscal Year 2020-2021 property (ad valorem) tax rate for the purposes of creating a dedicated fund for a joint local government corporation, the Austin Transit Partnership, created by the City of Austin and Capital Metro, to invest in the Project Connect System Plan and transit-supportive investments, including \$300 million for transit supportive anti-displacement strategies.

As a follow up to Council’s final direction regarding Project Connect in August 2020, staff has updated the Integrated Financial Model to include the Council amendment to the staff proposal (increasing the tax rate to 8.75 cents from 8.5 cents and allocating \$300 million of the tax rate revenue to transit-supportive anti-displacement strategies). The Report on the Integrated Financial Model is attached here as the staff response to Resolution 20200727-002.

**CC:** Spencer Cronk, City Manager  
Gina Fiandaca, Assistant City Manager  
Mark Dombroski, Interim Chief Financial Officer  
Randy Clarke, President & CEO, Capital Metro  
Reinet Marneweck, Chief Finance Officer, Capital Metro

**Attachments:**

1. Project Connect: Report on Integrated Financial Model



# **Project Connect Integrated Financial Model**

**Jill Jaworski, PFM Financial Advisors LLC**

**September 16, 2020**

**PFM Financial Advisors LLC**

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# Project Connect Integrated Financial Model

Jill Jaworski, PFM Financial Advisors LLC | September 9, 2020



## Project Background

In 2019, Capital Metro, the transportation authority for the Austin region, launched a comprehensive regional transportation plan that seeks to enhance mobility and transit solutions. Project Connect (the Project), calls for significant transit investments across a variety of modes: light rail, commuter rail, enhanced bus services, enhanced park and rides, and significant technology upgrades.

Enhanced mobility via investment in transit has been a policy objective of both Capital Metro and the City of Austin (the City) for several years. In recognition of the fact that the Project represents a multi-generational investment that would require significant funding and support beyond solely that of Capital Metro's resources, the City partnered with Capital Metro to develop a cooperative funding plan to support the Project. Throughout 2019, the City's finance staff worked with Capital Metro finance staff and its advisors, engineers, and legal counsel to develop a viable funding plan for the Project and evaluate various alternatives. The purpose of this memorandum is to summarize the key elements of the initial cooperative City and Capital Metro funding proposal in support of Project Connect.

## PFM's Advisory Engagement

PFM Financial Advisors LLC (PFM) currently serves as financial advisor to the City and as financial advisor to Capital Metro. We assist both entities with long-term financial planning and bond issuance advisory services.

In 2019, PFM was engaged by the City to specifically assist with its potential participation as a funding partner in Project Connect. PFM's scope of services to the City is focused on the development of an integrated financial plan and funding model and the evaluation of financing alternatives under the Project Connect concept. Over the past several months, we have worked with the City to evaluate the viability of potential financing plans under two primary funding frameworks: (1) a local government corporation model that would fund Project operating and debt financing needs through the use of City property tax revenues, with such property tax revenues dedicated for transit purposes by vote through a tax-ratification election for transit purposes, and (2) City general obligation (G.O.) bond issuances. These two alternatives and the analytic assumptions utilized to build a financing model are discussed in more detail in this white paper.

PFM has built a cashflow model to assist the City in preparing its financial plan. The model is designed to be compliant with FTA requirements and can be utilized as part of the application for Full Funding Grant Agreements (FFGA) from FTA, which will provide the bulk of the federal share of project funding. PFM has built the model through close coordination with the City of Austin, Capital Metro and HDR (Capital Metro's project engineer and PMOR (Program Manager and Owner Representative)).



The model and the results discussed in this memorandum assume the initial investment of \$7.1 billion in the Project Connect system is constructed and delivered<sup>1</sup>. Any future project changes will be updated in the model and financial plan.

## **PFM's Qualifications**

PFM was founded 45 years ago to provide independent financial advisory services to the public sector. Today, PFM is one of the nation's leading providers of financial advisory services to transportation agencies, municipalities, states, water and sewer issuers, healthcare and higher education institutions and non-profit organizations. PFM's financial advisory services include capital planning, transaction management and bond pricing and credit strategies, among others. Our broader organization also provides asset management services, management and budget consulting, and strategic financial forecasting. PFM and its affiliates currently have more than 600 employees, located in 39 offices nationwide, including our Austin office which opened in 1992.

PFM is the top ranked advisor nationally in the transportation sector generally and in mass transit specifically<sup>2</sup>. For our transit clients, we provide a wide array of services including building Federal Transit Administration (FTA) compliant financial models and creating long-term plans of finance. PFM has worked with transit agencies on \$5.6 billion of projects which have received FFGA awards or advanced to the engineering phase of the FFGA application process. We are experienced working with FTA and the Build America Bureau<sup>3</sup>, and have worked with the major engineering firms, including HDR.

## **Project Connect Elements**

Project Connect is a transit plan that includes a new light rail system, a downtown transit tunnel to improve travel time, new MetroRapid routes and vehicles, a transition to a zero-emissions fleet and much more.

The full system costs of Project Connect was identified initially as \$9.8 billion. The costs for the currently proposed initial investment in Project Connect are \$7.1 billion. Figure 1 illustrates the \$7.1 billion of Project costs by element projected to be completed by 2033.

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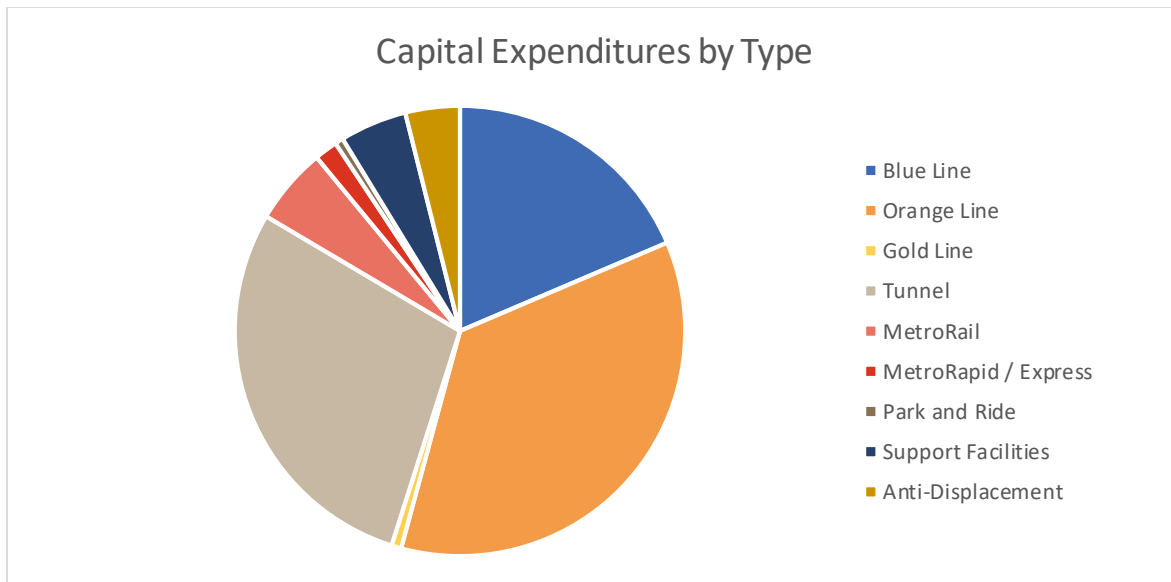
<sup>1</sup> Project Connect capital and operating cost assumptions provided by Capital Metro and HDR

<sup>2</sup> Source: Ipreo, as of December 31, 2019

<sup>3</sup> The Build America Bureau is housed within the Federal Department of Transportation (DOT) and provides TIFIA and RRIF loans for major transportation projects.



Figure 1



### *Light Rail*

The program consists of two proposed light rail lines, the Orange and Blue totaling about thirty-six miles of light rail transit. The Orange line is a north-south line that runs from Stassney Lane on the south to the North Lamar Transit Center on the north passing through south Congress Avenue, Downtown and the University of Texas areas. The Blue Line is an approximately eight mile line from the Airport to Downtown Austin that connects the growing area of east Riverside Drive and Montopolis to Downtown Austin. These projects include dedicated transitways, mostly at the street level, and approximately forty stations.

### *Downtown Transit Tunnel*

The Downtown Transit Tunnel will separate the proposed light rail service from street traffic, allowing for faster and safer travel through downtown. The Orange and Blue Lines will connect with underground stations at Republic Square and other downtown locations. These stations would feature such amenities as retail, restaurants, along with a transit store and service center.

### *MetroRapid*

MetroRapid provides frequent service with a limited number of stops and faster travel times. Priority lanes, transit signal priority, queue jumps, enhanced and improved bus stops and higher frequency are all features of MetroRapid. The program includes up to three new routes that serve all areas of Austin. MetroRapid includes new fleet and station stops to support the planned service. In addition, the Gold Line is proposed from Downtown to ACC Highland and connects the area of the Medical center with downtown Austin.

### *Commuter Rail*

The MetroRail Red Line's improvements will allow for more service to operate simultaneously going northbound and southbound – from downtown Austin to Leander. Project Connect's plan will better connect residents with such activity centers as downtown Austin, ACC Highland, Lakeline and Leander. Potential new



connections include The Domain and the new soccer stadium at McKalla Place in North Austin.

By 2025, the Red Line corridor is expected to attract nearly 4 times the number of riders who use it today. Currently, the Red Line carries about 2,600 customers, and our expanded options will accommodate up to 10,000.

The MetroRail Green Line proposes a 27-mile system traveling from downtown Austin to eastern Travis County and into Bastrop County, connecting Manor with downtown Austin using commuter rail. With new transit hubs and Park & Rides, the Green Line would operate along Capital Metro's existing freight line between Austin and Manor, with a possible extension to Elgin, and connect residents from established and developing neighborhoods to jobs and services in Central Austin. The initial investment would build the Green Line to Colony Park.

### *Express Bus and Park-n-Rides*

MetroExpress serves suburban Austin and neighboring communities with more direct connections between Park & Ride locations and major employment hubs like the Capitol Complex, downtown or the 38th Street Medical District.

### *Neighborhood Circulators*

Circulators let you connect to and from your final destination without driving. Sometimes that's directly to a store or a doctor's appointment that's too far to walk to, and sometimes that's to a transit station that will take you the rest of the way. Project Connect's goal is to make it easier for customers to access the transit system from where they live. Neighborhood circulators help provide this hyperlocal connection for our customers.

### *Support Facilities*

With the increase in service and fleet associated with Project Connect, the plan assumes that additional support facilities will be needed. Support facilities include service and storage facilities to support new light rail and expanded bus services. Additionally, modifications will be needed to existing facilities to support additional commuter rail, express, and other CapMetro services.

### *Customer Technology Upgrades*

Fare collection system upgrades are planned as part of Project Connect. The planned account-based, mobile-app technology lets you view and track your costs, plus the potential for loyalty rewards from our partners. Plans also include the use of a reloadable and reusable smart card or smart phone to pay for and use all types of transportation, including transit, scooters, bike rentals or even parking. Tap or scan to validate tickets on bus or rail and will also integrate with special events and community service partners

### *Transit Supportive Anti-Displacement Investments*

Project Connect will include \$300 million of investments for acquisition of real property and for financing tools and other anti-displacement strategies related to the implementation of the Project. These investments will support the City's policy to proactively assess displacement impacts of Project Connect and to support current neighborhood residents and businesses by stopping or limiting their displacement. These



funds may also be used to invest in transit-oriented affordable housing in the Project Connect corridor as well as other housing supportive strategies such as preservation of existing affordable housing; financial assistance for home ownership, home repair, rental subsidies; and right-to-return assistance for current affordable housing tenants that are displaced.

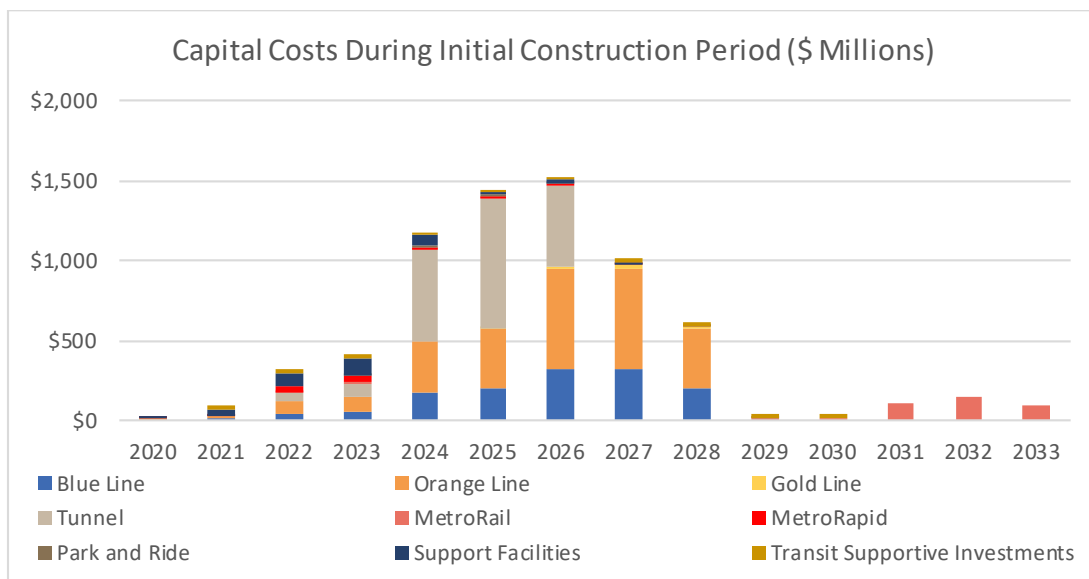
## Project Costs

### *Construction Cost Estimates*

Construction Cost Estimates have been developed by HDR in consultation with Capital Metro. The estimates associated with the program were developed using cost methodologies that are consistent with standard practices for projects at this early planning stage of development. This includes utilizing standard estimating spreadsheets that utilizes a work break down structure and cost information from other programs of similar nature across the nation. These estimates contain costs for the work that is anticipated and contingencies to cover unknown costs. The operations and maintenance costs were developed utilizing national averages from other transit agencies and current Capital Metro operating costs applied to the proposed operating hours and miles of the service plans. The model assumes a 3.5% inflation rate for project costs which are delayed from the initial cost estimate.

Figure 2 illustrates the \$7.1 billion of construction costs through 2033 annually by Project element.

**Figure 2**



### *Operations and Maintenance*

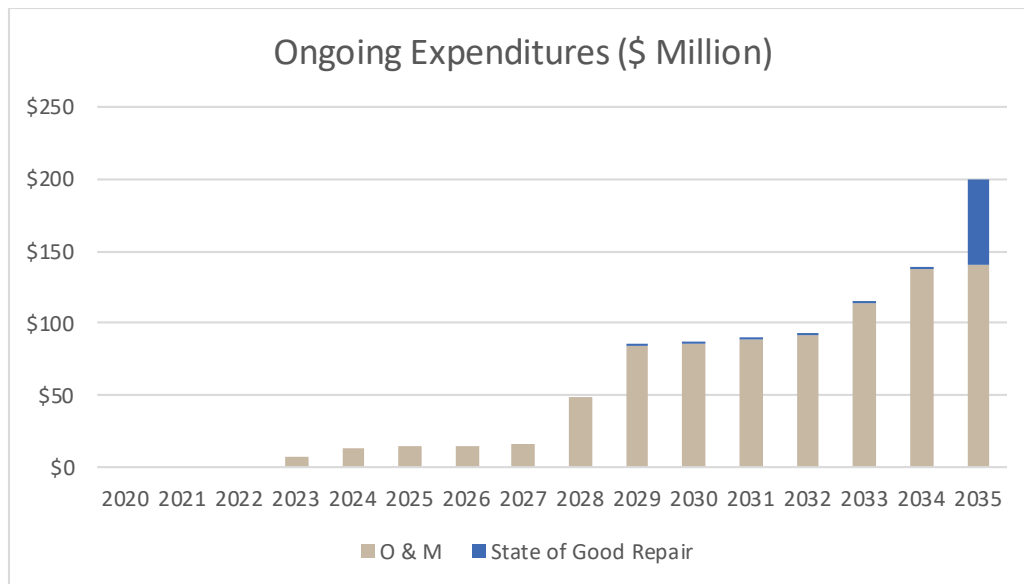
Operations and Maintenance costs for each of the Project elements are included in the model. These costs include labor, fuel and other maintenance costs. The operating costs begin after each element is put into service and will adjust if the timeline for a project element changes.

The model also includes future investments in the system to maintain a "State of Good Repair." The majority of those costs are for vehicle replacements, with the first major expenditure of \$56 million in 2035.



The vehicle replacement program is projected to be funded on a paygo basis with accumulated cash-on-hand. Figure 3 illustrates annual Operations and Maintenance and State of Good Repair expenditures through 2035.

**Figure 3**



## Federal Grant Revenue

Federal Grants are expected to be provided through FTA's Capital Investment Grant Program (CIG) utilizing both New Starts and Small Starts grants. New Starts grants are for fixed guideway projects exceeding \$300 million in size and requesting greater than \$100 million in grant funds. Small Starts grants are for transit projects under \$300 million in size with a request for less than \$100 million. Fixed guideway includes light rail, heavy rail and bus rapid transit (BRT) projects which have their own right of way. It is currently assumed that New Starts grant funding would be procured for the Orange and Blue Lines (including tunnel elements). Small Starts funding is assumed for the MetroRapid projects.

The process to receive a New Starts FFGA is a multi-year competitive process.<sup>4</sup> A proposed project must go through four steps before the award of an FFGA. The first step is to request entry into Project Development, followed by requesting entry into Engineering, request to be included in the President's Budget and award of the construction grant agreement. Project Development and Engineering must be completed in two and three years, respectively. There are multiple requirements to move through the process which include completion of a NEPA review, Project Justification and commitment of local funds. The project is scored in multiple categories which will determine if the project is able to continue to move through the process and ultimately receive an FFGA. The project must receive an overall score of Medium to receive the grant award. Eligible project costs include engineering, land acquisition, construction and finance costs (interest payments) while the grantee is receiving grant payments. The project sponsor must additionally demonstrate the technical ability to manage the project, the financial ability to cover increases in project costs over initial estimates, and the ability to maintain the project in a state of good repair after project completion. 50% of the Local Financial Commitment score is based on the Reasonableness of the Financial

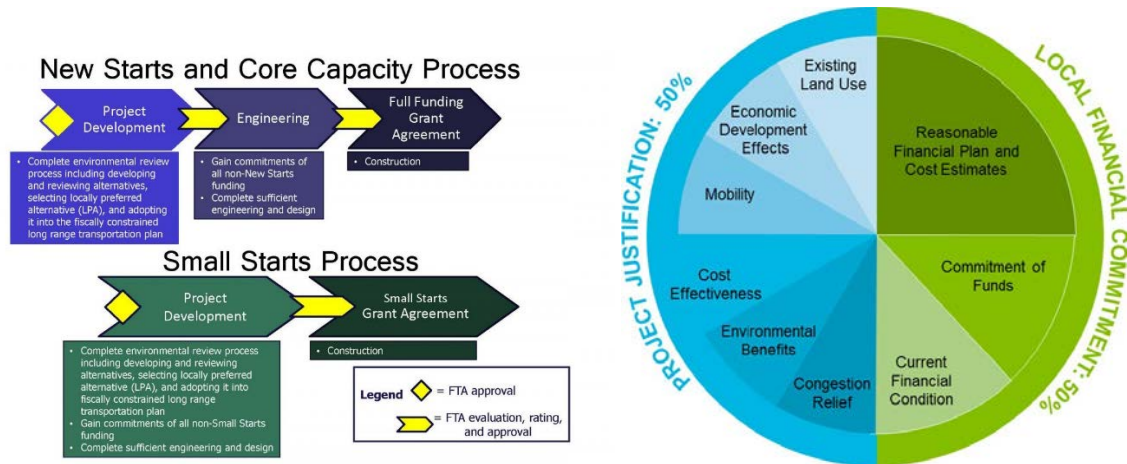
<sup>4</sup> Source: Federal Transit Administration, Final Interim Policy Guidance Federal Transit Administration Capital Investment Grant Program





Plan and Cost Estimates. In order to receive a Medium score, the financial plan must demonstrate an ability to manage an increase in project costs of 15% (including contingencies) and an increase in operating costs of 12%. To score Medium-High those thresholds increase to 25% for both categories. The process is illustrated in Figure 4.

Figure 4



An FFGA is a construction grant agreement which is binding on the grantee. The specific scope of the project will be included in the FFGA as well as a financial plan (100% of the local funds must be committed prior to the grant being signed) and a detailed schedule of FTA's grant award. The grantee is obligated to build the project as described. Grant funds will be withheld if the grantee cannot meet their obligations, and cost differentials are the responsibility of the grantee.

New Starts grants are provided by FTA to the grantee over time. The process provides funding for pre-construction costs prior to the Full Funding Grant Agreement being awarded. After award, the grant funds will be available under an annual schedule. Grant payments are disbursed on a reimbursement basis for expended costs. For large scale projects, the term of the grant typically extends beyond the construction period. The amounts available annually are generally equal for each year. As such, the grant payments do not match either the term of or peaks in construction spending. For Project Connect, bond or loan financing proceeds will be needed to provide funds for construction prior to the grant payments being fully received. Grant revenues can be used for reimbursement of interest costs after the project is completed.<sup>5</sup>

### Federal Grant Assumptions

There are two assumptions for New Starts federal grants, which impact the financial plan results: (1) the percentage of Project costs that will be funded by New Starts grants and (2) the annual grant funding levels. Changes to these assumptions are levers that impact the calculation of the tax levy rate necessary to fund the Project. Moving the assumptions can impact the levy rate by approximately one penny of tax rate per \$100 valuation. Both elements have been treated differently under the current federal administration than under prior administrations, though Congress has not taken action to change the legislation authorizing the grants. Transit agencies have responded to the changes in different ways. The application to grant award process for an FFGA takes years, and as such the impact of one administration's treatment of the program has to be

<sup>5</sup> Source: <https://www.transit.dot.gov/regulations-and-guidance/fta-circulars/full-funding-grant-agreements-guidance>



balanced against considerations that future administrations may have a different policy view.

The New Starts program allows for up to 50% of project costs to be funded through an FFGA. In practice, the amount of funding provided ranges from 25 to 49% of project costs, with the majority over 40%. Under the current administration, the FTA has encouraged applicants to increase the amount of local funding and decrease the request for New Starts funding in their applications. Of the projects that have been identified as advancing to engineering in the annual funding recommendations to Congress for fiscal years 2019-2020, there has been a wide range of federal funding from 36.1% to 50%, with a weighted average of 43.1%, as is detailed in Table 1. Advancing to engineering is a key step in the process to FFGA approval. We analyzed these projects as indicators of the projects successfully moving through the grant approval process. In discussions, certain applicants have stated that FTA staff were encouraging a federal funding level around or lower than 40%. At least one applicant felt that a more modest reduction to 46 or 47% would assist in receiving FTA support.

**Table 1**

State	New Starts Engineering	Percent Share
AZ	Phoenix, South Central Light Rail Extension (Downtown Hub)	39.4%
CA	Los Angeles, Westside Subway 3	36.1%
IN	Gary to Michigan City NICTD Double Track Northwest Indiana	37.9%
IN	Lake County, West Lake Corridor	38.0%
MN	Minneapolis, METRO Blue Line Extension (Bottineau LRT)	49.0%
MN	Minneapolis, Southwest Light Rail Transit	46.4%
NC	Durham, Durham-Orange Light Rail Transit	50.0%

The financial plan assumes 45% federal funding which is viewed as a reasonable assumption for a project of the size and significance of Project Connect.

New Starts FFGAs that have received funding over the last five years have received annual payments ranging from \$100 million<sup>6</sup> to \$250 million. The largest amount of funding going to a single metro region is for three Los Angeles MTA projects. The Westside Subway 1, Westside Subway 2 and Regional Connector Project each received \$100 million annually in recent years for a total of \$300 million to LAMTA projects. The Regional Connector Project was budgeted for its last grant payment in 2020 and a new FFGA is expected to be awarded for the Westside Subway 3, which is budgeted for a \$100 million annual payment in federal fiscal year 2021. The majority of funding recommendations for federal fiscal years 2018 to 2021 have been for \$100 million for each project, with two exceptions. The Boston Green Line Extension Project and the Maryland National Capital Purple Line have received annual recommendations for \$150 million and \$120 million respectively. In fiscal 2017, most projects were recommended for \$125 million annually. In fiscal 2016, projects were recommended in a wide range with several receiving \$165 million. The highest annual receipt was the \$5.1 billion Honolulu High Capacity Transit Corridor Project which received approximately \$250 million annually through the final year of the grant in fiscal 2017. Most of these projects use debt or other revenues to manage the mismatch between construction costs and grant receipts.

<sup>6</sup> Excludes the final year of funding for FFGAs, which is typically lower than other years and represents the balance of the grant funding.



Table 2 illustrates the federal fiscal year funding in the annual funding recommendations to Congress for current FFGAs.

**Table 2**

New Starts Project	Mode	Project Cost	Grant Award	Percent Share	FY2021	FY2020	FY2019	FY2018	FY2017
Los Angeles, Westside Subway 1	HR	\$2.822 B	\$1.250 B	44.3%	\$100 M	\$100 M	\$100 M	\$100 M	\$125 M
Los Angeles, Westside Subway 2	HR	\$2.499 B	\$1.187 B	47.5%	\$100 M	\$100 M	\$100 M	\$100 M	\$125 M
San Diego, Mid-Coast Corridor Transit Project	LRT	\$2.171 B	\$1.043 B	48.1%	\$100 M	\$100 M	\$100 M	\$100 M	\$125 M
Los Angeles, Regional Connector	LRT	\$1.403 B	\$0.670 B	47.7%		\$105 M	\$100 M	\$100 M	\$125 M
Boston Green Line Extension	LRT	\$2.298 B	\$0.996 B	43.4%	\$100 M	\$150 M	\$150 M	\$150 M	\$150 M
Maryland National Capital Purple Line	LRT	\$2.407 B	\$0.900 B	37.4%	\$120 M	\$120 M	\$120 M	\$0 M	\$125 M
Fort Worth, TEX Rail	CR	\$1.034 B	\$0.499 B	48.3%	\$25 M	\$20 M	\$100 M	\$100 M	\$125 M
Lynwood, Link Extension	LRT	\$3.260 B	\$1.173 B	36.0%	\$100 M	\$100 M	\$0 M	\$0 M	\$125 M
Seattle, Federal Way Link Extension	LRT	\$3.161 B	\$0.790 B	25.0%	\$100 M				

The financial plan assumes an annual funding amount of \$100 million each for the Orange and Blue Line New Starts grants which we view as a reasonable assumption in the current environment. The payments will continue past the construction period, necessitating financing portions of the construction cost that will be paid with FFGA grants.

### Common Funding Structures for Transit Projects

Transit agencies fund their operations through a mix of direct taxes, state funding and operating (farebox) revenues. The most common form of tax support for transit is sales taxes. Often, sales taxes can be dedicated specifically for transit purposes and pledged directly to bonds issued to fund transit investments. Other revenues include property taxes, revenues from other transportation entities (such as tolls or DOT payments) and direct payments from governments that are served by the agency. Capital projects are funded with a mix of federal grants, state grants and local funding. In many areas, major projects require a voter referendum to authorize increased funding for the project and to authorize the issuance of bonds for long-term financing. The most common structure for such referendums is to increase the sales tax rate, which provides increased funding and flexibility for the agency to use the funds on both capital and the resultant increase in operating expenses when the project is in service. Examples include Los Angeles, Seattle (Sound Transit) and Phoenix, all of which have embarked on significant transit expansion plans funded by sales taxes. Transit agencies use their local funds to provide a match for FTA grants, which leverage the local investment in the system.

We understand that the City's local sales tax rate of 8.25% is currently at the state statutory cap for the total sales tax rate. Therefore, absent changes to state law, the dedication of sales taxes would not be a viable funding scheme for the City to assist with the funding of Project Connect. Our focus has therefore been on evaluating financing plans currently available to the City under its existing legal and revenue authority.



## Funding Proposal: Transit-Focused Local Government Corporation and City Tax Ratification Election

After evaluating several options, the City of Austin's finance team, in cooperation with the Capital Metro finance team, has proposed the creation of a transit-focused Local Government Corporation (LGC) to serve as an independent governing authority to oversee and finance the Project, with the funding for the LGC to be provided by a mix of revenue from the City, Capital Metro, federal monies, and debt financing. **The key element of this funding model consists of the City's pursuit of a Tax Rate Election (the TRE) that would authorize a dedicated new property tax revenue stream for transit purposes in order to fund a significant portion of the Project's operational, capital and debt needs.** The TRE, if approved by voters of the City, would have the effect of increasing the O&M portion of the City's tax rate and (2) dedicating the incremental tax levy increase to transit purposes. The dedicated property tax revenue stream would be exclusively available to support the LGC and the Project. The TRE levy, if approved, will provide a stable, dedicated and growing source of property tax revenue that can be used to fund pay-as-you-go (paygo) project engineering and construction, pay debt service on bonds and loans and fund operations as Project Connect elements are put into service. The LGC would issue the bonds and loans needed to provide long-term financing for the project.

The TRE provides the flexibility which will allow the City to optimize the funding for the project by balancing the use of paygo with the use of debt financing, saving interest costs as compared to using bonds only to finance the project. Additionally, the service, once operational, will require funding for operations and state of good repair, including vehicle replacements, which cannot be funded from a G.O. bond. The property tax revenue stream will be available for both. This structure is very similar to the sales tax funded projects that are common in transit but provides one additional advantage. Sales tax collections are economically sensitive and subject to significant declines during recessionary environments. Property taxes are a very stable source of revenue and are able to grow 3.5% annually under State law. In addition, this revenue stream will allow the LGC to meet the FTA requirement that the project sponsor demonstrate the financial ability to cover actual project costs which may be above the preliminary cost estimates, as discussed previously. As discussed previously, the Project will have to demonstrate an ability to manage at a minimum an increase in project costs of 15% and an increase in operating costs of 12% in order to meet the scoring requirements to receive an FFGA.

We have also examined alternatives to the TRE model, which included: (1) the exclusive use of City of Austin GO bonds, and (2) the use of a combination of City of Austin GO bonds to fund the Project's capital costs and the use of a separate TRE to fund the operating and paygo needs of the Project. The first option – the use of GO Bonds without a TRE – was determined at the outset to be unfeasible as it did not provide funding for operations of the new system elements. The use of a combination GO bond election and TRE was also analyzed. While the GO/TRE combination would potentially result in lower taxes in the early stages of the Project since debt would be issued in phases as construction commences, the tax rate for the GO/TRE combination would subsequently ramp up as more GO Bonds are issued for construction and the debt services becomes due. As the taxes increase with the issuance of the GO bonds, the combination of the TRE for operations and GO Bonds for construction would result in a higher tax rate than the TRE-only scenario previously described. This is primarily due to an inability to fund construction costs on a paygo basis, resulting in more borrowing and higher interest costs. Further, for any GO bond election, the capacity to issue debt would be fixed and determined by the bonding amount authorized by voters at an election. Through the use of a TRE and LGC as the issuer of bonds, the bonding amount would be determined by the financial capacity of the pledged revenues.



## Financial Plan Model Structure and Assumptions

The Model is a 40-year “full system” cashflow model. Full system indicates that the model contains both initial capital, operations and maintenance and vehicle replacements (SOGR). The model is structured to include many dynamic inputs which can be adjusted to refine assumptions and stress test various scenarios. For each transit model that PFM prepares there is a standard methodology that is utilized which increases the ease of use and reduces errors. The major inputs are assumptions (growth rates for revenues and expenditures, timing of construction and service for each project element, financing rates), revenues (fares, taxes, transfers and grants), expenditures (construction and operating), and bond and loan financing structuring assumptions. The elements are combined to model the total system cashflow. Of note, the Model includes only new Project Connect elements; the existing Capital Metro operating and capital system is not included in the model, though funding for Project Connect from Capital Metro is included as a revenue input in the Model.

At its core, the Model is designed to determine how to fund multiple project elements to be built in phases with overlap of construction time and completion dates. Each individual project element can be included or deleted, and timing can be adjusted. Associated impacts adjust automatically, such as cost of construction which inflates at an assumed 3.5% rate annually, and operating revenues which will shift with delays in service operation dates. If Project elements are deleted, the costs are removed, and grant funding is reduced as applicable to those elements.

### Revenues and Financing Sources

Revenues dedicated to funding the Project include funds from the City of Austin, Capital Metro, Federal grants and fare revenues from operations. The revenues will be utilized to fund multiple project elements including construction costs, operating and maintenance, ongoing State of Good Repair (SOGR) investments and debt service. The individual revenues are not dedicated to one type of project expenditure, rather there is flexibility to utilize the funding for the range of costs that will be necessary to construct and operate the Project.

#### *City of Austin*

The City’s contribution will be the dedicated TRE property tax revenues which are projected to generate \$147 million in 2021 with annual revenue growth assumed at 3.75% through 2030. The levy rate projected to generate these proceeds is 8.75 cents. This growth rate assumes the property tax levy will increase by 3.5% – the maximum allowed on existing taxable property – and that new property will be added each year. The revenues are modeled at a more conservative 3% growth rate beginning in 2031<sup>7</sup>.

#### *Capital Metro*

Capital Metro will provide sales taxes, capital funds, fare revenues and park & ride revenues. The revenues are anticipated to begin in different years, with an early capital contribution in 2020 and sales taxes beginning in 2023. The combined sources from Capital Metro are estimated to generate approximately \$50 million annually at Project completion. Fare revenues contribute a projected \$17 million at Project

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<sup>7</sup> Data provided by the City of Austin



completion, growing to \$28 million in 2034 after the Green Line is operational

The Capital Metro revenue assumptions were determined after a thorough process by Capital Metro to assess available revenue streams. Each revenue stream was forecast using low and high assumptions from 2028 through 2040. The model assumes the medium forecast for sales tax revenues in 2023, inflating at 3% annually, and the low forecast for park & ride revenues in 2025, increasing in concert with ridership at 6% annually<sup>8</sup>. Figure 5 illustrates Capital Metro’s projected annual revenue contributions.

Figure 5

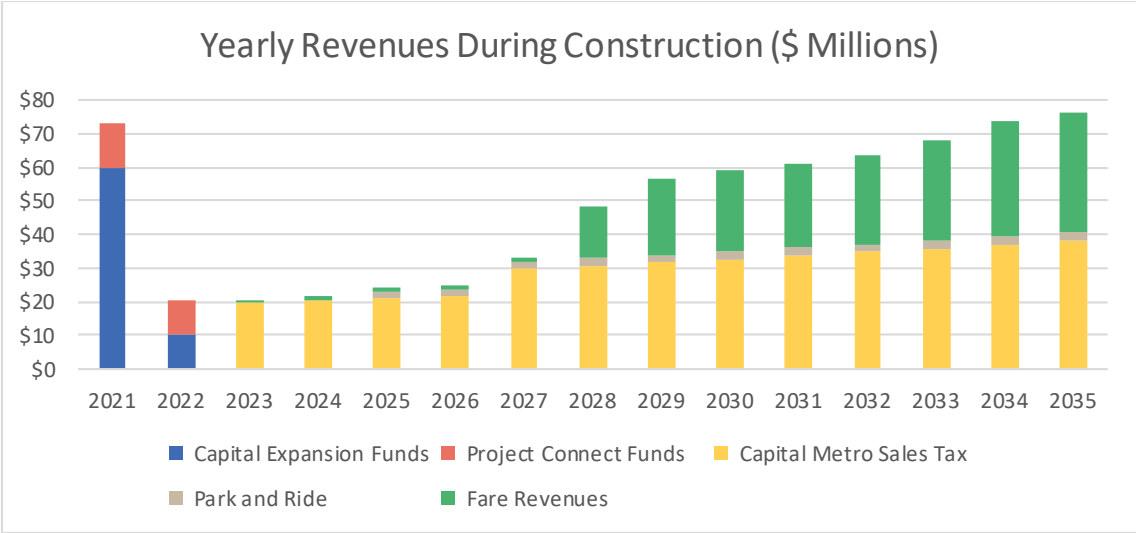
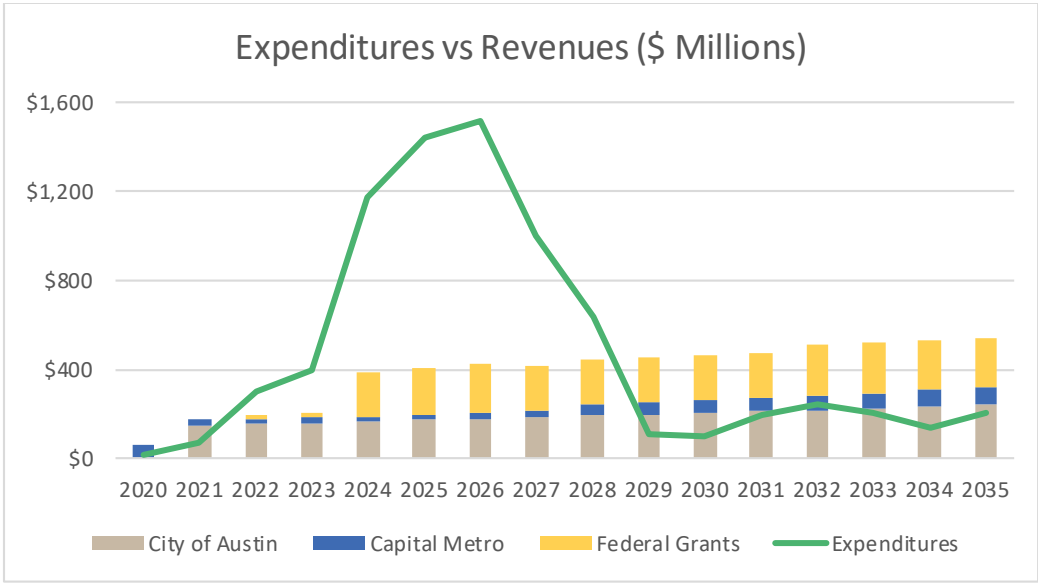


Figure 6 illustrates the timing of combined Project grant receipt and revenue projections as compared to construction cost expenditures.

Figure 6



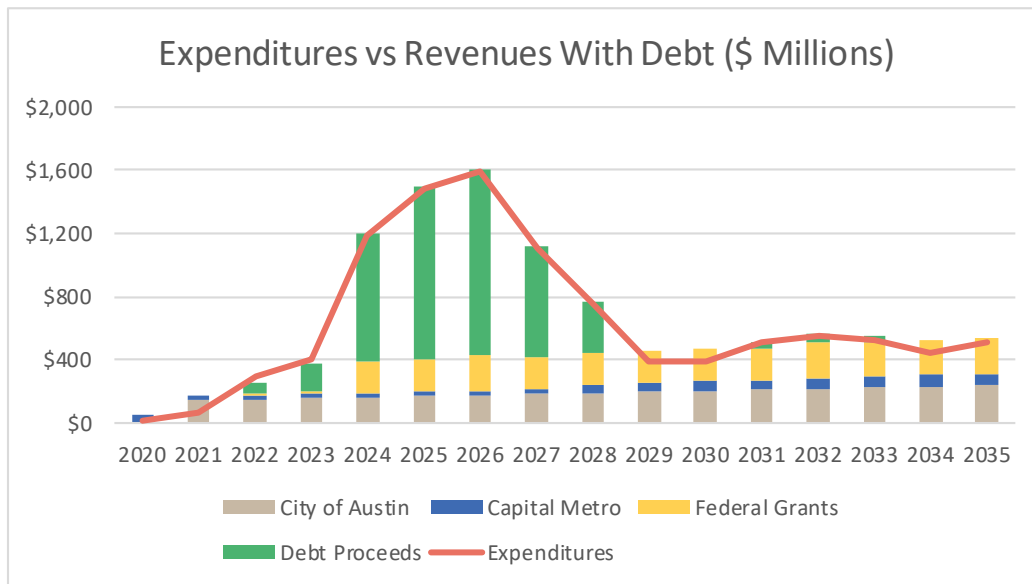
<sup>8</sup> Data provided by Capital Metro and HDR



## Bonds and Loans / Financing Assumptions

The Project has significant financing needs to manage the differential between grant receipts and project costs, as illustrated above, and to provide long term financing of project elements. Local Revenues and FFGA receipts will provide approximately \$1.7 billion of funding during the construction period. Financing the balance of the construction costs is a necessary component of the financial plan. The bonds and loans will be repaid by the LGC after Project completion with the LGC's property tax and grant receipts. Figure 7 illustrates the combined local revenues, federal grants and debt proceeds compared to construction costs and system expenditures through 2035.

Figure 7



Bonds and Loans will be issued through the LGC and will not be City of Austin general obligation bonds. The LGC bonds will be a separate property tax revenue credit secured by the dedicated TRE levy and will not be secured by other City or Capital Metro funds. Federal grant funds will also repay portions of the project debt.

Long term financing of Project Costs is anticipated to occur through a combination of bonds and federal loans. The Model assumes \$235 million would be borrowed in 2022 and 2023. In 2024, borrowing would increase significantly with an average of about \$820 million borrowed annually through 2028 to fund the large construction expenditures in those years. Additional borrowing will occur from 2029 through 2033 for the Green Line.

The federal loan programs that will be utilized will be the TIFIA and RRIF loan programs. The programs are designed to provide low cost flexible financing for major transportation infrastructure costs. Both programs lend at the Treasury rate at the time of the loan closing, which has historically been lower than tax-exempt rates. The loans are draw down structures in which interest does not accrue until the loan is drawn. Interest and principal repayments may be deferred for up to 5 years and 10 years, respectively, past project





completion. The loan term may extend to 35 years past project completion. The TIFIA program will provide financing for up to 33% of project costs. The RRIF program will fund up to 100% of project costs, but only heavy rail projects are eligible. Both programs are subject to a limit of 80% total federal support for a project, which is calculated by adding grants and loan proceeds together. Currently, there is no credit or consideration given for the fact that loan repayments are made with local funds when calculating the federal contribution. The model assumes that the maximum amount of TIFIA loans will be utilized for financing the project. The RRIF loan will be used to finance 35% of the Green Line project, which is limited by the 80% federal support limitation.

Bonds, which are expected to be secured by a combination of TRE taxes and federal grants, will be utilized for the balance of the financing needs. As illustrated in Figure 8, approximately \$2.4 billion of bonds with maturities ranging from 15 to 30 years are assumed to be issued from 2023 through 2028. \$2.1 billion of TIFIA loans are expected to be utilized in the same years with principal repayments from 2031 through 2060. The model also assumes a \$144 million RRIF loan will be utilized starting in 2031.

Interest rate assumptions are 4.5% for the TIFIA and RRIF loans and 5% for Bonds. Current interest rates are at very low levels and are lower than the rates assumed in the model. 5% is commonly used in long-term financial planning models and is the rate the City uses in its internal planning models. Minimum coverage of revenues compared to debt service costs is 1.32x. Coverage averages 1.75x from 2030 through 2060. The plan does not assume the use of debt service reserve funds.

## Conclusion

The initial results of the financial plan model are illustrated in Figure 9. The use of local revenues to fund paygo costs during construction optimizes the use of taxpayer funding and reduces the amount of bonds needed to be issued for the Project. The financial plan and the proposed TRE property taxes at a rate of 8.75 cents would fund the initial investment in the Project Connect system, including construction costs, operations and maintenance, state of good repair and debt service.

**Figure 8**

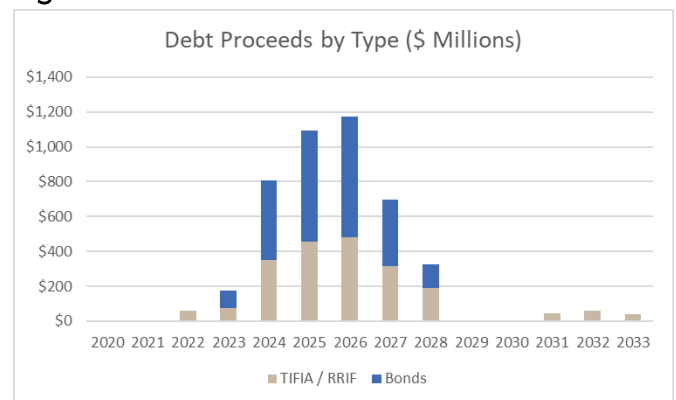
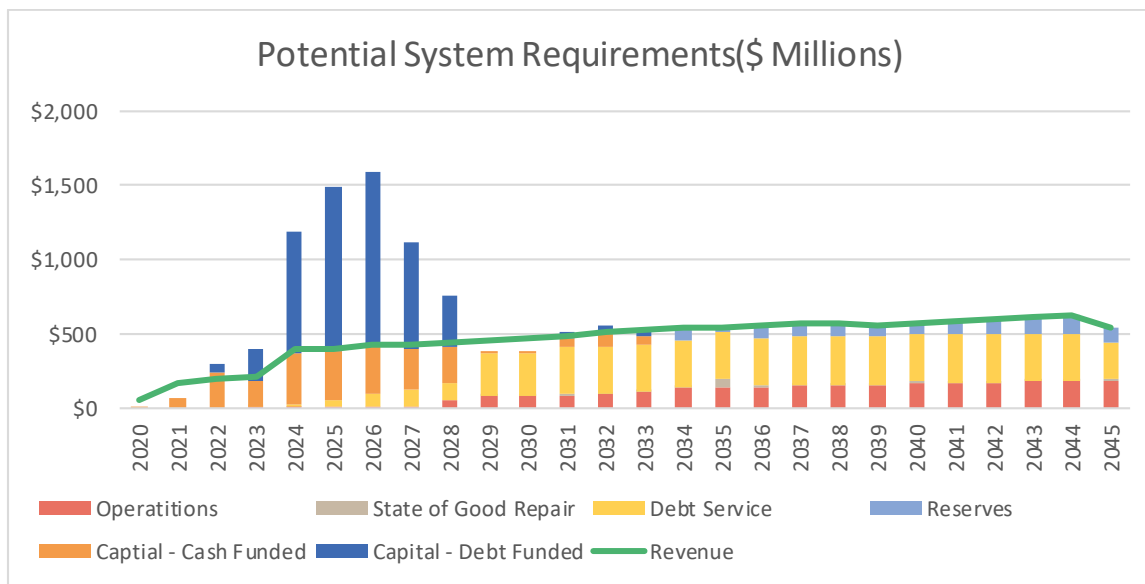






Figure 9



The integrated financial plan model will allow for further analysis of multiple scenarios. The model has been designed to be an FTA compliant model which is designed to meet FTA's criteria and support the efforts to leverage local funding and obtain Federal grant funding for the Project.

With respect to the available data and information for the purpose of this analysis, PFM has assumed the accuracy and completeness of such information, but we have made no effort to independently verify or confirm accuracy or completeness. The data and information reviewed for our analysis is limited to the creation of the financial model and discussion related to it.

## Appendix A



Systemwide Sources and Uses (\$Millions)		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Sources														
City of Austin		-	152	157	163	169	176	182	189	196	204	211	218	224
Capital Metro		55	24	23	31	22	24	25	33	48	57	59	61	63
Federal Grants		-	-	15	16	203	206	226	200	200	200	200	200	225
Debt Proceeds		-	-	58	207	825	1,095	1,185	714	343	-	-	44	62
Reserve Withdrawal		-	-	65	4	-	6	1	-	-	-	-	14	8
<b>Total</b>		<b>55</b>	<b>176</b>	<b>318</b>	<b>420</b>	<b>1,219</b>	<b>1,508</b>	<b>1,620</b>	<b>1,136</b>	<b>788</b>	<b>460</b>	<b>470</b>	<b>536</b>	<b>583</b>
Uses														
Capital - Cash Funded		15	72	238	181	332	329	315	274	246	17	15	60	85
Capital - Debt Funded		-	-	58	207	825	1,095	1,185	714	343	-	-	44	62
Transit Supportive Investments		-	24	23	23	23	23	23	23	23	23	23	23	23
Operations		-	-	-	7	14	15	15	15	49	84	86	89	92
State of Good Repair		-	-	-	-	-	-	-	-	-	2	1	1	2
Debt Service		-	-	-	3	18	46	81	109	125	288	289	319	319
Reserve Deposit		41	80	-	-	7	-	-	2	2	46	56	-	-
<b>Total</b>		<b>55</b>	<b>176</b>	<b>318</b>	<b>420</b>	<b>1,219</b>	<b>1,508</b>	<b>1,620</b>	<b>1,136</b>	<b>788</b>	<b>460</b>	<b>470</b>	<b>536</b>	<b>583</b>



Systemwide Sources and Uses (\$Millions)		2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
<b>Sources</b>														
City of Austin		231	238	245	252	260	268	276	284	293	301	310	320	329
Capital Metro		68	74	76	79	82	86	88	92	95	99	102	106	109
Federal Grants		225	225	225	225	225	212	200	200	200	200	200	200	105
Debt Proceeds		39	-	-	-	-	-	-	-	-	-	-	-	-
Reserve Withdrawal		-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>		<b>563</b>	<b>537</b>	<b>546</b>	<b>557</b>	<b>567</b>	<b>565</b>	<b>564</b>	<b>576</b>	<b>587</b>	<b>600</b>	<b>612</b>	<b>626</b>	<b>544</b>
<b>Uses</b>														
Capital - Cash Funded		54	-	-	-	-	-	-	-	-	-	-	-	-
Capital - Debt Funded		39	-	-	-	-	-	-	-	-	-	-	-	-
Transit Supportive Investments		23	-	-	-	-	-	-	-	-	-	-	-	-
Operations		114	137	141	145	150	154	159	164	168	173	179	184	190
State of Good Repair		2	2	58	8	2	2	3	17	3	2	2	2	4
Debt Service		319	319	319	319	330	330	326	324	324	323	321	310	255
Reserve Deposit		12	79	28	85	86	80	76	71	92	101	110	129	95
<b>Total</b>		<b>563</b>	<b>537</b>	<b>546</b>	<b>557</b>	<b>567</b>	<b>565</b>	<b>564</b>	<b>576</b>	<b>587</b>	<b>600</b>	<b>612</b>	<b>626</b>	<b>544</b>