



Volume 3: Defining Projects and Plans

Evaluation of Funding Mechanisms and Financing Techniques

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Prepared for



Prepared by



with



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Executive Summary

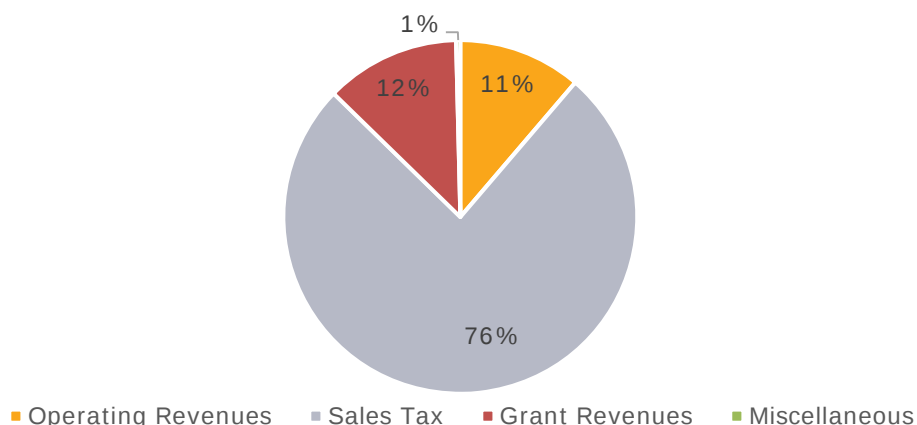
VIA Metropolitan Transit (VIA) updates its long range plan every five years to reassess the region's transportation needs and establish a strategic framework to guide transit investment in the region. The proposed recommendations, projects, and strategies developed in VIA's Vision 2040 Long Range Plan intend to meet the transportation needs resulting from the tremendous anticipated growth in the Greater San Antonio Region, support the type of redevelopment the region's municipalities are seeking, and provide more transportation options for the community. The implementation of proposed transit investments as part of the Vision 2040 Long Range Plan will require the development of a strategic funding plan that assesses the agency's funding capacity based on current revenue streams as well as the identification of other potential community options for funding transit to address the funding gap. This report summarizes the analysis of potential funding and financing options that VIA and the region could consider for plan implementation.

Estimating the Need for Additional Funding

Existing VIA Revenues and Expenditures

VIA's current funding includes operating revenues (including passenger fares), sales tax, grants (Federal Transit Administration (FTA)), and other miscellaneous funding for operating and capital expenses (Figure ES.1). VIA's revenues for FY 2015 were \$219.6 million. Sales tax revenues account for the largest funding source (76 percent), coming from two separate levies: a one-half percent sales tax collected from VIA member jurisdictions (Metropolitan Transit Authority, MTA) and one-eighth percent of the Advanced Transportation District (ATD) sales tax collected in the City of San Antonio (COSA). In 2015, total sales tax revenues were estimated at \$167.0 million.

Figure ES.1 VIA Revenue Sources (2015)



Source: VIA's Comprehensive Annual Financial Report (2015).

VIA's operating expenses in FY 2015 were \$207.8 million. In addition, VIA's annual debt service payments are estimated at approximately \$5.7 million.

VIA was created in 1977 after voters in Bexar County authorized funding through a one-half percent sales tax in San Antonio and seven other incorporated municipalities. In a subsequent vote in 1980, residents of five other municipalities and unincorporated Bexar County voted to join the VIA service area as well. Since that time, the Greater San Antonio Region has expanded to become one of the most populous cities in the United States. Funding for the system has not kept up with demand, particularly in comparison to other peer cities in Texas:

- **Federal Funding** – Historically, Federal funding has accounted for 15 percent of VIA's total funding, equating to approximately \$18 per person per year. Comparatively, the transit agencies in Dallas, Austin, and Houston receive approximately \$27 per person in Federal funding per year.
- **State Funding** – The State of Texas does not have a dedicated funding source for public transit in urban areas.
- **Local Funding** – Accounts for approximately 70 to 75 percent of VIA's existing funding, equating to \$93 per person per year. This is considerably less sales tax per capita per year in transit agencies in Dallas (\$213), Austin (\$202), and Houston (\$137).

2040 Funding Gap

The total cost of Vision 2040 is estimated at \$8,310.0 million (2015 dollars), including both capital and operating and maintenance (O&M) expenditures for all of VIA services. VIA needs at least \$5,689 million (2015 dollars) in new revenues between 2016 and 2040 to support implementation of Vision 2040, while maintaining and operating its current services and VIAtrans networks. This equates to approximately \$227.6 million (2015 dollars) annually, with approximately 75 percent spent towards capital expenditures and the remaining 25 percent towards O&M.

Approach for Evaluation of Funding and Financing Mechanisms

The 2040 funding gap is large, and the current funding mechanisms in place cannot address the gap alone. However, VIA and the surrounding municipalities have numerous funding and financing options to help close this gap and implement Vision 2040. This document evaluates the appropriateness and feasibility of these options in the Greater San Antonio Region, providing a guide for VIA and municipalities to understand the possible funding mechanisms and recommendations for which strategies to pursue.

The evaluation process proceeded through the following steps:

- Developed a comprehensive list of funding and financing mechanisms available at the Federal, state, and local levels.
- Evaluated each mechanism (detailed analysis and rating of each mechanism is presented in Appendix A).

- Developed a shortlist of the most promising funding and financing mechanisms for further exploration:
 - **Increase MTA Sales Tax:** While the viability is low (i.e., local sales tax cap restrictions; requires voter approval), increasing the MTA sales tax, even by a small fraction, results in a high yield.¹
 - **Carbon Tax:** A carbon tax would generate a high revenue through proportionate burden per capita and per business.
 - **Transit-Oriented Development (TOD) Tax Increment Financing (TIF) Districts:** This is a relatively flexible financing mechanism with no voter approval requirements. It is a financing tool that can help the areas around transit investments and help direct further investment to these areas.
 - **Transportation Reinvestment Zone (TRZ):** Of the tax increment financing tools, TRZs are the most applicable for transit projects and they have high potential financing leverage. VIA may want to pursue working in concert with jurisdictions in Bexar County that are currently evaluating TRZs for existing projects.
 - **Parking Benefit District:** A parking benefit district could generate funds to support needed capital funds for local improvements that promote alternative mode use, which may include things like transit stops and shelters. Such revenue stream could be dedicated to support some of those “miscellaneous” capital needs, freeing up local dedicated taxes for operations and/or major capital needs.
 - **Joint Development:** Although a potentially “low” yield option (further study would be necessary to determine yield for the San Antonio metropolitan area), this will be key to facilitate TOD and tax increase that could be captured for transit investments.
 - **Utility Fees:** A potential high-yield and stability would make this an attractive option. VIA may want to explore potential overlap with carbon tax (if applied to electricity only) and different tax structures.
 - **Farebox Revenues:** Implementation of policies to encourage higher farebox recovery will require an analysis of fare elasticity of San Antonio transit users, and the fare structure of premium services can be developed such that a higher farebox recovery ratio is achieved.
 - **FTA Section 5309 Capital Investment Grants:** New Starts and Small Starts are highly impactful funding sources with direct application to the fixed guideway projects that VIA is considering as part of Vision 2040.

¹ For the purpose of this study, a “high” yield revenue source could generate \$10 million or more annually.

- **TIFIA:** This is a Federal financing mechanism providing loans and other credit instruments for capital projects to be paid back by local dedicated revenues. An understanding of program criteria and identifying potential repayment sources is necessary as VIA considers this loan program potential to finance major capital investments.
- **Design Build Finance Operate Maintain (DBFOM) Public-Private Partnerships (P3):** DBFOM may help to advance major and complex capital investments. While Texas is one of the states with the most P3 experience in the US, this experience is focused on tolled facilities. Overall, there is limited DBFOM experience in the US for transit projects. Further study is warranted regarding the specifics of delivering a transit project through DBFOM with the Alamo Regional Mobility Authority (RMA), to further understand VIA and Alamo RMA's respective capacities to perform the shared functions required, and to identify potential concessionaires.
- **Federal EB-5:** This program facilitates foreign investment and benefits the greater community with outside investment and more jobs. The US Citizenship and Immigration Services (USCIS) has made the program more user-friendly in the recent past. Further study is required to understand the updated requirements in practice and how this program may apply to transit.

Recommended Strategies

For the purpose of funding the Vision 2040 Long Range Plan, VIA should consider pursuing a funding plan that advances three main groups of funding alternatives:

- **Federal Grants:** VIA should consider applying for Federal grant programs, such as FTA Section 5309 (New Starts/Small Starts) and TIGER grants that can leverage local funds for implementation of rapid transit alternatives (e.g., light rail transit) proposed as part of Vision 2040. In addition, if the Greater San Antonio Region becomes a nonattainment area under new US National Ambient Air Quality Standards (NAAQS), VIA could apply for Congestion Mitigation and Air Quality (CMAQ) funds to support transit investments as well. The decision to apply for these programs should be based on how well the projects perform under the criteria established to evaluate grant applications under each of these funding programs.
- **State/Local Funding:** The adoption of a sustainable funding source(s) at the local level is necessary for VIA's financial capacity over the long term to maintain its current services and address the regional public transportation needs identified in the Vision 2040 Long Range Plan. VIA must develop a strategy to support the adoption of one or more funding options at the local level. The strategy will require building political and public support to draft and file legislation that is eventually adopted by the jurisdictions within VIA's service area.
- **VIA Strategies:** These include a revision of the current fare structure that can help generate additional farebox revenues, a Comprehensive Operations Analysis (COA) to identify strengths and weaknesses of current operations, and the identification and implementation of short-term changes to transit service in the context of the Vision 2040 process.



1.0 Introduction

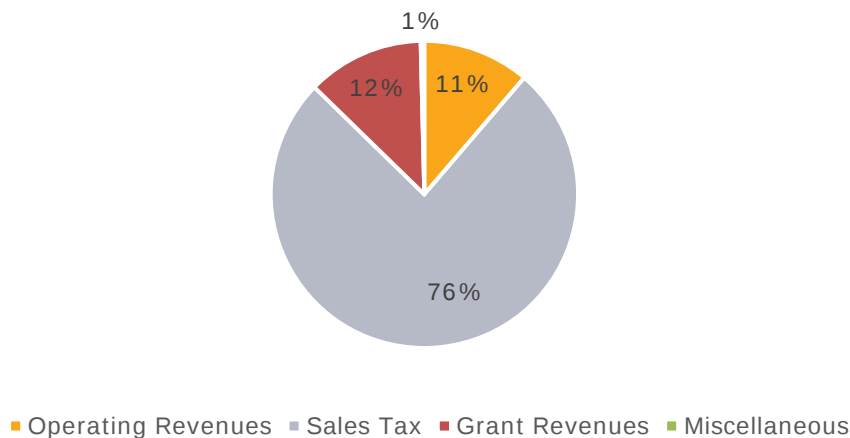
VIA Metropolitan Transit (VIA) updates its long range plan every five years to reassess the region's transportation needs and establish a strategic framework to guide transit investment in the region. The proposed recommendations, projects, and strategies developed in VIA's Vision 2040 Long Range Plan intend to meet the transportation needs resulting from the tremendous anticipated growth in the Greater San Antonio Region, support the type of redevelopment the region's municipalities are seeking, and provide more transportation options for the community. The implementation of proposed transit investments as part of the Vision 2040 Long Range Plan will require the development of a strategic funding plan that assesses the agency's funding capacity based on current revenue streams as well as the identification of other potential community options for funding transit to address the funding gap. This report summarizes the analysis of potential funding and financing options that VIA and the region could consider for plan implementation.

1.1 Existing VIA Revenues and Expenditures

VIA's current funding includes operating revenues (including passenger fares), sales tax, grants (Federal Transit Administration (FTA)), and other miscellaneous funding for operating and capital expenses (Figure 1.1). VIA's revenues for FY 2015 were \$219.6 million. Sales tax revenues account for the largest funding source (76 percent), coming from two separate levies: a one-half percent sales tax collected from VIA member jurisdictions (Metropolitan Transit Authority, MTA), and one-eighth percent of the Advanced Transportation District (ATD) sales tax collected in the City of San Antonio (COSA). In 2015, total sales tax revenues were estimated at \$167.0 million.

VIA's operating expenses in FY 2015 were \$207.8 million. In addition, VIA's annual debt service payments are estimated at approximately \$5.7 million.

Figure 1.1 VIA Revenue Sources (2015)



Source: VIA's Comprehensive Annual Financial Report (2015).

VIA was created in 1977 after voters in Bexar County authorized funding through a one-half percent sales tax in San Antonio and seven other incorporated municipalities. In a subsequent vote in 1980, residents of five other municipalities and unincorporated Bexar County voted to join the VIA services area as well. Since that time, the Greater San Antonio Region has expanded to become one of the most populous cities in the United States. Funding for the system has not kept up with demand, particularly in comparison to other peer cities in Texas:

- **Federal Funding** – Historically, Federal funding has accounted for 15 percent of VIA's total funding, equating to approximately \$18 per person per year. Comparatively, the transit agencies in Dallas, Austin, and Houston receive approximately \$27 per person in Federal funding per year.
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- **Local Funding** – Accounts for approximately 70 to 75 percent of VIA's existing funding, equating to \$93 per person per year. This is considerably less sales tax per capita per year in transit agencies in Dallas (\$213), Austin (\$202), and Houston (\$137).

1.2 2040 Funding Gap (Capital and Operational)

1.2.1 Assumptions for Forecast of Existing Revenues and Expenses for Vision 2040

Existing revenues and expenditures were forecast through 2040 applying the assumptions summarized in Table 1.1. For the purpose of the Vision 2040 Long Range Plan, the revenue and expenditure forecasts were adjusted to 2015 dollars using the Consumer Price Index forecast from the Congressional Budget Office (CBO, 2016) and 10-year historical change beyond 2026. These revenue and expenditure forecasts represent a 'Business as Usual' projection, where VIA would continue and support current VIA services; however, no new infrastructure, added service, or other projects would take place.

Table 1.1 Forecast Assumptions for VIA's Existing Funding Sources and Expenditures

Funding Sources	Assumptions
Farebox revenues: - Bus - VIAtrans	Annual growth rate: 3% (bus) 4% (VIAtrans)
Other VIA operating and miscellaneous revenues - Special events - Charter - Bus advertising - Other - Investment income	Constant
Sales Tax (MTA and ATD)	Annual growth rates: - Source: <i>City of San Antonio Five-Year Financial Forecast</i>: 2016-2018: 4.5% 2019: 3.5% 2020: 3.0% 2021 to 2040: 3.5%
Federal Funding	Annual growth rates: - Fixing America's Surface Transportation (FAST) Act rates by program: - Sections 5307, 5339, & 5310: 2.0% (2017); 2.1% (2018-2020) - Section 5337: 1.7% (2017-2020) 2021 to 2040: 1.5%

Expenditures	Assumptions
Operating expenses	Annual growth rate: 2.6%
Fleet replacement	The plan includes the acquisition of 1,006 vehicles from 2016 through 2040, based on VIA's fleet management plan (2016-2026) and estimated future vehicle replacement needs, assuming a 12-year useful life. - First vehicle replacement/acquisition cycle (2016-2025) 40' CNG: 479 buses 60' CNG: 19 buses - Second vehicle replacement cycle (2028-2037): 40' CNG: 479 buses 60' CNG: 19 buses - Third replacement cycle (begins in 2040) 40' CNG: 10 buses
Debt service	Based on data from <i>FY 2015 Comprehensive Annual Financial Report</i>
Other capital expenses (Business as Usual)	- Zarzamora Primo - Southwest Military Primo - VIA's adopted capital investment program through 2021 - Recurring capital investments beyond 2021

The forecast of revenues and expenditures through 2040 for the Business as Usual transit network is summarized in Table 1.2. VIA's funding surplus over the analysis period is estimated at \$2.4 million (2015 dollars).

Table 1.2 Business as Usual Revenues and Expenditures (million, 2015 dollars)

	Short (2015 to 2020)	Mid (2021 to 2030)	Long (2031 to 2040)	Total (2015 to 2040)
Revenues	\$1,382.7	\$2,556.7	\$3,020.7	\$6,960.1
Expenditures	\$1,564.0	\$2,556.6	\$2,837.1	\$6,957.7
Surplus / (Deficit)	(\$181.3)	\$0.1	\$183.6	\$2.4

Source: VIA Metropolitan Transit, 2016

1.2.2 Funding Gap for the Vision 2040 Long Range Plan

The full cost of the Vision 2040 Long Range Plan is estimated at \$8,310.0 million (2015 dollars), including both capital and operating and maintenance (O&M) expenditures (Table 1.3). As described in the Vision 2040 Long Range Plan, future investments are planned in three areas: Better Bus, Rapid Transit, and Innovative Solutions. The Vision 2040 Long Range Plan takes the current local services and network of premium and express routes and improves the base network with more frequent service and upgraded transit stops, supported by a regionwide network of frequent, dedicated-lane premium transit and fully integrated with emerging technology and multimodal travel options using innovative solutions.

Table 1.3 Estimated Cost of Vision 2040 (millions of 2015 dollars)

Component	Net O&M (Maximum Annual)	Capital	Net O&M (Total)	Accumulative Total 2040
Better Bus	\$126	\$892	\$1,240	\$2,132
Rapid Transit	\$134	\$5,344	\$833	\$6,177
Innovative Solutions	\$ –	\$1	\$ –	\$1
Total	\$260	\$6,237	\$2,073	\$8,310

Note: O&M costs are net of potential farebox revenues and incremental FTA Section 5307 formula funds.

1.3 Organization of the Report

This report is organized into three sections with two appendices, serving as support for the Vision 2040 Long Range Plan. The topics covered include:

- **Introduction:** Section 1.0 describes VIA's current financial situation and provides an estimate of the funding gap to meet existing and future transit needs.
- **Closing the 2040 Funding Gap:** Section 2.0 provides an overview of potential funding and financing mechanisms to address the funding gap, and establishes the framework by which these options were evaluated. It summarizes the evaluation results and presents a shortlist of potential funding and financing options. The section concludes with additional information and case studies for the recommended mechanisms.
- **Conclusions:** Section 3.0 provides a summary of findings and potential funding strategies for Vision 2040, and presents a high-level of revenue potential for some funding sources evaluated.
- **Appendix A:** This appendix provides the detailed analysis of all 50+ funding and financing mechanisms considered as part of this study.
- **Appendix B:** This appendix compiles information about sales tax ballot measure results since 2010 as collected by the Center for Transportation Excellence (CFTE).

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2.0 Closing the 2040 Funding Gap

2.1 Approach for Evaluation of Funding and Financing Mechanisms

With the combined cost of continuing to provide existing transit service levels (Business as Usual) plus delivering the Vision 2040 Long Range Plan at about \$7.4 billion (2015 dollars), the region must consider a wide range of funding and financing mechanisms to close this funding gap. A comprehensive list of over 50 funding and financing mechanisms developed included:

- **Federal Funding:** VIA currently receives formula funds from the Federal Transit Administration (FTA), which supports capital and preventative maintenance needs. With forecast of baseline system growth (Business as Usual) and the potential implementation of service levels, it is anticipated that current funding levels will increase in addition to the base growth. There are also opportunities for funding from discretionary grants other US Department of Transportation (US DOT) programs.
- **State Funding:** Opportunities of funding for transit in Texas are limited, especially for urban transit agencies. Two programs that could support the type of investments included in the Vision 2040 Long Range Plan were considered as part of the study.
- **Local Funding:** VIA's major funding source is a local sales tax that generates over 75 percent of the agency's revenues. Local funding options were divided into several major categories:
 - *Local Sales Tax:* Existing sources (MTA and ATD sales taxes) were evaluated against the criteria, and options for potential increases were considered.
 - *Operating Revenues:* From farebox revenues to other revenue opportunities, such as service contracts, to leverage sales tax and Federal funds in the delivery of VIA services.
 - *Traditional Taxes:* The funding options considered here are examples of taxes that have been used for transit in other states. Their application by local governments for transit in Texas is not currently authorized, and would require legislative action for implementation.
 - *Business, Activity, and Related Funding:* These are revenue sources that are not as widely employed, but some transit agencies have successfully used them to support transit needs.
 - *Value Capture:* "Value capture" includes various arrangements that can be used to capture revenue from income streams of private business and related development activities benefiting

from the proximity to specific transit facilities and services. In general, it is applied as a form of “property taxes” or fees that are targeted to capture the benefits or cost of infrastructure that serves property development.

- **Out-of-the-Box Ideas:** “Out-of-the-Box” ideas included here encompass cash flow management techniques, financing, and project delivery tools that can help leverage future revenue streams and/or accelerate delivery of transit projects.

2.2 Comparing Mechanisms and Techniques

There are variety of Federal, state, and local funding and financing mechanisms that VIA currently relies upon for capital and operating needs. In addition, there are many others which VIA may be able to access. Some require changes to VIA priorities and others require changes in legislation. VIA also has the ability to engage a variety of financing techniques; some are easier to execute and others are very challenging. In order to recognize the possible funding mechanisms and financing techniques, including sorting through the complexities while comparing and contrasting each option, the following evaluation criteria were selected:

- Revenue Yield;
- Stability;
- Viability; and
- Ease of Administration.

Due to the vast variety of funding mechanisms and financing techniques reviewed, the application of the evaluation criteria will differ from one funding mechanism to another. For existing funding mechanisms at VIA or other transit agencies across the country, such as local sales taxes or Surface Transportation Program (STP) funding, specific revenue yield values are likely to be estimated. However, for other mechanisms that are more recent or have not been widely implemented, revenue yield values are less predictable. The same rationale applies for other criteria used to compare and contrast the different funding mechanisms and financing techniques.

2.2.1 Revenue Yield

In general, yield refers to the overall amount of revenues a funding source is capable of generating. Funding mechanisms and finance techniques scored either “High,” “Moderate,” or “Low,” dependent upon the projected revenue the funding source is expected to generate annually.

- **High:** Funding source generates over \$10 million in revenue annually
- **Moderate:** Funding source generates between \$1 and \$10 million in revenue annually
- **Low:** Funding source generates less than \$1 million in revenue annually

2.2.2 Stability

Stability refers to whether the funding source or financing technique is subject to uncertain fluctuations that can impact VIA's ability to project future revenue with certainty, as well as the ability to rely on the source to back revenue bonds for financing improvements. Funding mechanisms and finance techniques scored either "High," "Moderate," or "Low," dependent upon how well the funding source is expected to maintain revenue during changes in travel or social patterns, economic climates, and if the source relies upon consistent, formula funding, or discretionary funding such as a competitive grant program.

- **High:** Remains consistent despite changing travel patterns, social patterns, and economic climate in the Greater San Antonio Region and Texas; based off of formula funding program or program with a consistent funding history.
- **Moderate:** Slightly susceptible to instability in response to changes in travel patterns, social patterns, and economic climate in the Greater San Antonio Region and Texas. Could be based off formula or discretionary funding program.
- **Low:** Highly susceptible to instability and falling revenue in response to changes in travel patterns, social patterns, and economic climate in the Greater San Antonio Region and Texas. Based upon receiving funding from a competitive grant program, dependent upon available Federal/state/regional funding ability.

2.2.3 Viability

Viability refers to the legal requirements of a funding source or financing technique for dedicating its revenue to VIA for transit projects. The criterion considers whether a measure would require State legislative approval before being considered at the regional/local level. Statutory authority, or the ability for an agency, county, or city to implement the funding and finance technique, is another consideration. Funding mechanisms and finance techniques scored either "High," "Moderate," or "Low," dependent upon statutory legality required to implement the mechanism.

- **High:** Minor legislative action or traditional voter approval required.
- **Moderate:** Might require legislative authority or voter referendum on new concepts.
- **Low:** Could require legislative authority, voter referendum, or change of state law.

2.2.4 Ease of Administration

Ease of administration refers to the ability of the current local and regional governments within the Greater San Antonio Region to implement and administer the local and regional funding mechanisms and finance techniques. This criterion has the least influence in selecting the recommended funding/financing mechanisms, given that a funding source or financing tool can be administered if all other factors suggest that a given course of action should be taken.

- **High:** Funding mechanism already exists in Texas or the Greater San Antonio Region, no new collection technology and systems are required, and additional administration costs would be marginal due to the use of current staff and facilities.
- **Moderate:** Funding mechanism already exists in Texas or the Greater San Antonio Region, but new collection technology and systems might be required, and additional administration costs could be substantial, potentially involving the creation of a new department or division within existing governments.
- **Low:** Funding mechanism does not exist in the Greater San Antonio Region or Texas, new technology is required, and the creation and staffing of a new department or agency would be required.

2.3 Evaluation of Funding and Financing Options

Listed in Table 2.1 is the evaluation summary of all funding sources against the four criteria described above. Financing mechanisms were evaluated against three applicable criteria, excluding Revenue Yield, since they do not generate revenue, but rather require a dedicated funding source for repayment over the long-term. A description of each option along with the evaluation is provided in Appendix A.

Table 2.1 Summary of Funding and Financing Mechanisms

Funding Mechanism	Revenue Yield	Stability	Viability	Ease of Administration
Federal Funding Sources				
FTA Formula Programs				
Section 5307 UZA	High	Moderate	High	High
Section 5337 State of Good Repair	Low	Moderate	High	High
Section 5339 Bus and Bus Facilities	Moderate	Moderate	High	High
Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities	Low	Moderate	High	High
FHWA Flexible Funds				
National Highway Performance Program	Low	Moderate	Moderate	High
Surface Transportation Block Grant Program – Metropolitan Mobility	Moderate	Moderate	Moderate	High
Transportation Alternatives Program	Low	Low	High	Moderate
CMAQ	Low	Moderate	High	Moderate
US DOT Discretionary Programs				
TIGER Grants	Moderate	Low	High	Moderate
FTA Discretionary Grants				
Section 5309 Capital Investment Grants (New Starts/Small Starts)	High	Low	High	Moderate
Section 5339 Bus and Bus Facilities (Discretionary)	Low	Low	High	Moderate

Funding Mechanism	Revenue Yield	Stability	Viability	Ease of Administration
State Funding Sources				
Texas Mobility Fund	Low	Low	Moderate	High
Texas Rail Relocation and Improvement Fund	N/A	Moderate	Moderate	Moderate
Local Funding Sources				
Local Sales Tax				
Existing MTA Sales Tax	High	Moderate	High	High
Increasing MTA Sales Tax	High	Moderate	Low	High
Advanced Transportation District	High	Moderate	High	High
Operating Revenues				
Farebox Revenues	High	Moderate	Moderate	High
Other Operating/Miscellaneous	Moderate	Moderate	High	High
Local Contracts	Low	High	High	High
Naming Rights	Low	High	High	High
Traditional Taxes				
Property Tax	Moderate	Moderate	Low	High
Motor Fuel Tax	Moderate	Low	Low	High
Vehicle Registration/License Fees	Low	Moderate	Moderate	High
Car Rental Tax	Moderate	High	Low	High
Vehicle Emissions Tax	Moderate	Low	High	Low
Toll Revenues	Moderate	Moderate	Low	High
Taxi Fees	Low	Low	Low	Low
General Fund Allocations	Moderate	Low	Moderate	High
Local Assistance	Low	Low	Moderate	High
Local Allocation Agreement	Moderate	High	Moderate	High
"Sin" Taxes	Low	Low	Low	High
Business, Activity, and Related Funding Sources				
Employer/Payroll and Income Taxes	High	High	Low	Moderate
Utility Fees/Taxes	High	High	Low	High
Room/Occupancy Taxes	Low	High	Low	High
Real Estate Transfer Taxes	High	High	Low	High
Mortgage Recording Fees	Low	High	Low	High
Business-Related Fees	High	High	Low	High
Carbon Taxes	High	High	Moderate	High
Parking Fees				
Citywide Parking Fund	Low	High	Low	Moderate
Parking Benefit District	Moderate	High	Moderate	Low
Transit Agency Parking Facilities	Moderate	High	High	Moderate
Value Capture / Special Districts				
Impact Fees	Moderate	Moderate	Low	Moderate

Funding Mechanism	Revenue Yield	Stability	Viability	Ease of Administration
Public Improvement Districts	Low	High	High	Moderate
Tax Increment Reinvestment Zones	N/A	N/A	Low	N/A
Transit-Oriented Development (TOD)/Tax Increment Financing (TIF) Districts	High	High	High	Low
Transportation Reinvestment Zones	High	High	High	Moderate
Out of the Box Ideas				
Federal EB-5	High	Low	High	Moderate
Financing/Cash Flow Tools				
Revenue Bonds	N/A	Moderate	High	High
General Obligation (GO) Bonds	N/A	High	Moderate	High
Grant Anticipation Notes	N/A	Moderate	High	High
Credit Assistance				
Transportation Infrastructure Finance and Innovation Act (TIFIA)	N/A	Moderate	Moderate	Moderate
TxDOT Infrastructure Bank	N/A	Low	Moderate	High
Rail Rehabilitation and Improvement Financing	N/A	Moderate	High	Moderate
Cash Flow Management Tools				
Transportation Development Credits	N/A	Low	High	High
Public-Private Partnerships				
Design Build Operate Maintain Finance	N/A	High	High	Moderate
Joint Development or Site/Station Specific	Low	High	High	High

2.4 Shortlist of Most Promising Funding and Financing Options

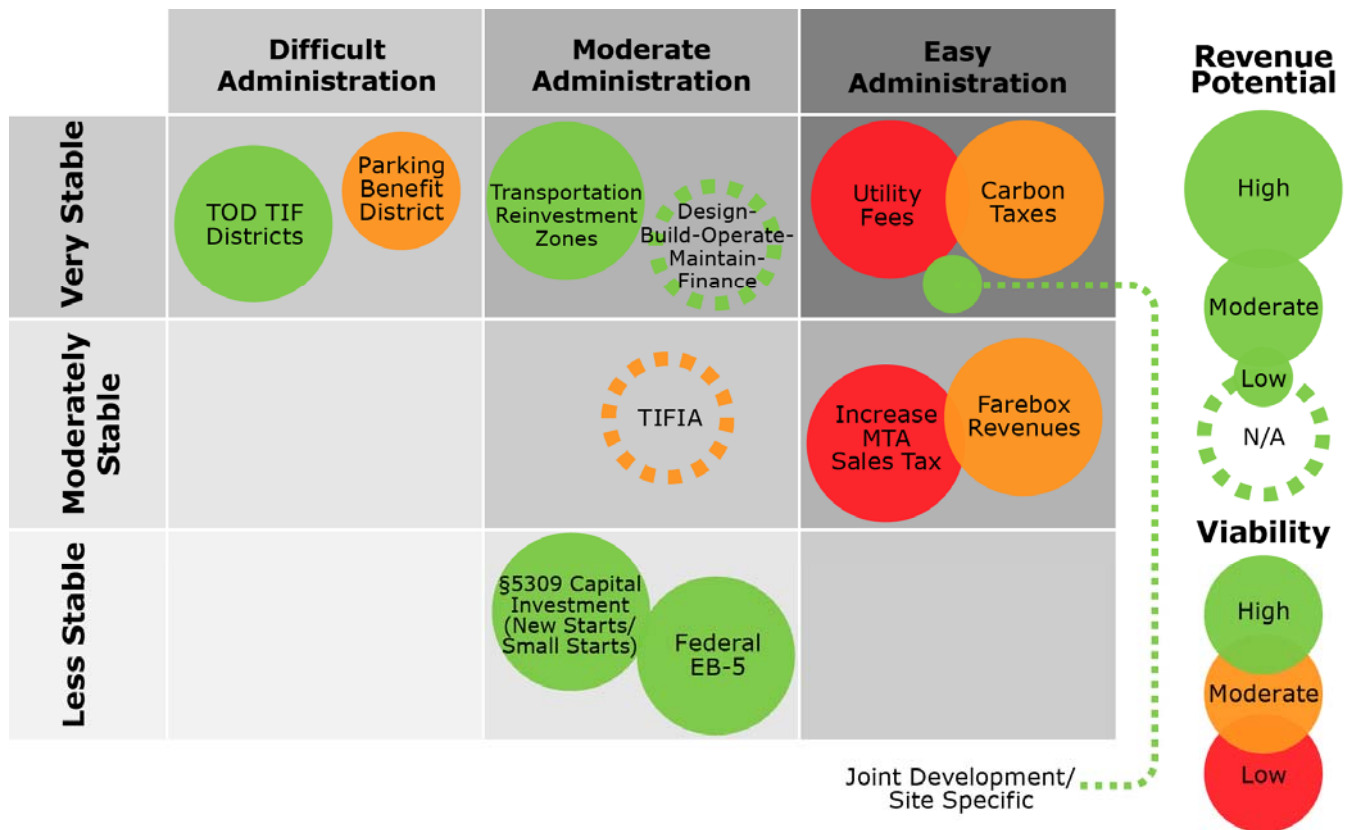
After the evaluation of all potential funding and financing options using the criteria described above, a shortlist of funding and financing mechanisms was selected to move forward for further analysis (Table 2.2 and Figure 2.1). The shortlisted funding and finance mechanisms were evaluated amongst the full list of mechanisms based on its potential for revenue yield, viability, stability, and ease of administration. Most of these choices exclude mechanisms that VIA has used or are currently using and for which additional research would not be necessary or meaningful.

The shortlist is divided in two categories: revenue and leverage/project delivery tools. It is important to make that distinction, because leverage/project delivery mechanisms generally require a local dedicated source to match (in the case of grants), or repayment (in the case of borrowing or equity). The following section summarizes how these recommended funding and financing options have been applied by other transit agencies and/or governments to support transit investments.

Table 2.2 Shortlist of Recommended Funding and Financing Options for Further Exploration

		Revenue Yield	Stability	Viability	Ease of Administration
Revenue Sources					
1	Increase MTA Sales Tax	High	Moderate	Low	High
2	Carbon Taxes	High	High	Moderate	High
3	TOD TIF Districts	High	High	High	Low
4	Transportation Reinvestment Zone	High	High	High	Moderate
5	Parking Benefit District	Moderate	High	Moderate	Low
6	Joint Development	Low	High	High	High
7	Utility Fees	High	High	Low	High
8	Farebox Revenues	High	Moderate	Moderate	High
Leverage / Project Delivery Tools					
9	Section 5309 Capital Investment Grants (New Starts/Small Starts)	High	Low	High	Moderate
10	TIFIA	N/A	Moderate	Moderate	Moderate
11	Design Build Operate Maintain Finance	N/A	High	High	Moderate
12	Federal EB-5	High	Low	High	Moderate

Figure 2.1 Overview of Most Promising Funding and Financing Options



2.5 Case Studies

2.5.1 Increasing Sales Tax

Local sales taxes are among the most popular funding sources dedicated to transportation, including public transit. A database of recent local sales tax ballot measures from the Center of Transportation Excellence (CFTE) shows that 60 jurisdictions pursued sales taxes for general transportation or transit since 2010 (Figure 2.2 and Table 2.3). Of this total, 32 ballot measures (53 percent) passed, and of those approved, 22 dedicated all sales tax revenue to transit; 10 of the approved measures included funding for nontransit investment, such as road and street improvements, bike/pedestrian projects, and other (e.g., schools). There were three types of ballot initiatives: to adopt new local sales taxes, to increase local sales tax rate dedicated to transportation, or extending collection of an existing sales tax set to expire. Over half of the successful ballots were for new sales taxes. The information compiled by CFTE on recent sales tax measures is presented in Appendix B, including information of these ballot measures as it relates transit funding.

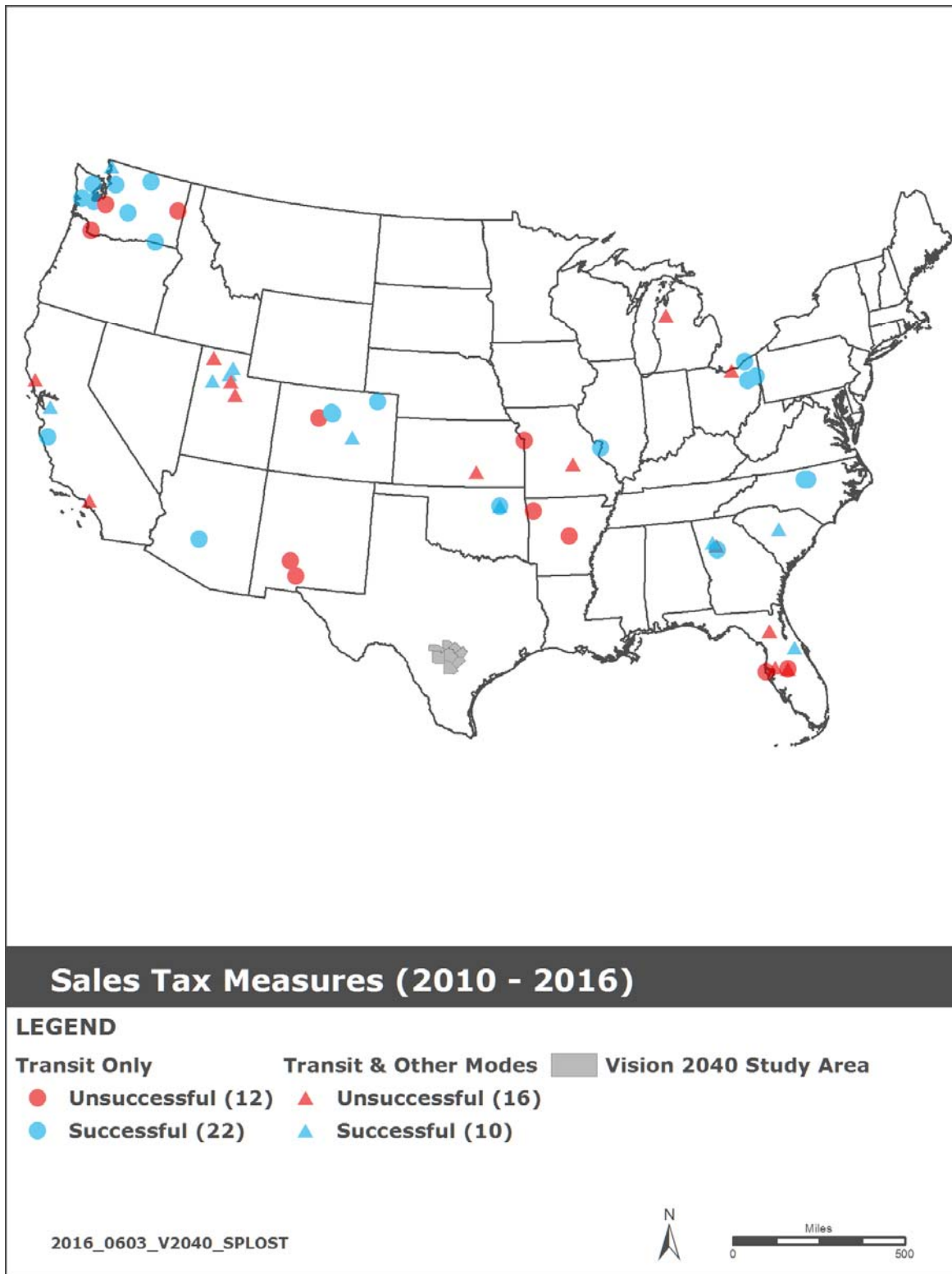
Table 2.3 Sales Tax Ballot Results, 2010 to 2016

	Extension	Increase Existing	New	Total
Dedicated to Transit				
Fail	0	5	8	13
Pass	4	6	12	22
Total	4	11	20	35
Not Dedicated to Transit				
Fail	1	3	11	15
Pass	3	2	5	10
Total	4	5	16	25
All Ballot Measures				
Fail	1	8	19	28
Pass	7	8	17	32
TOTAL	8	16	36	60

Source: CFTE.

Jurisdictions in Arizona, California, Colorado, Florida, Ohio, and Washington asked voters to approve sales tax increases. Washington State had the most ballot measures for local transportation sales taxes (13 ballot measures), most of which proposed increasing the local transportation sales tax rate by 0.10 to 0.30 percent. The success rate to increase sales taxes was 50/50, based on the information obtained from CFTE. The motive for most of the sales tax increase proposals were to counteract service cuts and budget shortfalls due to the recession.

Figure 2.2 Sales Tax Ballots for Transportation (2010 to 2016)



Source: Center for Transportation Excellence.

2.5.2 Carbon Tax

Carbon taxes are more common outside of the United States; however, a number of jurisdictions in the United States have tested and evaluated pilot programs in recent years. Three carbon tax programs located in the United States are reviewed below. None of these programs, however, were created specifically for public transportation funding.

Example: Boulder Colorado

The first municipal carbon tax in the United States was implemented in Boulder in 2006, placing a tax on gas and electric utility bills. Tax revenues are directed to the City's Office of Environmental Affairs to fund programs to reduce community-wide greenhouse gas emissions, including rebates, incentives, and energy audits. The carbon tax has generated approximately \$1.8 million per year. Carbon tax rates are \$0.0003 per kWh for industrial users, \$0.0009 per kWh for commercial users, and \$0.0049 per kWh for residential households (Table 2.4). The average annual cost is \$9,600 a year for industrial businesses, \$94 per commercial business, and \$21 per home. These funds go toward implementing the Boulder Climate Action Plan. Funds support investments in public transit, as well as in public education, energy audits, and energy rebates (Smart Growth America, 2016). To date, community residents have been supportive of the tax, as it was extended for another five years in 2012 by a vote with 82 percent approval, an increase from the initial voter approval rate of 60.5 percent in 2006.

Table 2.4 Boulder Carbon Tax Rates

Building Type	Carbon Tax (per kWh)	Average Annual Bill
Residential	\$0.0049	\$1
Commercial	\$0.0009	\$94
Industrial	\$0.0003	\$9,600

Source: Smart Growth America.

The goal for establishing a carbon tax in Boulder was first and foremost to encourage responsible energy consumption, rather than to establish a large revenue source. Rates were set in direct proportion to the estimated sector (industrial, commercial, and residential) program expenditures set by the Climate Action Plan. Since its extension in 2012, the City has reassessed sector consumption and program outcomes and is refocusing efforts toward curbing commercial consumption, which accounts for approximately 60 percent of the City's greenhouse gas emissions.

Between 2006 and 2012, 41 percent of the tax revenue went to service delivery (rebates, incentives, and energy audits), as well as consultant services to help the City develop the programs. Thirty-two percent went to personnel, and 12 percent went to education and marketing. The rest was spent on overhead, with a balance of approximately \$400,000 in reserves for future projects. The carbon tax in Boulder was written to provide flexibility in adjusting the rates over time by up to 20 percent from the starting rates without a public vote.

Example: San Francisco, California

The Bay Area Air Quality Management District, which covers nine counties in the San Francisco Bay Area, charges a carbon tax on businesses at a rate of 4.4 cents per ton of carbon dioxide emitted. Revenue is used to fund a variety of programs to reduce greenhouse gas (GHG) emissions.

Example: Montgomery County, Maryland

Montgomery County, Maryland enacted the first county-level carbon tax in the US in 2010. While it was in use, the tax charged only very large emitters (only one coal-fired power plant is charged in the whole county). The law provided for half of the revenue to go toward creating a low interest loan plan for county residents to invest in residential energy efficiency upgrades. The tax was repealed in 2012 after a lawsuit by the power plant (County of Montgomery, 2012).

2.5.3 TOD TIF Districts

In 2005, the Tax Increment Financing Act was amended to allow a Tax Increment District, or Transit-Oriented Development TIF District (TOD TIF), to pay for land outside of the district if the zone is served by a rail transit project or bus rapid transit project. TIF revenues can be used to “pay for the costs of acquiring, constructing, operating, or maintaining property located in the zone or to acquire or reimburse acquisition costs of real property outside the zone for right-of-way or easements necessary to construct public rights-of-way or infrastructure that benefits the zone” (Title 3, Subtitle B, Section [311.010](#) (b)).

Peer Example: Dallas, Texas

The application of TIF for TOD has been implemented only one-time to date, in Dallas. The Dallas TOD TIF District (also referred to as the “Spider TIF”) was created in 2008 by the City of Dallas to encourage transit-oriented developments adjacent to Dallas Area Rapid Transit (DART) light rail stations. It has been used primarily for station area improvements. The estimated base value for the District is \$206 million and has projected revenues of \$369.8 million over the 30-year-term, which equates to approximately \$185.2 million in net present value, with \$2.43 billion forecast from new private investment. Eligible public investments include infrastructure, environmental remediation, parks and plazas, affordable housing, and transit-related improvements.

The primary benefit of creating the TOD TIF District has been that higher tax base, more densely developed areas (e.g., Mockingbird/Lovers Lane) can help support struggling areas (e.g., Lancaster Corridor). The District facilitates the transfer of TIF revenues from more revenue generating TOD districts to less revenue generating districts according to a specified formula. It is designed to provide affordable housing options in the north subdistricts and mixed income housing in the Lancaster Corridor according to the following formula:

- **Mockingbird / Lovers Lane:** This subdistrict, containing the two named stations, is the wealthiest subdistrict located along the Red and Blue Lines in North Dallas paralleling the North Central Expressway. Tax increment collected in this subdistrict is allocated with 40 percent staying within the subdistrict for development projects, 40 percent going to the Lancaster Corridor subdistrict, and 20 percent dedicated to affordable housing investments district wide.

- **Cedars West:** This subdistrict, adjacent to the Cedars-Pohatten Station on the south edge of downtown, shares 10 percent of its increment with the Lancaster Corridor subdistrict and allocates 10 percent to affordable housing investments. The remaining 80 percent is retained within Cedars West.
- **Lancaster Corridor:** This subdistrict, including 8th and Corinth, Illinois, Kiest, Veterans Affairs Medical, and Ledbetter Stations, is in a low-income area of South Dallas in need of revitalization investment and is the primary receiving subdistrict.
- **Cedar Crest:** This subdistrict, adjacent to Illinois Station, is a master planned development of the former Kiest Landfill. Cedar Crest retains all of its generated increment does not receive increment from other subdistricts.

2.5.4 Transportation Reinvestment Zone

TRZs would allow a transit agency, in conjunction with a city or county, to use TIF to help finance a major transit investment that is expected to generate enhanced values for nearby properties. This value capture approach could potentially be used to fund a portion of the local match, or a Federally financed project without an additional tax levy. TRZ finance covers anywhere between 5 percent and 20 percent of project cost (as in the examples of Corpus Christi and Bexar County below).

Example: Corpus Christi, Texas

The Port of Corpus Christi and the Counties of Nueces and San Patricio, Texas are replacing the Corpus Christi Harbor Bridge, which spans across multiple jurisdictions. The cost is estimated at \$870 million and funded through a mix of Federal, state, and local sources. The counties are expecting to finance \$25 to \$40 million through TRZs.

Example: Bexar County

Other jurisdictions in Bexar County, Texas are also looking into using TRZs to fund capacity enhancements on Loop 1604 to improve safety, and increase mobility and operational efficiency. A mix of Federal, state, and local funds were used to fund the project, which is estimated to cost between \$770 million and \$1.47 billion for four new managed lanes along 35.5 miles. Three of the affected jurisdictions are interested in using the TRZ mechanism to raise the local match for the project (10 to 20 percent of cost) (Texas A&M Transportation Institute, 2013). The Loop 1604 TRZ project does not preclude Bexar County from pursuing another TRZ project for public transit. As of the passing of SB 1110 in 2013, TRZs may be formed for one or more projects within a zone.

2.5.5 Parking Benefit District

In a parking benefit district (PBD), all or a portion of the parking revenues generated are dedicated for uses within the area where collected. To date, there is only one application of PBDs in Texas. There are, however, examples of successful parking districts in other states including:

- **Boulder, Colorado:** Established a general improvement district (GID) in the downtown area that combines revenues from parking charges with a mill levy applied to all commercial development to fund transit passes for employees, a WiFi network, and improvements to the Pearl Street Mall.

- **Old Pasadena, California:** Established a PBD in 1993 and borrowed against future meter revenues to fund substantial streetscape, parking, maintenance, and safety projects. Implementing these improvements in the first year of the PBD resulted in a 100 percent increase in sales tax revenues.
- **San Diego, California:** Established a PBD in 1997 to revitalize a historic district through infrastructure improvements. Improvements include directional signs, landscaping and pedestrian improvements.
- **San Francisco, California:** The Dynamic Parking Pilot Program in San Francisco, California designated 19,250 spaces in certain areas of the City to charge rates according to time of day and area demand. The pilot was successful and applied citywide in 2012. Revenue went toward the transit service general fund.
- **Washington, D.C.:** A PBD in Washington, D.C. has established an 85 percent occupancy rate with their demand-based pricing model. Community improvements include bike racks, lighting, street furniture, and trash compactors.

In 2012, the Urban Land Institute conducted a study evaluating opportunities for PBDs in New Orleans, Louisiana that provides insight into how the feasibility of a PBD could be evaluated in the Greater San Antonio Region. At a minimum, PBDs should include the following (Urban Land Institute, 2012):

- Well-defined area with high demand for parking;
- Insufficient supply of curb parking;
- Ability to charge for curb parking space;
- Means of measuring effectiveness;
- Added public services for the neighborhood; and
- Ease of payment.

Peer Example: Austin PBD

The Austin West Campus PBD dedicates half of the funds to streetscape projects, including sidewalk and curb enhancements, benches, crosswalks, transit shelters, and bike lanes; the other half goes to the City of Austin General Fund (Metropolitan Planning Council, 2013). Enforcement runs five days a week from 8 a.m. to 5:30 p.m. at a flat \$1-per-hour rate, with a two-hour time limit. West Campus residents are exempted from paying any parking charges. West Campus PBD is the only PBD in Austin, but more than one PBD can be established in a given jurisdiction upon adoption of a City ordinance (City of Austin, 2016).

To date, this is the first and only PBD in Texas. In the formative stages of the PBD, stakeholders in the West Campus area held 12 meetings over several months to discuss options for bringing about neighborhood improvements. Ultimately, the group decided on forming a PBD based on successful

cases in other states and worked with the City of Austin to establish the application process and subsequent ordinance. The application process for PBDs in Austin now includes the following steps:

- Create district boundaries and determine the number of paid parking spaces and their locations. The minimum number of spaces is determined by the potential revenue necessary to pay for the expenses of operating and maintaining the district; West Campus PBD required 96 spaces to fulfill this requirement in the pilot program and has since increased the total to over 300 spaces.
- Present to City staff on how creating the parking district will address a problem affecting the neighborhood. The City needs to see that there have been extensive efforts to inform and involve residents and that there is community support for the district.
- Provide a basic financial pro forma for the PBD, delineating cost recovery, proceeds to the General Fund (minimum 51 percent of the amount less cost recovery), and proceeds to the PBD goals and objectives.
- Submit plans for projects to be funded. Meetings with staff are recommended at this point to discuss the implementation procedures required.
- Request a public hearing, whereby staff recommends it for Council action. The Austin City Council then establishes an ordinance to create the PBD.

2.5.6 Joint Development

Joint development refers to private real estate development or development partnerships on transit agency properties within or adjacent to transit stations to promote TOD. A variety of development solicitation structures are used for joint developments. Most agencies prefer to use long-term land leases to secure a long-term revenue stream and maintain control of the property. However, land leases are not always appropriate and the agencies surveyed employ a variety of techniques to partner with private developers. The findings of a survey (EPS, 2014) regarding joint development practices is summarized below:

- San Francisco (Bay Area Rapid Transit (BART)) has found that developers are not willing to participate in for-sale residential development on leased property.
- Washington, D.C. (Washington Metropolitan Area Transit Authority (WMATA)) also prefers to land lease property, but will sell sites for for-sale residential development, or if the property is small and has little development potential on its own.
- Salt Lake City (Utah Transit Authority (UTA)) is authorized only to enter into joint ventures. UTA is also authorized to subordinate its equity position to other project debt in order to lower the developer's financial risk as a project incentive.
- Portland (TriMet) typically sells property as its real estate holdings around stations are not large enough to generate significant financial or TOD benefit on their own. TriMet has used a land lease

for a public educational facility at a station. If property is sold for joint development, deed restrictions can be used to maintain long-term control over development and land use.

An important concern for transit agencies (as well as for FTA) is being able to maintain control over development and land use surrounding transit stations. Utilizing land leases rather than sale of land for joint development is the preferred option as it allows the agency to maintain control of the land over the long term in order to protect transit operations. Developer agreements and deed restrictions (covenants, codes, and restrictions) can be used to specify the nature of development and land use if agency property is sold to a private party. Deed restrictions specify allowable uses and other criteria and can be attached to a property in perpetuity if desired. Subdividing critical transit property such as parking, pedestrian circulation, and the station platform from the larger TOD is also a way to ensure that the transit function is protected.

The expected rate of return on the land varies by agency depending on a variety of factors, including the robustness of the real estate market and the relative importance of revenue generation in comparison to other objectives. An acceptable land lease or sale rate will vary within an individual market depending on the attractiveness of the location and the immediate area real estate conditions. WMATA is an example of a mature TOD market and the most prescriptive lease rate requirements that are based on the current rates of return in the financial market adjusted for real estate risk. The lease payments are structured so that the present value of the annual lease payments at the agency's preferred rate of return over the lease term are equivalent to the land value today.

2.5.7 Utility Taxes

Several US cities, most predominantly in Oregon, have imposed utility fees for transportation funding since the fee's initial introduction in 1979 (Table 2.5). Among these cities, only the City of Pullman and the City of Corvallis have dedicated utility taxes/fees for transit funding.

Table 2.5 Selected US Cities using Transportation Utility Fees

State	City	Year Adopted	Outcome	Basis
Colorado	Fort Collins	1984	Discontinued 1987	Front footage
			Validated 1990	Trip generation
	Loveland	2001	In use	Flat fee per unit per-acre
Florida	Port Orange	1992	Invalidated 1994	Flat fee
Idaho	Pocatello	1986	Discontinued 1986	Trip generation
Oregon	Ashland	1989	Invalidated 1999	Flat fee per unit
	Bay City	2003	In use	Determined by city council
	Corvallis	2005	In use	Trip generation
	Eagle Point	1990	In use	Flat fee per unit
				Gross floor area

State	City	Year Adopted	Outcome	Basis
	Grants Pass	2001	In use	Flat fee per unit Trip generation Gross floor area
	Hillsboro	2008	Effective 2009	Flat fee per unit Trip generation
	Hubbard	2001	In use	Flat fee per unit Trip generation
	La Grande	1985	In use	Flat fee
	Lake Oswego	2003	In use	Flat fee Trip generation Gross floor area
	Medford	1991	In use	Trip generation
	Milwaukie	2006	In use	Trip generation
	North Plains	2003	In use	Trip generation
	Oregon City	2008	In use	Trip generation
	Philomath	2003	In use	Trip generation Gross floor area
	Phoenix	1994	In use	Flat fee per unit Trip generation
	Talent	2000	In use	Trip generation
	Tigard	2003	In use	Flat fee per unit Per parking space
	Tualatin	1990	In use	Trip generation
	Wilsonville	1997	In use	Flat fee per unit Trip generation Gross floor area
Texas	Austin	1990	In use	Trip generation
Washington	Pullman	1979	In use	Flat fee
	Soap Lake	1992	Invalidated 1995	Flat fee
Wisconsin	Oconomowoc	2005	Abandoned 2005	Flat fee per unit Trip generation Gross floor area

Source: Adapted from Junge and Levinson, 2012; League of Oregon Cities, 2008.

Some cities allow for utility fee discounts for low-income residents, as well as vacant parcels, City-owned land and public open spaces (Table 2.6).

Table 2.6 Examples of Utility Fee Discounts

State	City	Conditions for Discount
Colorado	Fort Collins	Low-income and all elderly residents
Oregon	Ashland	Low-income elderly resident
	Grants Pass	Vacant properties unoccupied for 30 days 50% discount for residences with no vehicles
	Hubbard	Low-income elderly residents
	North Plains	50% discount for residences with no vehicles
	Phoenix	Low-income elderly residents Residences with no vehicles discounted to senior housing rates
Texas	Austin	Measured traffic below assigned level
	Beaumont	Elderly residents

Source: Adapted from Angelo Planning Group, 2000.

Example: Corvallis Transit System

The Corvallis Transit System (CTS) has been in operations under the supervision of the Public Works Department since 1981. Funding for CTS comes from a number of sources: State and Federal grants, Oregon State University, miscellaneous sources like advertising and donations, and since February 2011, from the Transit Operations Fee (TOF). This utility fee replaced general fund allocations (from property taxes) and farebox revenues.

The TOF is a monthly utility fee, collected from all Corvallis utility customers (residential, commercial, nonprofits, and university housing). The TOF eliminated competition with other essential services for general fund allocations and provided a stable source of local funding for matching state and Federal funds. The funds raised from this fee are dedicated to CTS and cannot be used for any other purpose. As of February 1, 2016, the amount for single-family residential customers is \$2.75 per-month, the amount for multifamily residential customers is \$1.90 per housing unit per-month, and the amount for commercial and industrial customers varies depending on the type of business. The fee is adjusted annually, indexed to the average price of a gallon of gas in the preceding year, and adjusted each February. The base rate (floor) is \$2.75 per-month for single-family residential customers. CTS receives 38 percent or \$1.1 million of its revenues from utility fees.

Example: Pullman Transit

Pullman Transit is a city-owned public transportation service in the City of Pullman, Washington State. Funding for Pullman Transit comes from service contracts with Washington State University and the Pullman School District, farebox revenues, state and Federal grants, the local utility tax, and other miscellaneous funding. Local funding for Pullman Transit comes from a two percent utility tax, the only public transit system in Washington State to fund its operation with utility tax. Other transit agencies in Washington State use local sales taxes to fund public transportation. The City of Pullman is about seven miles west of Moscow, Idaho, where taxes are lower. The retail sector in Pullman

cannot generate enough taxable sales to sustain Pullman Transit's financial needs through sales tax, thus the utility tax represented a better revenue option. By working with the Washington State Legislature, Pullman received the authority to present a ballot measure to tax the use of utilities at a rate of up to two percent. Before the ballot measure was put in place, transit supporters completed significant community outreach to raise support for the utility tax. In November 1978, the ballot issue was approved by voters of Pullman.

The utility tax is collected on natural gas, electricity, telephone, water, sewer, and garbage collection services within the City of Pullman, and generates about \$1.1 million annually in utility taxes, which accounts for 25 percent of the operating budget.

2.5.8 Farebox Revenues

According to a fare policy and peer² analysis conducted as part of the Vision 2040 Long Range Plan, VIA's farebox recovery ratio in 2014 was estimated at 15 percent, below the average of its peers (Table 2.7). This presents an opportunity for VIA to improve its farebox recovery ratio with an updated fare structure or more productive service. Per VIA's fare policy, the agency should achieve a minimum farebox ratio of 18 percent, with an aspirational recovery ratio goal of 20 percent. The peer analysis found that VIA could optimize its fare structure. More specifically, its base fares and multiuse passes are underpriced and the agency's farebox recovery ratio reflects this. Many peers across the country with similar average personal incomes and cost of living standards charge higher prices. The fare study provided a list of recommendations for VIA to change its pricing structure to generate more fare revenues (Table 2.8).

Table 2.7 VIA and Peer Agencies Base Fares and Farebox Recovery Ratio (2014)

Agency	Location	Regular Fare	Express Fare	Passengers per Revenue Hour	Farebox Recovery Ratio
TriMet	Portland, OR	\$2.50	\$2.50	45	32%
CATS	Charlotte, NC	\$2.20	\$2.20–\$4.00	34	27%
Valley Metro	Phoenix, AZ	\$2.00	\$3.25	30	24%
Metro	St. Louis, MO-IL	\$2.00	\$2.00	29	23%
UTA	Salt Lake City, UT	\$2.50	\$5.50	28	21%
METRO	Houston, TX	\$1.25	\$2.00–\$4.50	27	18%
DART	Dallas, TX	\$2.50	\$2.50	27	16%
VIA	San Antonio, TX	\$1.30	\$2.60	28	15 %

² Nine peer agencies were selected to be included in the fare study: Austin Capital Metro; Dallas Area Rapid Transit (DART); Metropolitan Transit Authority of Harris County (Houston METRO); Santa Clara Valley Transportation Authority; Phoenix Valley Metro; Portland TriMet; St. Louis Metro Transit; Charlotte Area Transit System (CATS); and Utah Transit Authority (UTA).

Capital Metro	Austin, TX	\$1.25, \$1.75	\$3.50	30	15%
VTA	San Jose, CA	\$2.00	\$4.00	30	12%

Source: National Transit Database, 2014.

Table 2.8 VIA's Fare Study Recommendations

Area of Improvement	Recommendation
Base fares	Implement a fare increase policy that is tied to the annual CPI percentage increase.
Multiuse passes	Increase monthly pass-to-base fare cost ratio to a minimum of 32 to 1.
Tiered multiuse passes	Separate passes, charge extra fees, or impose restrictions for unlimited access to premium services.
Transfers	Eliminate transfers.
Performance	Target industry farebox recovery ratio standard of 20 percent.

2.5.9 Section 5309 Capital Investment Grants (New Starts/Small Starts)

Since 2005, VIA's peer agencies have implemented 16 projects with a total cost of \$8.4 billion³ (projects ranged from \$27 million to \$1.5 billion) by leveraging local, other Federal, and state funds with the FTA Major Capital Improvement Grant funding (i.e., New Starts and Small Starts grants).⁴ Over the last 10 years, FTA New Starts and Small Starts grants to these agencies have totaled close to \$4.6 billion (individual grants ranged from \$20 million to \$745 million), covering 55 percent of the costs for 16 projects. Cost information and funding sources for capital investment in fixed guideway and BRT projects funded with FTA New Starts/Small Starts grants is summarized in Table 2.9.⁵

Austin's Capital Metropolitan Transportation Authority (Capital Metro), El Paso SunMetro, and San Diego Metropolitan Transit System (SDMTS) received relatively fewer grants; these agencies implemented BRT systems, with costs ranging from \$27.1 million (SunMetro's Mesa Corridor) to \$47.6 million (Capital Metro's MetroRapid). Agencies with more Federal grant awards (DART, Houston Metro, Portland (TriMet), UTA, and Phoenix Valley Metro) have primarily implemented light rail transit (LRT) projects during this period. Over this period, UTA has received the most FTA New Starts/Small Starts awards of the peer agencies, with four grants with a total value of \$1.1 billion, leveraging \$1.5 billion in transit projects. TriMet also has received over \$1 billion in FTA New Starts/Small Starts grants since 2005, allowing it to leverage over \$2 billion. Bus Rapid Transit and LRT projects proposed

³ Includes funding recommendations in the FY 2016 Annual Report.

⁴ The eight peer agencies selected for the Vision 2040 Peer Review include: Austin Capital Metro; DART; El Paso SunMetro; Houston Metro; Phoenix Valley Metro; Portland TriMet; Utah Transit Authority (UTA); and San Diego Metropolitan Transit System (SDMTD).

⁵ Fixed guideway BRT project must include elements as specified under Section 5309(a)(4) of the FAST Act, including operation on separated right-of-way dedicated for public transportation use during peak periods along the majority of the route (i.e., over 50 percent).

as part of VIA's Vision 2040 Long Range Plan could be positioned for funding under FTA Section 5309, if strong project justification and local financial commitment is demonstrated. The criteria for project justification and local financial commitment are listed in Figure 2.3.

Local financial commitment accounts for 50 percent of the overall rating for FTA New Starts/Small Start grants. Project sponsors must provide evidence of available matching funds for implementation of the proposed project and the ability to operate and maintain the existing system, including investments to maintain its assets in state of good repair. Most peer agencies have relied on local funding to match FTA Section 5309 grants (Table 2.9). SunMetro and TriMet have received state funding and other Federal funds⁶ as the match for its capital investments. Valley Metro has also used other Federal funds for the non-New Starts/Small Starts share. It should be noted that some of these agencies have also invested in major capital projects using other funding sources (i.e., non-New Starts/Small Starts grants), including funding some projects with 100 percent local funds. For example, for many years UTA has been investing in expanding its LRT and commuter rail transit network with local funds. UTA's most recent transit expansion program, FrontLines 2015, was a \$2.5 billion plan that included the construction of four light rail lines and one commuter rail line. Only two of these projects were funded with FTA New Starts grants. Houston Metro and Capital Metro implemented its first rail lines without FTA New Starts funding.

⁶ Includes other FTA funds or Federal Highway Administration (FHWA) flexible funds, such as Congestion Mitigation and Air Quality (CMAQ) and Surface Transportation Program (STP).

Table 2.9 FTA New Start/Small Start Grant Summary by Agency since FY 2006

Agency	City	State	Project	Mode	Total Cost (\$M)	Grant Type	Year of Grant	Grant Amount (\$M)	Other Federal (\$M)	State Funding (\$M)	Local Funding (\$M)	Share of Federal
Capital Metro	Austin	TX	MetroRapid BRT	BRT	\$47.60	FTA SS	2012	\$38.00	–	–	\$9.60	80%
DART	Dallas	TX	Northwest/ Southeast LRT Minimum Operable Segment	LRT	\$1,406.22	FTA NS	2006	\$700.00	–	–	\$706.22	50%
Metro	Houston	TX	North Corridor LRT	LRT	\$756.00	FTA NS	2011	\$450.00	–	–	\$306.00	60%
Metro	Houston	TX	Southeast Corridor LRT	LRT	\$822.91	FTA NS	2011	\$450.00	–	–	\$372.91	55%
SDMTS	San Diego	CA	Mid-City Rapid	BRT	\$43.30	FTA SS	2010	\$21.65	–	–	\$21.65	50%
SunMetro	El Paso	TX	Mesa Corridor BRT	BRT	\$27.08	FTA SS	2012	\$13.54	\$2.00	\$6.12	\$5.42	50%
SunMetro	El Paso	TX	Dyer Corridor BRT	BRT	\$35.25	FTA SS	2014	\$20.41	\$6.05	\$1.51	\$7.28	58%
SunMetro	El Paso	TX	Montana Avenue BRT	BRT	\$43.36	FTA SS	2016	\$25.74	\$8.85	–	\$8.77	59%
TriMet	Portland	OR	South Corridor I-205/ Portland Mall LRT	LRT	\$575.70	FTA NS	2007	\$345.40	\$90.94	–	\$139.35	60%
TriMet	Portland	OR	Portland-Milwaukie LRT	LRT	\$1,490.35	FTA NS	2012	\$745.18	\$140.65	\$355.20	\$249.33	50%
UTA	Salt Lake City	UT	Weber County to Salt Lake City Commuter Rail	CR	\$611.68	FTA NS	2006	\$489.35	–	–	\$122.33	80%

Agency	City	State	Project	Mode	Total Cost (\$M)	Grant Type	Year of Grant	Grant Amount (\$M)	Other Federal (\$M)	State Funding (\$M)	Local Funding (\$M)	Share of Federal
UTA	Salt Lake City	UT	Mid-Jordan LRT	LRT	\$535.37	FTA NS	2009	\$428.29	–	–	\$107.08	80%
UTA	Salt Lake City	UT	Draper Corridor	LRT	\$193.64	FTA NS	2011	\$116.18	–	–	\$77.46	60%
UTA	Salt Lake City	UT	Provo-Orem BRT	BRT	\$159.37	FTA SS	2014	\$74.99	–	–	\$84.38	47%
Valley Metro	Phoenix	AZ	Central Phoenix/ East Valley LRT	LRT	\$1,412.12	FTA NS	2005	\$587.20	\$59.75	–	\$765.17	42%
Valley Metro	Phoenix	AZ	Central Mesa LRT Extension	LRT	\$199.01	FTA SS	2012	\$74.99	\$52.84	–	\$71.17	38%

Figure 2.3 FTA New Starts/Small Starts Criteria

Project Justification	Local Financial Commitment
• Mobility improvements • Environmental benefits • Congestion Relief • Cost-effectiveness • Economic development • Land use	• Current condition • Commitment of funds • Reliability/Capacity

Source: FTA.

2.5.10 Transportation Infrastructure Finance and Innovation Act (TIFIA)

Since FY 2010, there has been a significant increase of transit agencies using TIFIA loans to finance major transit projects. Of 15 TIFIA loans for transit projects, 13 are active TIFIA loans that have been issued since FY 2010 (Table 2.10). The two TIFIA loans issued in FY 1999 have been retired. US DOT has issued a total of \$6,902 million in TIFIA loans for transit investments, leveraging a total of \$25,935 million (includes retired loans). Most TIFIA loans have been issued for rail projects, with a few exceptions funding BRT or multimodal station improvements. Project costs range between \$240 million and \$5,684 million. By statute, the minimum cost of a TIFIA loan-eligible project is \$50 million.

One of the main requirements of TIFIA is that the project must be supported by a dedicated funding source, which can also serve for repayment of the loan. Sales taxes are the primary revenue pledge for transit projects, although some agencies have pledged farebox revenues (e.g., Chicago Transit Authority) or real estate tax increments (e.g., Denver Union Station Project Authority).

Applicants are also required to follow an application process that is detailed in the TIFIA Program Guide (US DOT, 2015a), which includes the submittal of a letter of interest, creditworthiness review, rating opinion from at least one nationally recognized credit rating agency (e.g., Moody's, Standard & Poor's, or Fitch Group), and submittal of application. Once the application is approved, additional credit ratings are required for debt obligations senior to the TIFIA loan and the TIFIA loan itself. The US DOT and the borrower then negotiate terms and execute the credit agreement.

Table 2.10 TIFIA Loans for Transit Projects since FY 1999

Project Sponsor	Project	Mode	Cost (millions)	TIFIA Assistance (millions)	Percent TIFIA	Primary Revenue Pledge	FY Closed	Status
Metropolitan Washington Airport Authority	Dulles Corridor Metrorail	Rail	\$5,684.0	\$1,876.0	33.0%	State/Local Appropriations; Tolls	FY 2014	Active
Sound Transit	East Link Extension	Rail	\$4,031.0	\$1,330.0	33.0%	Tax Revenue	FY 2015	Active
Los Angeles Metro	Westside Purple Line Extension, Section 1	Rail	\$2,648.0	\$856.0	32.3%	Sales Tax	FY 2014	Active
WMATA	Capital Improvement Program	Multimodal	\$2,324.0	\$600.0	25.8%	Local Appropriations	FY 1999	Retired
Puerto Rico Highway Transportation Authority	Tren Urbano	Rail	\$2,250.0	\$300.0	13.3%	Tax Revenue	FY 1999	Retired
Denver RTA	Eagle Project	Rail	\$2,047.0	\$280.0	13.7%	Sales Tax	FY 2011	Active
Los Angeles Metro	Crenshaw/LAX Transit Corridor	Rail	\$1,749.0	\$546.0	31.2%	Sales Tax	FY 2013	Active
Los Angeles Metro	Regional Connector Transit Corridor	Rail	\$1,399.0	\$160.0	11.4%	Sales Tax	FY 2014	Active
Charlotte Area Transit	LYNX Blue Line Extension	Rail	\$1,160.0	\$180.0	15.5%	State/Local Appropriations	FY 2015	Active
Chicago Transit Authority	Rail Fleet Replacement Project	Rail	\$772.5	\$254.9	33.0%	Farebox Revenues	FY 2016	Active
Denver Union Station Project Authority	Denver Union Station	Station	\$519.0	\$145.6	28.1%	Real Estate Tax Increments	FY 2010	Active
Chicago Transit Authority	Blue Line Project	Rail	\$408.7	\$120.0	29.4%	Farebox Revenues	FY 2015	Active
DART	Orange Line Extension	Rail	\$397.0	\$120.0	30.2%	Sales Tax	FY 2013	Active
Colorado High-Performance Transportation Enterprise	US 36 Managed Lanes/BRT Phase 1	BRT	\$306.0	\$54.0	17.6%	Tolls	FY 2011	Active
Chicago Transit Authority	95 th Street Terminal Improvement	Station	\$240.0	\$79.0	32.9%	Farebox Revenues	FY 2014	Active
Average			\$1,729.0	\$460.1	26.6 %			

Example: Denver Union Station

Denver Union Station is a public-private development in downtown Denver that included the historic Denver Union Station building, rail lines, vacant parcels, street rights-of-way, and off-site trackage rights. The project redeveloped the rail station and site into a multimodal transportation hub connecting passenger rail, vehicle parking, commuter rail, light rail, bus rapid transit, regularly scheduled bus service, bicycle and pedestrian access, and other related transportation services. These transportation activities are surrounded by substantial transit-oriented development, including a mix of residential, retail, and office space (US DOT, 2016d).

The sponsor, Denver Union Station Project Authority (DUSPA), is a nonprofit, public benefit corporation formed by the City of Denver in July 2008 to finance and implement the project. As project elements are completed, they are transferred to the Regional Transportation District (RTD), which will maintain these elements. RTD will provide for the operation and maintenance of the project as a complete transportation district.

The total project cost was \$519 million. The funding package included Federal grants, Federal financing tools (TIFIA and Rail Rehabilitation Improvement Financing (RRIF) loan), state and local funding, and land sales (Table 2.11). The TIFIA and RRIF loans are secured by liens on pledged revenues, which consist of an annual payment of \$12 million from RTD to DUSPA and real estate development-related income generated by the DUSPA project area, including tax increment revenues, a levy on property tax revenues, and lodger's tax revenue. The RTD payment is funded from the 0.4 percent FasTracks sales and use tax approved by voters in 2004 (US DOT, 2016e).

Table 2.11 Denver Union Station Funding

Funding Source	Amount (millions)
TIFIA loan	\$145.6
RRIF loan	\$155.0
FHWA grant	\$45.3
FTA grant	\$9.5
ARRA stimulus grant	\$28.4
Homeland Security	\$0.3
RTD contribution	\$65.1
Other state/local funds	\$19.9
Land sales	\$18.4

Source: US Department of Transportation.

Peer Example: DART Orange Line Extension

The DART Orange Line is a 14-mile light rail line that connects downtown Dallas with the City of Irving, and the Dallas/Fort Worth International (DFW) Airport. DART financed the 4.2-mile extension from Belt Line Road to DFW Airport using a TIFIA loan (Table 2.12). Both the TIFIA loan and revenue bonds were backed by the DART sales tax revenues.

Table 2.12 DART Orange Line Funding

Funding Source	Amount (millions)
TIFIA loan	\$120.0
Revenue bonds and cash	\$276.4
FTA Section 5307 Formula	\$0.6

Source: US Department of Transportation.

2.5.11 Design-Build-Operate-Maintain-Finance

In the design-build-finance-operate-maintain (DBFOM) structure, the responsibilities for designing, building, financing, and operating are bundled together and transferred to a private-sector partner (concessionaire). DBFOMs are either partially or fully financed by debt leveraging revenue streams dedicated to the project. Direct user fees (e.g., farebox revenues) are the most common revenue source to back the debt obligations. DBFOMs are often supplemented by public sector grants in the form of money or contributions in kind, such as right-of-way. Many of the DBFOM projects in the US have also relied on Federal grants (e.g., New Starts) and Federal financing tools, such as TIFIA and Private Activity Bonds (PAB) to help jumpstart the project before revenues are available.

There are two models of DBFOMs that have been used in the US, revenue risk transfer or availability payment concessions. Under a revenue risk transfer structure, demand and revenue risk is transferred to the concessionaire with the concessionaire charging users for the use of the facility. Since the revenues are dependent on user demand, revenue is not guaranteed; as such, this structure represents higher risk to the concessionaire.

Under the availability payments model, the concessionaire is paid based on the level of performance of the project. Availability payment deal structures contribute to predictable cash flows, lower debt service coverage ratio requirements, inherent incentive for an efficient construction term, and lower risk for all partners, among others. Unlike a full concession, the scope of services for the concessionaire in an availability payment DBFOM structure does not include ridership and demand risks or fare collection responsibilities (KPMG, 2009).

Example: Dallas London B. Johnson (LBJ) Freeway (Transportation DBFOM, Revenue Risk Transfer)

The I-635/LBJ Freeway Managed Lanes project in Dallas-Fort Worth, Texas is a 13-mile expansion of six new lanes with dynamic toll management. The \$2.6 billion project is being constructed as a DBFOM where the concessionaire, LBJ Infrastructure Group (LBJIG), will lease the facility from TxDOT and carry out the DBFOM functions for the project and receive toll revenues over 52 years as payment. The concessionaire is providing roughly two-thirds of the total financing to construct the project. Private equity contributions totaled \$672 million, 90 percent of which came from the concessionaire, and 10 percent from the Dallas Police and Fire Pension System; this is the first time a US pension fund made a direct investment in a major road project (US DOT, 2015b).

Additionally, LBJIG used two Federal credit programs administered by the US DOT that reduce financing costs for private developers. First, they secured an \$850 million loan from the TIFIA Federal credit program. The flexibility provided in TIFIA's debt service schedule was key to the successful financing of the project. Second, after receiving a Private Activity Bonds (PAB) allocation from US DOT, LBJIG issued \$615 million in tax exempt PABs through a special state conduit. The TIFIA loan, as well as the PABs, will be repaid with project revenues. TxDOT contributed \$490 million as a construction grant to the project (US DOT, 2015b). The revenue risk transfer agreement shifts certain risks from TxDOT (and the taxpayer) to the concessionaire, such as lower than projected toll revenues. LBJIG's profit will be generated from the toll revenues (approximately \$17 million) with excess toll revenues being shared with TxDOT for use on future North Texas transportation projects.

While this is a successful example of a public-private partnership (P3), the LBJ freeway expansion project is a road project that can rely on tolls as a lucrative and reliable revenue source. The nature of revenue for public transit systems is more volatile, and generally generates lower revenue yields.

Example: Denver Eagle P3 (Transit DBFOM, Availability Payments)

The Eagle P3 Project in the Denver, Colorado metro area is currently being delivered and operated under a DBFOM concession agreement between RTD Denver, the transit agency, and Denver Transit Partners (DTP), the concessionaire (comprised of Fluor Enterprises, Uberior Investments and Laing Investments, Ames Construction, Balfour Beatty Rail, Hyundai-Rotem USA, Alternative Concepts Inc., Fluor/HDR Global Design Consultants, PBS&J, Parsons Brinckerhoff, Interfleet Technology, Systra, Wabtec, and others).

The Eagle P3 Project concession agreement requires DTP to design, build, finance, operate, and maintain three commuter rail lines and part of a fourth-line under a single contract. RTD will retain all assets while shifting much of the risk of designing and building the project to DTP. The Concessionaire has also committed approximately \$450 million of private financing for the project. This allows RTD to spread out large upfront costs over approximately 30 years, making it more affordable over time. In return, RTD will make service payments to DTP based on their performance of the operation and maintenance of the project. The total project funding is estimated at \$2.2 billion, which includes \$1.03 billion in Federal funding (FTA New Starts grant), and \$450 million in private financing. The involvement of a private sector company is estimated to save about \$300 million in construction costs (approximately 14 percent of total) compared to estimates of the cost if RTD were solely responsible for the project (Metropolitan Planning Council, 2011). The line opened in April 2016.

2.5.12 Federal EB-5

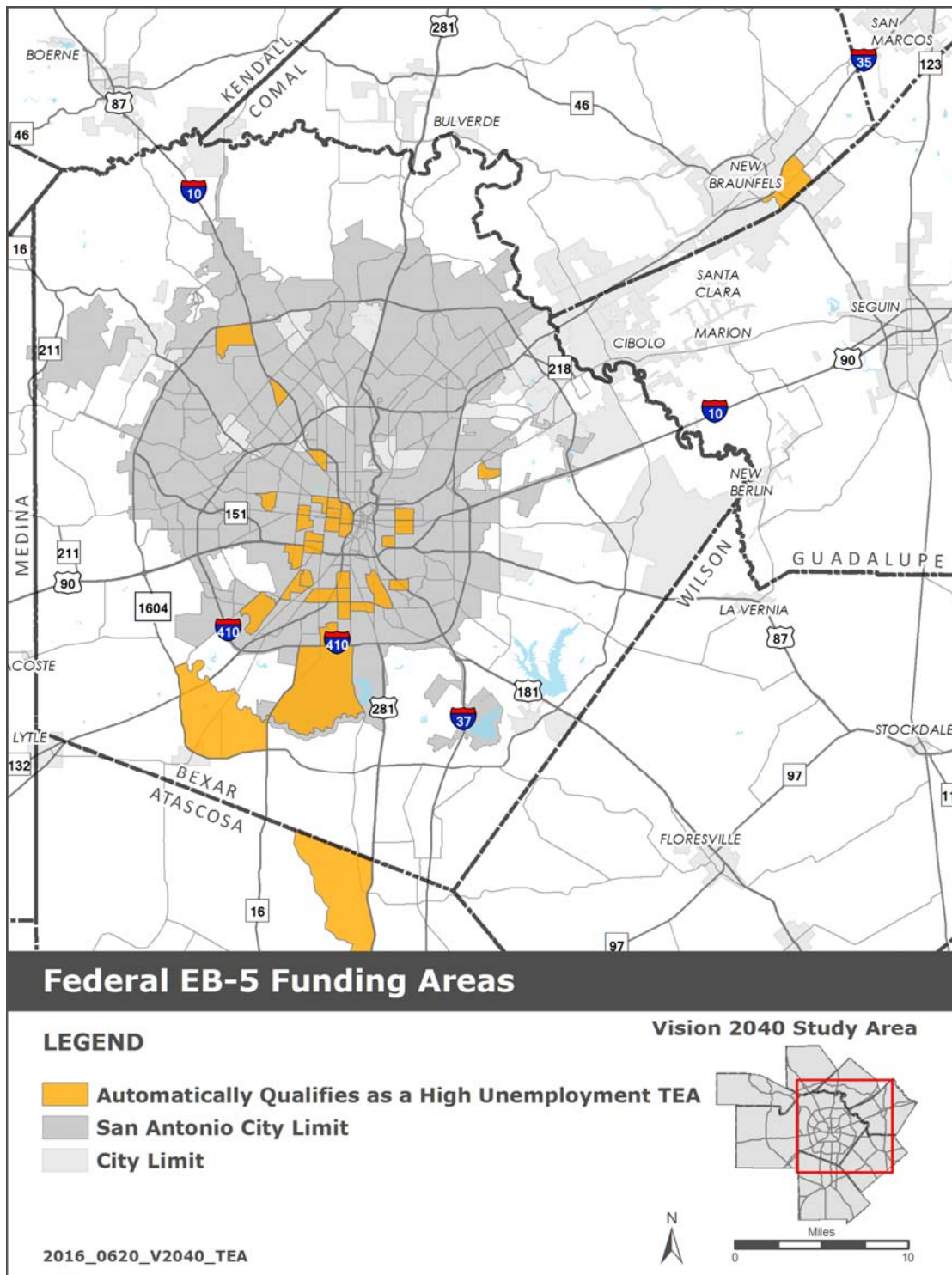
The Immigrant Investor Program (EB-5) was created in 1990 to stimulate the national economy through job creation and capital investment by foreign investors. For each foreign investor, the US Citizenship and Immigration Services (USCIS) looks for a minimum investment of \$500,000 within targeted employment areas (TEA), which are rural areas or urban areas with high unemployment (150 percent of the national average rate), or a minimum investment of \$1,000,000 in areas outside of TEAs. The investment must also create at least 10 new jobs or the 40 percent expansion of an existing business. The total number of jobs that a particular transportation project will create

determines the maximum amount of potential EB-5 funding (includes “indirect” jobs, such as employees of materials suppliers).

The EB-5 program offers a unique way to fund and finance economic development projects, but case studies have shown that not all projects and developments are suited to utilize EB-5 funding. For-profit and local governmental economic development agencies are set up to attract and guide foreign investors through the choices and the processes of the program. The program attracts investors with a primary motivation to obtain US visas. Investors are able to choose between several opportunities and will likely choose the most reliable and profitable project. The program has become an increasingly popular tool, especially for real estate projects (less so for transit), largely due to its flexibility. While transit projects do not typically result in high returns on investment, investors may opt for them over real estate projects because large infrastructure projects are perceived as low risk investments backed by government authorities.

As part of the program, construction sites must be in areas with high unemployment. To qualify as a target employment area (TEA), an area is required to have an 8.0 percent unemployment rate. Bexar County currently has a 3.4 percent unemployment rate, which means the VIA service area as a whole will not automatically qualify as a TEA. As such, the infrastructure that would be able to qualify for EB-5 funding would be limited to either only the specific census tracts that have high unemployment, or service that serves primarily those who travel to and from those areas (Figure 2.4).

Figure 2.4 Target Employment Areas



Source: EB-5 Affiliate Network.

Example: Southeastern Pennsylvania Transportation Authority, Pennsylvania

In 2012, Southeastern Pennsylvania Transportation Authority (SEPTA) approved the largest EB-5 project to date, raising \$200 million in financing with 100 percent investor approvals. The SEPTA Rebuilding for the Future Project is a \$809 million capital improvement program comprised of the development, construction, and purchase of an integrated system of machinery and equipment to improve and update SEPTA's public transportation system while creating over 8,400 new jobs (5,300 permanent full-time jobs) for the local economy. Specifically, the work to be performed includes City Hall Station Rehabilitation, Elwyn-Wawa Rail Service Restoration, Substation Rehabilitation Program, and Frazer Yard Expansion and Locomotives & Rail Car Acquisition (Delaware Valley Regional Center (DVRC), 2016). DVRC was able to secure 400 investors for the \$200 million within 10 months.

Example: New York, New York

EB-5 was used for the renovation of the George Washington Bridge Bus Station in New York City. The New York Regional Center organized EB-5 investments estimated between \$87 million and \$91 million to help fund expansion and improvements at the station. Improvements included increasing bus capacity by 50 percent and building approximately 120,000 square feet of additional retail space. The full cost of the station improvement project was approximately \$180 million (Baker Tilly, 2015 and IIUSA).

EB-5 was also used for the Hudson Yards Redevelopment Project in New York City, which was a joint venture between the City and the Metropolitan Transportation Authority to encourage development along the Hudson River. EB-5 investments account for approximately \$600 million of the \$20 billion cost for the Hudson Yards Redevelopment project. The \$600 million in funds is sourced from approximately 1,200 investors through the EB-5 program and will be used to build the foundation for three skyscrapers totaling 17 million square feet of office, retail, and residential space when completed. To date, Hudson Yards is the largest project to utilize the EB-5 program and has collected the largest amount of investment (e-Council Inc.com, 2016 and Brown, 2014).

Example: Orlando, Florida

The Major League Soccer team in Orlando, Florida is using EB-5 to help fund a 25,000-seat soccer stadium. The team's decision to leverage the EB-5 program came after state politicians declined to provide subsidies for the stadium, which is being built in Parramore, one of Orlando's most disadvantaged neighborhoods. The project expects to raise 50 percent of the \$156 million cost for the stadium through the EB-5 program. To date, the project has attracted 30 investors through the program (estimated at \$15 million total). This stadium will be the first time the EB-5 program will be applied to stadium funding; it was used for infrastructure work around the Barclays Center in Brooklyn, New York, but not for the center itself (Benson, Ken, 2016).

In addition to attracting investors and finding locations that qualify for the program, projects themselves should also be flexible. An important factor to consider is the time sensitivity of the project. Projects pursuing EB-5 investment should be planned with relatively large schedule contingencies because visas take between four to 10 months to process. In the case of the Major League Soccer stadium in Orlando, Florida currently under construction, the developers were

required to front several million dollars in construction cost themselves while investors' visas were being processed (Belson, Ken, 2016).



3.0 Conclusions

3.1 Key Findings

The forecast of existing revenues and expenditures shows that VIA will need to raise over \$500 million in new funding over this period in order to maintain the current level of service and meet its financial commitments, including vehicle replacement. Therefore, VIA must consider which are the most viable funding options and prepare a strategy that will help generate additional funding to advance the proposed Vision 2040 Long Range Plan.

Raising new revenues will require VIA to work both internally and externally (with local and state decision-makers) to build stakeholder support, regardless of the funding source. Until a new funding source is approved and collection begins, VIA will have to work with the existing budget constraints and amend its capital improvement program, advancing projects based on the funding available.

3.2 Recommended Strategies

For the purpose of funding the Vision 2040 Long Range Plan, VIA should consider pursuing a funding plan that advances three main groups of funding alternatives. A list of proposed funding options for consideration is illustrated in Figure 3.1.

Figure 3.1 Additional Funding Strategies for VIA

Federal Grants	State/Local Funding	VIA Strategies
• New Starts • Small Starts • TIGER	• Sales tax • Carbon tax	• Fare strategy • Comprehensive Operations Analysis (COA)

3.2.1 Federal Grants

VIA should seek and apply for Federal grant programs, such as FTA Section 5309 (New Starts/Small Starts) and TIGER grants that can leverage local funds for implementation of rapid transit alternatives (e.g., LRT or BRT) proposed as part of the Vision 2040 Long Range Plan. The decision to apply for these programs should be based on how well the projects perform under the criteria established to evaluate grant applications.

For example, fixed guideway and BRT projects are eligible for FTA Section 5309, and the project evaluation criteria is focused in two main areas: Project Justification and Local Financial Commitment.

CMAQ Funding

Currently, the Greater San Antonio Region is in an attainment area and is ineligible to receive Congestion Mitigation and Air Quality (CMAQ) Funds. With the anticipated changes to the US National Ambient Air Quality Standards (NAAQS), the region may become a nonattainment area, making this funding program available to support transit investments.

Project sponsors applying for TIGER grants also need to demonstrate that the projects meet the criteria used to evaluate grant applications. Projects are evaluated based on the benefits realized in five areas: safety, economic competitiveness, state of good repair, quality of life, and environmental sustainability. Projects are also evaluated based on innovation, partnerships, project readiness, benefit-cost analysis, and cost share.

3.2.2 State/Local Funding

The adoption of a sustainable funding source(s) at the local level is necessary for VIA's financial capacity over the long term to maintain its current services, and advance the Vision 2040 Long Range Plan that would address the transportation regional needs identified through the long range planning process. As described earlier, the existing funding sources will not be able to meet VIA's expenses in the future. Therefore, VIA must develop a strategy to support the adoption of one or more funding strategies at the local level that, along with Federal grants and financing strategies, will allow closing the funding gap. The strategy will require building political and public support to draft and file legislation that is eventually adopted by the jurisdictions within VIA's service area.

Strategies under the value capture "spectrum" (e.g., joint development, TOD TIF, and TRZs) can be useful in generating revenue for specific capital projects. However, the agency needs a revenue source to pay for O&M expenses over the long term from existing and new services. An increase in the sales tax, or the implementation of a new revenue source such as a carbon tax or a utility tax could provide a stable revenue stream to close the funding gap.

3.2.3 VIA Strategies

The following recommended strategies, which are under VIA's control, can help reduce the funding gap.

Fare Strategy

The fare study conducted as part of the Vision 2040 Long Range Plan found that VIA has an opportunity to optimize its fare structure. The study evaluated VIA's current fare structure, comparing VIA with its peer agencies. VIA's base fares and multiuse passes are underpriced and the agency's farebox

recovery ratio reflects this finding. Many peers across the country with similar average personal incomes and cost of living standards charge higher prices. The study provides recommendations to change the pricing structure to generate more farebox revenue.

VIA's current fare policies allow for periodic fare increases and establishes an aspirational farebox recovery target of at least 20 percent. A study of fare elasticity would help VIA assess the optimal fare that increases revenues, but minimizes ridership loss. In addition, new fare structures may be considered for the implementation of premium transit, with the goal of achieving a farebox recovery ratio of at least 20 percent.

Comprehensive Operations Analysis

A comprehensive analysis of existing operations is necessary to identify strengths and weaknesses and address short-term changes to transit service in the context of the Vision 2040 Long Range Plan process. The Comprehensive Operations Analysis will focus on addressing the following objectives:

- To retain existing riders and to attract new transit riders;
- To establish a framework for making decisions about existing and future transit service;
- To develop recommendations to strengthen VIA transit network; and
- To explore non-fixed route/alternative services as complimentary to fixed route service.

The Comprehensive Operations Analysis should include a Short-Term Transit Service Plan covering five years of service changes, plus an additional five years of financial and travel demand projections. The service plan should also include operational, maintenance, and passenger facility needs. In addition to standard line service, the plan should include information on non-VIA services serving in a feeder or "first mile/last mile" capacity, such as ride-hailing services.

3.3 Funding Forecast for the Vision 2040 Long Range Plan

Forecast of potential funding sources were prepared to illustrate the type of revenue sources that could help narrow the funding gap (Vision 2040 Long Range Plan needs estimate of \$8.3 billion). The forecast assumptions and revenue estimates of potential funding sources are summarized in Table 3.1.

Table 3.1 Potential Funding Assumptions and Forecast (millions of 2015 dollars)

Funding Source	Assumptions	Average Annual Estimated Revenues
MTA Sales Tax Increase of 0.5%	- Initiate collection in FY 2021 - Annual growth rate (2021 to 2040): 3.5%	\$172.0
Carbon Tax: Residential	- Initiate collection in FY 2021 - Rate = \$0.001 per KWh - Household (HH) energy consumption growth rate = 0.5% 2015 average HH energy consumption from CPS Energy, San Antonio - VIA Service Area Household forecast from Vision 2040	\$10.0
Carbon Tax: Industrial/Commercial	- Initiate collection in FY 2021 - Rate = \$0.001 per KWh - Commercial/Industrial energy consumption growth rate = 1.0% 2015 commercial/industrial energy consumption from CPS Energy, San Antonio	\$7.5
Value Capture	To be considered in the planning and development process for premium transit services	N/A
Federal Grants	VIA will pursue Federal grant funding (New Starts/ Small Starts/TIGER) for eligible projects	\$800 (project total, not annual)



4.0 References

- AAMPO. (2014). *Alamo Area MPO FY 2015-2018 TIP*. Retrieved March 7, 2016 from http://www.alamoareamp.org/Plans/TIP/docs/2015-2018/TIP_2015-2018.pdf
- AASHTO. (2016). *Funding*. Retrieved March 7, 2016 from http://www.financingtransportation.org/funding_financing/funding/
- Act Wireless. (2016). *State Tax Rankings*. Retrieved March 15, 2016 from <http://actwireless.wpengine.com/state-issues/state-tax-rankings/texas/>
- American Road and Transportation Builders Association. (2015). *2015 "Fixing America's Surface Transportation Act."* Retrieved March 15, 2016 from <http://www.artba.org/newsline/wp-content/uploads/2015/12/ANALYSIS-FINAL.pdf>
- American Public Transportation Association. (2013). *Trends in Public Transportation Vehicle Fleets*. Retrieved March 25, 2016 from <http://www.apta.com/resources/reportsandpublications/Documents/Trends-in-Public-Transportation-Vehicle-Fleets.pdf>
- American Public Transportation Association. (2016). *Third Quarter 2015 Ridership Reports*. Retrieved March 23, 2016 from <http://www.apta.com/resources/statistics/Documents/Ridership/2015-q3-ridership-APTA.pdf>
- Angelo Planning Group. (2008). *City of Hillsboro Report to the Transportation Committee: Proposed Hillsboro Transportation Utility*. Retrieved on June 1, 2016 from <https://www.hillsboro-oregon.gov/modules/showdocument.aspx?documentid=990>
- Baker Tilly (2015, June 17). *Project Finance Advisory to \$183M New York City Redevelopment*. Retrieved September 16, 2016 from <http://www.bakertilly.com/insights/project-finance-advisory-to-183m-new-york-city-redevelopment/>.
- Belson, Ken (2016, May 17). *Price for a green Card: \$500,000 Stadium Stake*. The New York Times, pages B1, B13.
- Bexar County Budget Department. (2015). *Proposed Budget FY 2015-2016*. Retrieved March 7, 2016 from <https://www.bexar.org/DocumentCenter/Home/View/5402>
- Brookings Institute. (2014). *Improving the EB-5 Investor Visa Program: International Financing for US Regional Economic Development*. Retrieved March 18, 2016 from http://www.brookings.edu/~media/research/files/reports/2014/02/05-eb5/eb5_report.pdf

Brown, Eliot (2014, December 9). *Hot Source of Property Financing: Visa Seekers. Developers Raise Millions for U.S. Projects Through EB-5 Visa Program.* The Wall Street Journal. Retrieved September 16, 2016 from http://www.wsj.com/articles/hot-source-of-real-estate-financing-green-card-seekers-1418146394?mod=residential_real_estate

California Debt and Investment Advisory Commission. (2008). *An Overview of Local Government General Obligation Bond Issuance Trends.* Retrieved March 19, 2016 from <http://www.treasurer.ca.gov/cdiac/publications/trends.pdf>

Cambridge Systematics, KFH Group, McCollum Management Consulting, Inc., and Brendon Hemily. (2009). *TCRP Report 129: Local and Regional Funding Mechanisms for Public Transportation.* Retrieved March 15, 2016 from http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rpt_129.pdf

Center for Transportation Excellence. (2005). *Building Communities through Public Transportation – A Guide for Successful Transit Initiatives.*

Center for Transportation Excellence. (2016). *Transportation Ballot Measures, Election Monitoring: Past Elections.* Retrieved June 1, 2016 from <http://www.cfte.org/elections/past>

City of Austin. (2016a). *Parking Benefit District.* Retrieved March 15, 2016. <http://austintexas.gov/departments/parking-benefit-district-pbd>

City of Austin. (2016b). *What Cities Need to Know to Administer Municipal Hotel Occupancy Taxes.* Retrieved March 15, 2016. https://austintexas.gov/sites/default/files/files/Transportation/Special_Events/WhatCitiesNeedToKnow_HOT_FullVersion.pdf

City of Dallas (2014). *Dallas TOD Experience and TOD TIF District: Providing Unique Public Financial Incentives for Transit-Oriented Development in Underserved Areas.* Retrieved March 18, 2016 from http://www.dallas-ecodev.org/wp-content/uploads/2012/04/Dallas-TIF-Overview_TOD-TIF_BetterHouston-Group_7-16-10.pdf

City of Fort Worth. (2013). *Municipal Parking Fund.* Retrieved March 15, 2016 from http://fortworthtexas.gov/uploadedFiles/Budget_and_Management_Services/FY2013/FY2013_M.pdf

City of Fort Worth. (2016). *Impact Fees.* Retrieved March 17, 2016 from <http://fortworthtexas.gov/impactfees/>

City of Houston. (2016a). *Convention and Entertainment Facilities Department FY 2008 Budget.* Retrieved March 15, 2016 from http://www.houstontx.gov/budget/08budadopt/IX_PM.pdf

City of Houston. (2016b). *Washington Avenue Corridor Parking Benefit District.* Retrieved March 15, 2016 from <http://www.houstontx.gov/parking/washingtonavenue/pbd-flyer.pdf>

City of Louisville. (2016). *Regulations of the Louisville/Jefferson County Metro Revenue Commission.* Retrieved March 15, 2016. https://louisvilleky.gov/sites/default/files/revenue_commission/misc_pdfs/regulations.pdf

City of McKinney. (2016). *Impact Fees*. Retrieved March 17, 2016 from <http://www.mckinneytexas.org/impactfees>

City of Park City. (2013). *Park City Business License Fee Schedule*. Retrieved March 16, 2016 from <http://www.parkcity.org/Home/ShowDocument?id=2238>

City of San Antonio. (2014). *City Council Session Meeting Notes – August 21, 2014*. Retrieved March 8, 2016 from <https://sanantonio.legistar.com/MeetingDetail.aspx?ID=318527&GUID=DD4EE6D4-0281-4345-B6E5-824713B01B92&Options=&Search=>

City of San Antonio. (2016). *Filing the Hotel/Motel Occupancy Tax*. Retrieved March 15, 2016 from <http://www.sanantonio.gov/Finance/taxeslicensesfees/hoteltax.aspx>

City of San Antonio Office of the City Auditor (2014): *Parking Revenue*. Retrieved June 1, 2016. <https://www.sanantonio.gov/Portals/0/Files/CityAuditor/Reports/FY2014/AU14-010.pdf>

City of San Antonio, SA Tomorrow (2016): *Draft Sustainability Plan*. Retrieved June 6, 2016. http://www.sasustainabilityplan.com/app_pages/view/19

City of Waco. (2014). *Public Improvement District No. One Service and Assessment Plan*. Retrieved March 18, 2016 from [http://www.waco-texas.com/economic-development/pdf/PID1%202014-15%20service%20plan%20\(final\).pdf](http://www.waco-texas.com/economic-development/pdf/PID1%202014-15%20service%20plan%20(final).pdf)

City of Waco. (2015). *Transportation Development Credits*. Retrieved March 25, 2016 from http://www.waco-texas.com/userfiles/cms-mpo/file/2015%20Policy%20Board%20Meetings/12%20Dec%203%202015/06_1txdot_tdc_background_info.pdf

Delaware Valley Regional Center. (2016). *Delaware Valley Regional Center*. Retrieved March 18, 2016 from <http://thedvrc.com/>

Denver Regional Council of Governments. (2010). *Transit Agency Parking Pricing and Management Practices*. Retrieved March 16, 2016 from http://tod.drcog.org/sites/default/files/documents/Transit%20Agency%20Parking%20Pricing%20and%20Management%20Practices_%20Peer%20Review.pdf

Dingell, John (2007, August 2). *The Power in Carbon Tax*. The Washington Post. Retrieved March 16, 2016 from <http://www.washingtonpost.com/wp-dyn/content/article/2007/08/01/AR2007080102051.html>

Economic and Planning Systems (EPS), Inc. (2014). *Memorandum: Peer Agency Joint Development Lease and Sales Procedures*. Prepared for DART.

e-Council Inc.com (2016). *Public-Private Partnerships: A Recipe for EB-5 Success?* Retrieved September 16, 2016 from http://ecouncilinc.com/public-private-partnerships-a-recipe-for-eb-5-success/#_ftn14.

Eno Center for Transportation. (2015). *Was the FAST Act's 70 Percent Cut in TIFIA Funding Justified?* Retrieved March 15, 2016 from <https://www.enotrans.org/article/22938/>

Ernst and Young (2013). *Availability Payments Can Add Value*. Retrieved May 24, 2016. [http://www.ey.com/Publication/vwLUAssets/Availability-Payments-Can-Add-Value/\\$FILE/Availability-Payments-Can-Add-Value.pdf](http://www.ey.com/Publication/vwLUAssets/Availability-Payments-Can-Add-Value/$FILE/Availability-Payments-Can-Add-Value.pdf)

Expatisan. (2016). *Cost of Living in San Antonio, Texas*. Retrieved March 15, 2016 from <https://www.expatisan.com/cost-of-living/san-antonio-texas>

FHWA. (2010). *Project Finance Primer*. Retrieved March 25, 2016 from http://www.fhwa.dot.gov/ipd/finance/resources/general/#government_bonds

FHWA. (2016a). *National Highway Performance Program*. Retrieved March 7, 2016 from <http://www.fhwa.dot.gov/map21/factsheets/nhpp.cfm>

FHWA. (2016b). *Comparison of Actual FY 2015 Apportionments under MAP-21, As Amended, And Estimated FY 2016 to 2020 Apportionments under the FAST Act*. Retrieved March 15, 2016 from <http://www.fhwa.dot.gov/fastact/estfy20162020apports.pdf>

FHWA. (2016c). *P3 Defined*. Retrieved March 18, 2016 from https://www.fhwa.dot.gov/ipd/p3/defined/dbfo_6320.aspx

FHWA. (2016d). *Design Build Finance Operate Maintain Concession*. Retrieved March 18, 2016 from https://www.fhwa.dot.gov/ipd/p3/defined/design_build_finance_operate.aspx

Federal Register. (2014). *Department of Transportation; Federal Transit Administration: State of Good Repair Grants Program: Proposed Circular*. Retrieved March 15, 2016 from <https://www.apta.com/gap/fedreg/Documents/FTA%E2%80%932014%E2%80%9320State%20of%20Good%20Repair%20Grants%20Program%20-%20Proposed%20Circular.pdf>

FTA. (2014). *MAP-21 Fact Sheet*. Retrieved March 7, 2016 from [http://www.fta.dot.gov/documents/MAP-21_Fact_Sheet_-_Flexible_Funding_Programs_-_National_Highway_Performance_Program_\(NHPP\).pdf](http://www.fta.dot.gov/documents/MAP-21_Fact_Sheet_-_Flexible_Funding_Programs_-_National_Highway_Performance_Program_(NHPP).pdf)

FTA. (2016a). *Urbanized Area Formula Program (5307)*. Retrieved March 23, 2016 from <https://www.fta.dot.gov/funding/grants/grant-programs/urbanized-area-formula-program-5307>

FTA. (2016b). *Fiscal Year 2016 Section 5337 State of Good Repair Apportionments – Full-Year*. Retrieved March 15, 2016 from <https://www.fta.dot.gov/funding/apportionments/table-11-fiscal-year-2016-section-5337-state-good-repair-apportionments-full>

FTA. (2016c). *Section 5309 Annual Report on Funding Recommendations*. Retrieved March 25, 2016 from <https://www.fta.dot.gov/funding/grant-programs/capital-investments/annual-report-funding-recommendations>

Federal Railroad Administration. (2016). *Summary of RRIF*. Retrieved March 8, 2016 from <http://www.fra.dot.gov/Page/P0128>

George Mason University. (2013). *Public-Private Partnership Lessons Learned and Best Practices*. Retrieved March 18, 2016 from <http://p3policy.gmu.edu/wp-content/uploads/2013/12/LESSONS-LEARNED-06-25-2013.pdf>

Goldman, T; Corbett, S; & Wachs, M. (2001). *Local Option Transportation Taxes in the United States (Part Two: "State-by-State Findings")*. Institute of Transportation Studies: University of California at Berkeley.

Heritage Foundation. (2004). *An Increase in the Gas Tax Would Hurt Consumers and Slow the Economy*. Retrieved March 5, 2016 from <http://www.heritage.org/research/reports/2004/03/an-increase-in-the-gas-tax-would-hurt-consumers-and-slow-the-economy>

HUD. (2013). *HUD Approves \$6 Million Loan Guarantee to Pasadena, California*. Retrieved March 8, 2016 from <http://archives.hud.gov/local/ca/news/pr2013-03-27.cfm>

IIUSA. *Utilizing EB-5 in New York*. Retrieved September 16, 2016 from <https://iiusa.org/wp-content/uploads/2016/09/EB5-Economic-Impact-NY.pdf>.

Junge, J. R., & Levinson, D. (2012). *Prospects for Transportation Utility Fees*. *Journal of Transport and Land Use*, 5(1), 33-47.

KPMG. (2009). *Availability Payment Mechanisms for Transit Projects*. Retrieved March 18, 2016 from http://www.pwfinance.net/document/research_reports/10%20KPMG%20availability.%20pdf

League of Oregon Cities. (2008). *Transportation utility fee*. Retrieved June 1, 2016 from <http://www.orcities.org/Portals/17/Premium/TUFReport2011.pdf>

Lexis Nexis. (2015). *EB-5 Funding and Transportation Projects – A Perfect Fit for Jobs, Accessibility and the Environment*. Retrieved March 16, 2016 from <http://www.lexisnexis.com/legalnewsroom/banking/b/venture-capital/archive/2015/09/21/eb-5-funding-amp-transportation-projects-a-perfect-fit-for-jobs-accessibility-and-the-environment.aspx#sthash.QQ1kfVEu.dpuf>

MacKechie, C. (2015). *New York State Public Transit Funding*. Retrieved March 16, 2016 from http://publictransport.about.com/od/Transit_Funding/a/New-York-State-Public-Transit-Funding.htm

Mathur et al. (2015). *Transit Impact Fee*. Retrieved March 17, 2016 from https://www.researchgate.net/publication/275854689_Transit_Impact_Fee

Metropolitan Planning Council. (2011). *PPP Profiles: Eagle P3, a section of Denver's comprehensive transit expansion, FasTracks*. Retrieved March 19, 2016 from <http://www.webcitation.org/61dDLACjS>

Metropolitan Planning Council. (2013). *Solving the parking predicament: How parking benefit districts revitalized Austin, Texas*. Retrieved March 15, 2016 from <http://www.metroplanning.org/news/6717/Solving-the-parking-predicament-How-parking-benefit-districts-revitalized-Austin-Texas>

Mid-Hudson News Network. (2014). *MTA Payroll Tax is Here to Stay*. Retrieved March 15, 2016 from <http://www.dailyfreeman.com/general-news/20140110/mta-payroll-tax-is-here-to-stay-says-ny-sen-john-bonacic>

Mineta Transportation Institute. (2001). *Factors Influencing Voting Results of Local Transportation Funding Initiatives with a Substantial Rail Transit Component: Case Studies of Ballot Measures in Eleven Communities*.

Mineta Transportation Institute. (2011). *Revisiting Factors Associated with the Success of Ballot Initiatives with a Substantial Rail Transit Component*.

Montgomery County, Maryland. (2012). *Repeal of Department of Finance Regulation 12-10, Excise Tax: Major Emitters of Carbon Dioxide*. Retrieved March 17, 2016 from http://www.montgomerycountymd.gov/council/resources/files/res/2012/20120710_17-484.pdf

National Conference of State Legislatures. (2016). *Public-Private Partnerships for Transportation Categorization and Analysis of State Statutes*. Retrieved March 18, 2016 from http://www.ncsl.org/Portals/1/Documents/transportation/P3_State_Statutes.pdf

National Cooperative Highway Research Program. (2006). *NCHRP 20-24(49): Future Financing Options to Meet Highway and Transit Needs*.

National Cooperative Highway Research Program. (2009). *NCHRP 20-24(62): Making the Case for Transportation Investment and Revenue*.

National Transit Database (NTD). (2016). *NTD Program Data*. Retrieved March 23, 2016 from <http://www.ntdprogram.gov/ntdprogram/data.htm>

New Mexico DOT. (2014). *Transportation Alternatives Program Project Selection Guide: FFY 2016 and FFY 2017*. Retrieved March 8, 2016 from http://dot.state.nm.us/content/dam/nmdot/planning/NMDOT_TAP_Guide%20FINAL_FFY16&17.pdf

New York Independent Budget Office. (2011). *For MTA, Tax and Fee Revenues Not Always on Track*. Retrieved March 16, 2016 from <http://www.ibo.nyc.ny.us/iboreports/mtareportaugust2011.pdf>

New York Department of Taxation and Finance. (2016). *Employers – Metropolitan Commuter Transportation Mobility Tax (MCTMT)*. Retrieved March 15, 2016 from <https://www.tax.ny.gov/bus/mctmt/emp.htm>

Oregon Live. (2016). *Bill would let TriMet, other transit agencies tax employees' wages*. Retrieved March 15, 2016 from

http://www.oregonlive.com/commuting/index.ssf/2016/02/bill_would_allow_trimet_other.html

Smart Growth America. (2016). *Boulder Carbon Tax*. Retrieved March 17, 2016 from

<http://www.smartgrowthamerica.org/documents/Boulder-Carbon-Tax.pdf>

Stewart Total Guaranty Company. (2014). *Texas Recording Fees*. Retrieved March 16, 2016 from

<https://www.stewart.com/content/dam/stewart/Microsites/texas/pdfs/2014%20State%20TX%20RECORDING%20FEES%202.pdf>

State of Texas. (2016). *Transportation Code: Title 6. Roadways, Subtitle K. Mass Transportation, Chapter 451. Metropolitan Rapid Transit Authorities, Subchapter A. General Provisions*. Retrieved March 15, 2016 from

<http://www.statutes.legis.state.tx.us/Docs/TN/htm/TN.451.htm>

Sumner, Jenny, et al. (2009). *Carbon Taxes: A Review of Experience and Policy Design Considerations*. Retrieved June 5, 2016.

<http://www.nrel.gov/docs/fy10osti/47312.pdf>

Texas Ahead. (2016). *Tax Increment Financing Act, Tax Code Chapter 311 Overview*. Retrieved March 8, 2016 from

http://www.texasahead.org/tax_programs/increment_finance/

Texas A&M University. (2013). *The Use of Federal Toll Credits and Transportation Development credits by States and Regional Planning Entities*. Retrieved March 25, 2016 from

<http://ftp.dot.state.tx.us/pub/txdot-info/lgp/tech-memo-transportation-development-credits.pdf>

Texas A&M University. (2015). *Sources of Funding for Transit in Urban Areas in Texas*. Retrieved March 21, 2016 from

<http://d2dtl5nnlpfr0r.cloudfront.net/tti.tamu.edu/documents/PRC-15-11-1.pdf>

Texas A&M University. (2016). *Local Motor Fuel Tax*. Retrieved March 7, 2016 from

<http://mobility.tamu.edu/mip/strategies-pdfs/funding/technical-summary/Fuel-Tax-Local-Option-2-Pg.pdf>

Texas A&M Transportation Institute. (2013). *Texas Legislature Redefines Transportation Reinvestment Zones*. Retrieved March 18, 2016.

<http://tti.tamu.edu/2013/09/01/texas-legislature-redefines-transportation-reinvestment-zones/>

Texas A&M Transportation Institute. (2013). *Capturing the Value of Transportation to Finance Transportation: Case Studies from Texas*. Retrieved March 18, 2016.

http://nacto.org/wp-content/uploads/2013/10/AldreteRafael_DesigningCitiesPHX.pdf

Texas Comptroller on Public Accounts. (2016a). *Quarterly Sales Tax Historical Data*. Retrieved March 7, 2016 from

<https://mycpa.cpa.state.tx.us/allocation/HistSales.jsp>

Texas Comptroller on Public Accounts. (2016b). *Transit Sales and Use Tax*. Retrieved March 25, 2016 from

<http://comptroller.texas.gov/taxinfo/local/mta.html>

Texas Department of Motor Vehicles (TxDMV). (2016). *Texas Registration Fees*. Retrieved September 2, 2016 from <http://www.txdmv.gov/motorists/register-your-vehicle>

Texas Highway Man. (2016). *Proposed Tollway System*. Retrieved March 15, 2016 from <http://www.texashighwayman.com/tollsys.shtml>

Trimet. (2016). *Adopted Budget 2016-2017*. Retrieved September 2, 2016 from <http://trimet.org/about/accountability.htm#financial>

TxDOT. (2010). *Texas Rail Plan*. Page 6-4. Retrieved March 7, 2016 from <https://ftp.dot.state.tx.us/pub/txdot-info/rail/plan/ch6.pdf>

TxDOT. (2012). *Minute Order September 27, 2012*. Retrieved March 19, 2016 from http://www.txdot.gov/about_us/commission/2012_meetings/documents/minute_orders/sep27/5a1.pdf

TxDOT. (2013a). *The Use of Federal Toll Credits and Transportation Development Credits by States and Regional Planning Entities*. Retrieved March 18, 2016 from <http://ftp.dot.state.tx.us/pub/txdot-info/lgp/tech-memo-transportation-development-credits.pdf>

TxDOT. (2013b). *A Study of Sources Used for Local Revenue for Transit*. Retrieved March 7, 2016 from <https://ftp.dot.state.tx.us/pub/txdot-info/ptn/matching-funds-resource-guide.pdf>

TxDOT. (2014a). *Top 100 Federal Funding Sources*. Retrieved March 7, 2016 from http://www.lbb.state.tx.us/Documents/Publications/Primer/1500_Top100FederalFundingSources.pdf

TxDOT. (2014b). *AAMPO Category 7 Apportionment Recap*. Retrieved March 3, 2016 from http://ftp.dot.state.tx.us/pub/txdot-info/fin/fed_funds/cat7/apportionment/bexar.pdf

TxDOT. (2014c). *Texas Transportation Commission State of Texas General Obligation, Mobility Fund Refunding Bonds, Series 2014*. Retrieved March 15, 2016 from http://ftp.dot.state.tx.us/pub/txdot-info/fin/investor/tmf_bond/2014.pdf

TxDOT. (2016a). *Texas Mobility Fund*. Retrieved March 8, 2016 from <http://www.txdot.gov/inside-txdot/office/innovative-finance/mobility-fund.html>

TxDOT. (2016b). *Transportation Development Credits*. Retrieved March 8, 2016 from <http://www.txdot.gov/government/programs/local-financing/transportation-development-credits.html>

TxDOT. (2016c). *Transportation Reinvestment Zone*. Retrieved March 18, 2016 from <http://www.txdot.gov/government/programs/trz.html>

TxDOT. (2016d). *2016 Texas Rail Plan Update*, page 2-73. Retrieved September 2, 2016 from <http://www.txdot.gov/government/legislative/state-affairs/texas-rail-plan.html>

- Texas PUC. (2016). *Charges on Your Telephone Bill*. Retrieved March 15, 2016 from <https://www.puc.texas.gov/consumer/phone/bill.aspx>
- Texas Rail Relocation and Improvement Association. (2016). *What is Relocation?* Retrieved March 7, 2016 from <http://railrelo.org/what.html>
- Texas Transportation Commission. (2012). *Minute Order: 113281*. Retrieved March 25, 2016 from http://www.txdot.gov/about_us/commission/2012_meetings/documents/minute_orders/sep27/5a1.pdf
- Transportation Cooperative Research Program. (2008). *Uses of Fees or Alternatives to Fund Transit*. Retrieved March 17, 2016 from http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_lrd_28.pdf
- Transportation Cooperative Research Program. (2009). *Local and Regional Funding Mechanisms for Public Transportation*. Retrieved March 15, 2016 from http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rpt_129.pdf
- Urban Land Institute (2012): *Study on Parking Benefit Districts and Opportunities for New Orleans*. Retrieved May 27, 2016. <http://uli.org/wp-content/uploads/2012/12/ULI-LA-Study-on-Parking-Benefits-District-for-New-Orleans-FINAL.pdf>
- US DOT. (2015a). *TIFIA Program Guide*. Retrieved June 3, 2016 from <https://www.transportation.gov/tifia/program-guide>
- US DOT (2015b). *I-635 / LBJ Freeway Managed Lanes, Dallas-Fort Worth, Texas*. Retrieved May 24, 2016. <https://www.transportation.gov/policy-initiatives/build-america/i-635-lbj-freeway-managed-lanes-dallas-fort-worth-tx>
- US DOT. (2016a). *TIFIA*. Retrieved March 7, 2016 from <https://www.fhwa.dot.gov/ipd/tifia/>
- US DOT. (2016b). *DART Orange Line Extension*. Retrieved March 8, 2016 from <https://www.transportation.gov/tifia/financed-projects/dallas-area-rapid-transit-project-orange-line-extension-i-3>
- US DOT. (2016c). *About TIGER Grants*. Retrieved March 21, 2016 from <https://www.transportation.gov/tiger/about>
- US DOT. (2016d). *Denver Union Station*. Retrieved June 15, 2016 from <https://www.transportation.gov/buildamerica/denver-union-station>
- US DOT. (2016e). *Denver Union Station*. Retrieved June 15, 2016 from <https://www.transportation.gov/tifia/financed-projects/denver-union-station>
- VIA Metropolitan Transit. (2015). *Comprehensive Annual Financial Report*.

VIA Metropolitan Transit. (2016). *Fares and Passes*. Retrieved March 23, 2016 from <http://www.viainfo.net/fares/faresmain.aspx>

Washington State Legislature. (2015). *Revised Code of Washington (RCW) § 35.95.040*. Levy and collection of excise taxes authorized—Business and occupation tax—Excise tax on residents—Appropriation and use of proceeds—Voter approval. Retrieved June 1, 2016 from <http://apps.leg.wa.gov/rcw/default.aspx?cite=35.95.040>

Washington State Transportation Commission. (2014). *Pullman Transit's Presentation to the Washington State Transportation Commission*. Retrieved March 15, 2016 from http://wstc.wa.gov/Meetings/AgendasMinutes/agendas/2014/April16/documents/2014_0416_BP4_PullmanTransit.pdf

A. Evaluation of Funding and Finance Options

A.1 Federal Funding Sources

FTA Formula Programs

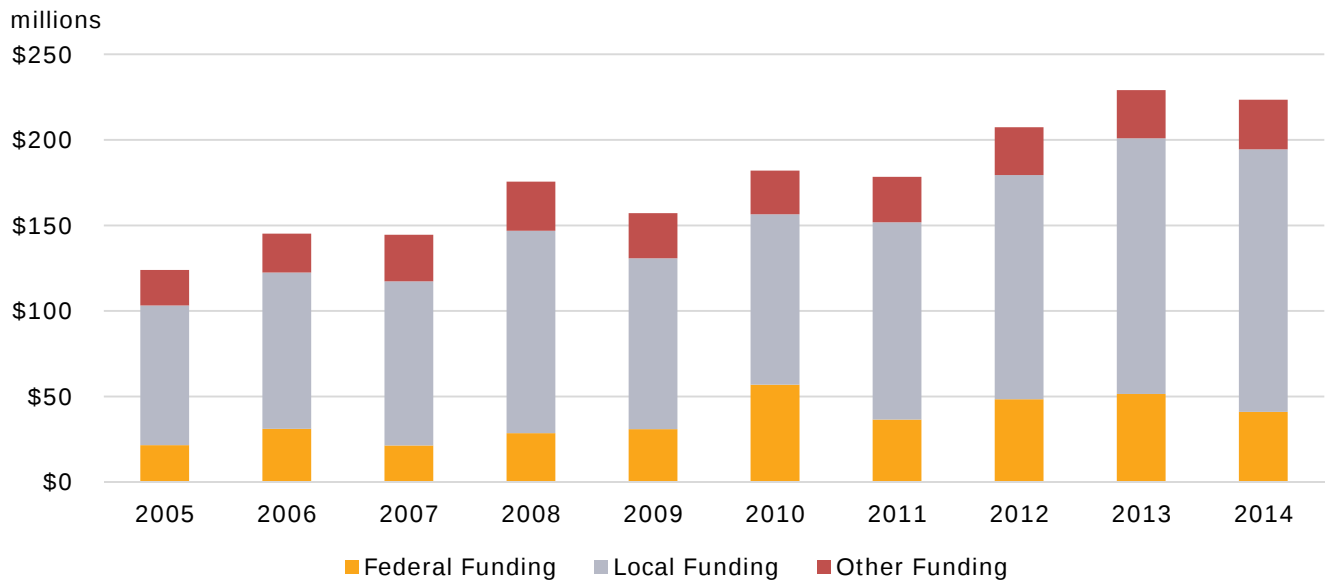
VIA is the designated recipient of Federal Transit Administration (FTA) funding in the San Antonio Urbanized Area (UZA). In Fiscal Year (FY) 2016, FTA funds allocated directly to the San Antonio UZA totaled \$33.6 million, most of which was allocated through Section 5307 Urbanized Area Formula program (\$29.2 million). According to National Transit Database (NTD), Federal funding has historically accounted for 21 percent of VIA's total capital and operations funding (illustrated in Table A.1, Figure A.1, and Figure A.2). The remainder of VIA's total capital and operations funding has historically been generated from a combination of local funding and "other" sources, including farebox revenues, together accounting for the other 79 percent. Additional information on these sources is explained in the following appendix sections.

Table A.1 VIA Funding Sources (in millions)

Year	Federal Funding	Local Funding	Farebox and Other Funding	Total Funding
2005	\$21.6	\$81.6	\$20.8	\$124.0
2006	\$31.1	\$91.4	\$22.7	\$145.2
2007	\$21.4	\$95.9	\$27.2	\$144.5
2008	\$28.6	\$118.3	\$28.7	\$175.6
2009	\$30.9	\$99.9	\$26.4	\$157.1
2010	\$56.9	\$99.6	\$25.5	\$182.1
2011	\$36.5	\$115.3	\$26.6	\$178.4
2012	\$48.4	\$131.0	\$28.0	\$207.3
2013	\$51.5	\$149.4	\$28.2	\$229.0
2014	\$41.0	\$153.5	\$29.0	\$223.5

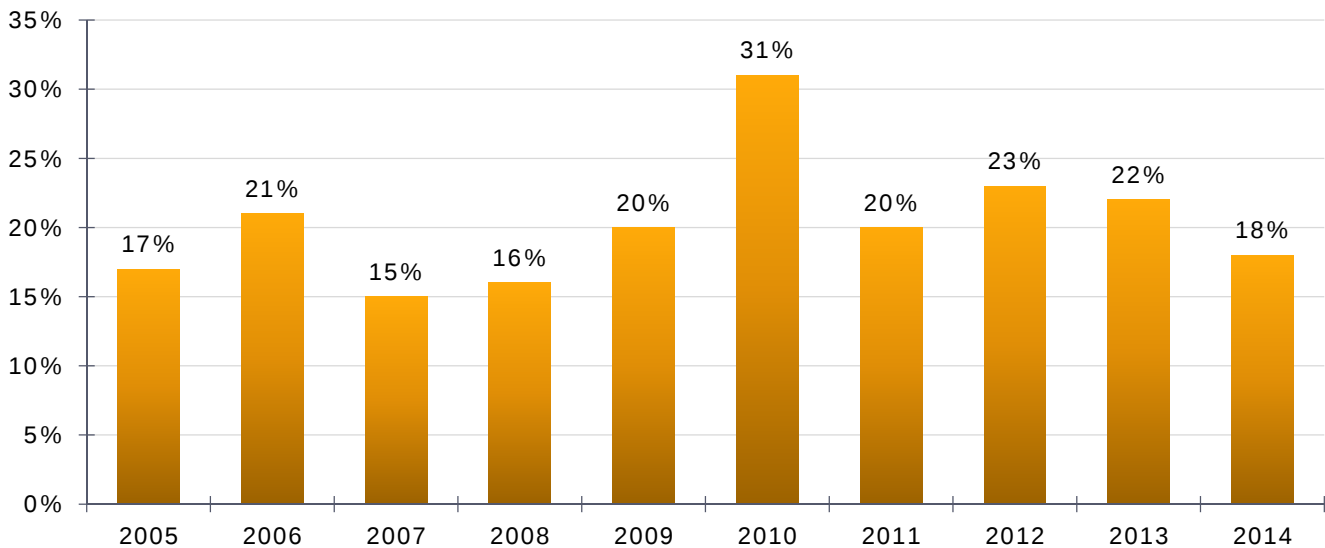
Source: NTD, 2016.

Figure A.1 VIA Funding Sources (in millions)



Source: NTD, 2016.

Figure A.2 VIA Federal Share of Transit Revenues



Source: NTD, 2016.

Section 5307 UZA

The Section 5307 UZA Formula Funding program is the largest of FTA's grant programs, making Federal funding available to states, regions, and localities for transit capital and operating assistance in urbanized areas and for transportation-related planning (FTA, 2016). FTA apportions formula funds

to designated recipients, who then suballocate funds to state and local governmental authorities. VIA is the designated recipient of Section 5307 funds in the San Antonio UZA. Since San Antonio UZA has a population over 200,000, the formula to allocate funds is based on a combination of bus revenue vehicle miles, bus passenger miles, fixed guideway⁷ revenue vehicle miles, and fixed guideway route miles as well as population and population density (Texas A&M University, 2015). FTA's apportionments of Section 5307 Formula funds over the last five years ranged between \$24 and \$29 million per year.

- **Revenue Yield:** High; funding apportionments over the last five years have averaged approximately \$27.2 million per year and in FY 2016, VIA is slated to receive \$29.2 million in formula funds (FTA, 2016).
- **Stability:** Moderate; funding distribution is based on formula, providing stability. However, the program is funded through motor fuel tax revenues (2.86 cents per gallon) deposited into the Mass Transit Account of the Federal Highway Trust Fund. The yield of motor fuel taxes is declining over the long-term with improvements in fuel efficiency and introduction of alternative fuel vehicles.
- **Viability:** High; existing Federal funding program.
- **Ease of Administration:** High; existing Federal funding program.

Section 5337 State of Good Repair

The Moving Ahead for Progress in 21st Century Act (MAP-21) addressed transit asset management through the creation of the FTA State of Good Repair (SGR) Grants Program, Section 5337 (formerly known as Section 5309 Fixed Guideway Formula funds). The SGR Grants program is available for the maintenance, rehabilitation, or replacement of existing capital assets in urbanized areas. However, SGR grants are not available for projects that expand system capacity or service or modernize assets (Federal Register, 2014). Within the program, FTA apportions SGR Grants program funds to designated recipients in urbanized areas with high-intensity fixed guideway and high-intensity motorbus systems.⁸ Of the funds appropriated to the SGR Grants program by Congress, 97 percent is apportioned among urbanized areas with fixed-guideway systems and 3 percent is apportioned among urbanized areas with high-intensity motorbus systems. Urbanized areas with fixed guideway and high-intensity motorbus systems become eligible for SGR funds after seven years in operation.

Three metropolitan areas within Texas have received SGR Grants for Fixed Guideway and Motorbus SGR projects in the past, with their FY 2016 Apportionments listed below in Table A.2.

⁷ The 49 U.S. Code of fixed guideway includes a public facility that: a) uses and occupies a separate right of way for the exclusive use of public transportation; b) uses rail; c) uses a fixed catenary system; d) is a passenger ferry system; or e) is a bus rapid transit system.

⁸ High-intensity motorbus systems includes public transportation provided on high-occupancy vehicle lanes.

Table A.2 FY 2016 SGR Grant Recipients in Texas

Region	Fixed Guideway State of Good Repair	Motorbus State of Good Repair
Corpus Christi	\$41,983	N/A
Dallas-Fort Worth	\$22,435,450	\$1,167,250
Houston	\$4,208,128	\$1,109,600

Source: FTA, 2016b.

VIA's existing Primo service does not meet the criteria under Section 5337 as a "high-intensity motor bus system." Should VIA implement fixed guideway or high-intensity motor bus systems by 2040, the agency will be eligible for FTA SGR funds within nine years (seven years of operation plus two-year lag for data reporting) of starting operations. The potential funding allocation will depend on VIA service levels (as measured by revenue vehicle miles and route miles operating on high-occupancy vehicle [HOV] lanes).

- **Revenue Yield:** Low; distributed by formula and will depend on how service characteristics of fixed guideway and "high-intensity motor bus" systems implemented by VIA compare at the National level.
- **Stability:** Moderate; funding distribution is based on a formula, providing stability. However, the program is funded through motor fuel tax revenues (2.86 cents per gallon) deposited into the Mass Transit Account of the Federal Highway Trust Fund. The yield of motor fuel taxes is declining over the long-term with improvements in fuel efficiency and introduction of alternative fuel vehicles.
- **Viability:** High; existing Federal funding program.
- **Ease of Administration:** High; existing Federal funding program (although VIA is not currently eligible).

Section 5339 Bus and Bus Facilities

Section 5339, Bus and Bus Facilities Program, is an FTA formula program. The purpose of the program is to assist eligible recipients in replacing, rehabilitating, and purchasing buses and related equipment; and to construct bus-related facilities, thus allowing grantees to address replacement and capital expansion needs. As of 2013, the average bus fleet age across the nation was 7.8 years (APTA, 2013), and comparatively, VIA's average bus fleet age in 2016 is 12 years. Since VIA has an older bus fleet, it is likely that they be well positioned for those competitive bus grants.

Each year, \$65.5 million is allocated nationally, with each state receiving \$1.25 million and each territory receiving \$0.5 million. Remaining funds are distributed using the same formula described for Section 5307 and other formula funds.

- **Revenue Yield:** Moderate; FY 2016 apportionments for VIA are estimated at almost \$3.0 million.
- **Stability:** Moderate; funding distribution is based on a formula, providing stability. However, the program is funded through motor fuel tax revenues (2.86 cents per gallon) deposited into the Mass

Transit Account of the Federal Highway Trust Fund. The yield of motor fuel taxes is declining over the long-term with improvements in fuel efficiency and introduction of alternative fuel vehicles.

- **Viability:** High; existing Federal funding program.
- **Ease of Administration:** High; existing Federal funding program.

Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities

The FTA Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities program provides formula funding to states for the purpose of assisting private nonprofit groups and public agencies in meeting the transportation needs of the elderly and persons with disabilities when the transportation service provided is unavailable, insufficient, or inappropriate to meeting these needs. Funds are apportioned using a formula-based on each state's share of population for these groups of people.

- **Revenue Yield:** Low; FY 2016 apportionments for VIA are estimated at about \$1.5 million.
- **Stability:** Moderate; funding distribution is based on a formula, providing stability. However, the program is funded through motor fuel tax revenues (2.86 cents per gallon) deposited into the Mass Transit Account of the Federal Highway Trust Fund. The yield of motor fuel taxes is declining over the long-term with improvements in fuel efficiency and introduction of alternative fuel vehicles.
- **Viability:** High; existing Federal funding program.
- **Ease of Administration:** High; existing Federal funding program.

FHWA Flexible Funds

Texas received Federal highway funding authorizations for more than \$3.4 billion in FY 2014. While the Texas Department of Transportation (TxDOT) allocates many of these funds to regions, localities, and transit agencies, not all of those funding sources are applicable for VIA funding programs. The primary Federal funding programs in Texas are listed in Table A.3. Transit projects are eligible for only a few of the Federal-aid Highway programs, including National Highway Performance Program (NHPP), Surface Transportation Block Grant Program (STBGP), and Congestion Mitigation and Air Quality Program (CMAQ)⁹. VIA can also apply for discretionary funding for eligible transit projects through the TIGER grant program.

⁹ If the Greater San Antonio Region becomes a nonattainment area for air quality measures.

Table A.3 TxDOT Federal Funding Sources in FY 2014

Federal Funding Program	Federal Funding Amount (in millions)	Federal Funding Share of Total
National Highway Performance Program (NHPP)	\$2,002.3	57%
Surface Transportation Block Grant Program (STBGP)	\$921.0	26%
Highway Safety Improvement Program	\$202.5	6%
Congestion Mitigation and Air Quality Improvement (CMAQ)	\$164.5	5%
Airport Improvement Program	\$41.7	1%
Nonurbanized Area Formula Grants	\$41.0	1%
TIGER Discretionary Grants	\$31.6	1%
Metropolitan Planning Highways	\$23.7	1%
Border Enforcement – Highways	\$18.3	1%
Railway Highway Crossings Program	\$17.5	1%
State and Community Highway Safety Grants	\$17.2	0%
Alcohol Impaired Driving Countermeasures Incentive Grants	\$10.0	0%
Motor Carrier Safety Assistance	\$8.1	0%
Total	\$3,499.4	100 %

Source: TxDOT, 2014a.

National Highway Performance Program

The National Highway Performance Program (NHPP) provides support for the condition and performance of the National Highway System (NHS), offering \$21.9 billion in FY 2014 (Federal Highway Administration (FHWA), 2016). It provides funding for the construction of new facilities on the NHS, and to ensure that investments of Federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a state's asset management plan for the NHS (FTA, 2014). While traditionally allocated for highway funding, MAP-21 allows NHPP funding to be allocated by state DOTs to transit agencies for eligible public transportation projects.

Over the past five years, TxDOT has received an average of \$1.74 billion annually in NHPP funding (TxDOT, 2014a). MAP-21 allows funding from the NHPP to be used for transit capital projects if a transit project is in the same corridor as, and in proximity to, a fully access controlled highway designated as a part of the NHS. MAP-21 also allows NHPP funding to be used for transit if the project is expected to reduce delays, produce travel-time savings on the fully access-controlled highway, and improve regional traffic flow (TxDOT, 2014a).

- **Revenue Yield:** Low, it is unclear whether there is a precedent of flexing NHPP funds (or formerly NHS funds) to transit projects in Texas, and whether funding would be available for transit in the future.

- **Stability:** Moderate; NHPP is funded through the Federal Highway Trust Fund. While the Fixing America's Surface Transportation (FAST) Act funded the program over the next five years, the future of the Federal-aid Highway Program in general is uncertain with the yield of motor fuel taxes declining over time and significant pressure to increase the size of the overall transportation spending. General fund transfers are maintaining the Federal Highway Trust Fund viable.
- **Viability:** Moderate; while this is an existing Federal funding source, VIA has no control over its allocation. VIA will need to coordinate with TxDOT to determine whether a portion of funds that currently support highway needs could be allocated to pay for eligible transit investments, particularly to a metropolitan transit agency that does not get state funding support for transit investments.
- **Ease of Administration:** High; existing Federal funding program.

Surface Transportation Block Grant Program – Metropolitan Mobility

Former Surface Transportation Program (STP) funding, now known as the Surface Transportation Block Grant Program (STBGP) as part of the FAST Act, may be used by states and localities for projects preserving or improving conditions and performance on any Federal-aid highway, bridge projects on any public road, facilities for nonmotorized transportation, transit capital projects and public bus terminals and facilities. Similar to NHPP funding allocation, the FAST Act allocates STP funding to state DOTs, for further allocation to local governments, MPOs, and transit agencies for eligible projects. The Alamo Area Metropolitan Planning Organization (AAMPO) is a recipient for STBGP funds and issues a call for projects about every two years for STBGP funding.

Over the past five years, TxDOT has received an average of \$889 million annually in overall STP/STBGP program funding; the total apportionment for FY 2016 under the FAST Act is \$996.8 million (illustrated in Figure A.3). Of that, AAMPO has received an average of \$29.6 million per year over the past five years, which was further allocated to the cities and transit agencies within the AAMPO region (TxDOT, 2014b). AAMPO has awarded about \$44 million in STP funds since 2011 for various transit projects (e.g., CNG facility, Stone Oak Park & Ride facility).

Figure A.3 Alamo Area MPO and VIA STP/STBGP MM Funding (in millions)



Source: TxDOT (2014b), VIA (2016).

- **Revenue Yield:** Moderate; AAMPO has awarded \$10 million or more to VIA on the last three calls for projects (2011, 2013, and 2015).
- **Stability:** Moderate; funded from Federal HTF, which has remained viable with transfers from the General Fund, but yield of its main source (motor fuel taxes) is declining over time.
- **Viability:** Moderate; this is an existing Federal program, but VIA has no control its allocation. Transit needs compete with other eligible regional transportation priorities.
- **Ease of Administration:** High; this funding mechanism already exists.

Transportation Alternatives Program

Formerly known as the Transportation Alternatives Program (TAP), Transportation Alternatives (TA) projects are now funded through a set-aside of the STBGP funding through the FAST Act. The set aside amounts through 2020 are between \$835 million and \$850 million annually, maintaining the same level of funding as in MAP-21 (ARTBA, 2015). These set-aside funds include all projects and activities that were previously eligible under TAP, encompassing a variety of smaller-scale transportation projects such as pedestrian and bicycle facilities, recreational trails, safe routes to school projects, community improvements such as historic preservation and vegetation management, and environmental mitigation related to stormwater and habitat connectivity.

The State of Texas is estimated to receive similar funding amounts for TA through the FAST Act, as was received under MAP-21 (FHWA, 2016b). Between FY 2013 to 2016, AAMPO received a total of \$11.5 million in TAP funding, and is expecting similar amounts going forward under the FAST Act (City of San Antonio, 2014). VIA will continue to be able to submit competitive grant applications for TA funding through the SBTGP, similar to the former TAP program.

- **Revenue Yield:** Low; grant award for specific project.
- **Stability:** Low; TAP funds are awarded through a competitive grant process and are contingent upon availability of Federal and regional funding.
- **Viability:** High; existing Federal-funding program.
- **Ease of Administration:** Moderate; this funding mechanism already exists. Per the FAST Act, agencies administering STBG TA funds have to produce an annual report indicating total amounts requested, for what types of projects and the number of projects selected. Requires technical capacity for preparation of competitive grant applications.

Congestion Mitigation and Air Quality Improvement Program

The Congestion Mitigation and Air Quality Improvement Program (CMAQ) provides a flexible funding source to state and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards (NAAQS) for ozone, carbon monoxide, or particulate matter (nonattainment areas) as well as former nonattainment areas that are now in compliance (maintenance areas).

CMAQ Funding

Currently, the Greater San Antonio Region is in an attainment area and is ineligible to receive CMAQ Funds. With the anticipated changes to the NAAQS, the region may become a nonattainment area, making this funding program available to VIA.

Although CMAQ funds can be used only for projects that reduce vehicle emissions in metropolitan areas designated as air quality nonattainment or maintenance areas, there is no Federal requirement that state DOTs suballocate CMAQ moneys to MPOs for direct programming. Instead, CMAQ dollars flow from the Federal government to the states, and states are encouraged to consult with MPOs and local agencies to select CMAQ projects. The Greater San Antonio Region is currently in attainment and thus ineligible to receive CMAQ funding. However, the Environmental Protection Agency (EPA) is expected to revise the air quality standards that would likely result in the Greater San Antonio Region becoming a nonattainment area. If this change were to occur, the region would be eligible to receive CMAQ funds.

- **Revenue Yield:** Low; grant award for specific project.
- **Stability:** Moderate; depends on how the MPO manages the process for distribution grants.
- **Viability:** High; existing Federal funding program, but currently ineligible.
- **Ease of Administration:** Moderate; existing Federal funding program, but may require technical capacity for preparation of competitive grant applications, if such process is implemented by AAMPO to distribute funds.

US DOT Discretionary Programs

TIGER Grants

The Transportation Investment Generating Economy Recovery (TIGER) program, authorized and implemented by the US DOT, funds capital investments in surface transportation infrastructure that have a significant impact on the nation, a region, or a metropolitan area. The TIGER grant program was created

in 2009 as part of the Recovery Act of 2009. The TIGER program operates on an annual basis as a discretionary grant program, based upon the submission and evaluation of applications from localities, transit agencies, regional agencies, and states across the country for a variety of transportation projects. One of TIGER's goals is to provide funding to state and local levels for multimodal, multijurisdictional projects that are more difficult to support through traditional DOT programs. Since the program's start in 2010, US DOT has awarded 28.5 percent in TIGER grants to transit projects, totaling \$1.3 billion over 71 projects nationwide (US DOT, 2016c). The US DOT considers applications on a project-specific basis. To remain competitive in the program, it is essential that any project VIA puts forward be multimodal, multijurisdictional, and provide a significant impact to the Greater San Antonio Region.

- **Revenue Yield:** Moderate; most transit awards from TIGER are above \$1.0 million. Grant award is for a specific project.
- **Stability:** Low; TIGER funds are awarded through a competitive grant process and are contingent upon annual Federal appropriations. The TIGER program is a discretionary program funded through the General Fund.
- **Viability:** High; existing Federal discretionary grant program.
- **Ease of Administration:** Moderate; would require technical capacity to prepare application.

FTA Discretionary Grants

Section 5309 Capital Investment Grants (New Starts/Small Starts)

Under Section 5309, FTA offers capital investment grants through the New Starts and Small Start programs, for projects making a “substantial corridor-based investment” in existing fixed guideway system.

To apply for New Starts, projects can be a new fixed guideway system (LRT or commuter rail), an extension of an existing system, or a fixed guideway BRT system. The total project cost must be greater than \$300 million. To apply for Small Starts, similar project types can apply, including smaller corridor-based BRT systems. The total project cost must be less than \$300 million, with the funding sought a maximum of \$100 million.

New Starts/Small Starts recipient projects in Texas over the past 15 years are listed in Table A.4. Both New Starts and Small Starts grants have been given to projects ranging across the state and in dollar amount, for both BRT and LRT projects.

- **Revenue Yield:** High; grant award for specific capital investment project.
- **Stability:** Low; highly competitive grant program.
- **Viability:** High; Federal discretionary grant program.
- **Ease of Administration:** Moderate, requires technical capacity to undertake application process and upon receipt of full funding grant agreement, ability to meet grant management and reporting requirements.

Table A.4 Section 5309 Recipients in Texas

Year	Agency	City	Project	Mode	Total Project Cost	Grant Type	Grant Amount	Other Federal Funding	State Funding	Local Funding
1999	DART	Dallas	North Central LRT Extension	LRT	\$517.2	FTA NS	\$333.0	–	–	\$184.2
2006	DART	Dallas	Northwest/Southeast LRT MOS	LRT	\$1,406.2	FTA NS	\$700.0	–	–	\$706.2
2011	Metro	Houston	North Corridor LRT	LRT	\$756.0	FTA NS	\$450.0	–	–	\$306.0
2011	Metro	Houston	Southeast Corridor LRT	LRT	\$822.9	FTA NS	\$450.0	–	–	\$372.9
2012	CapMetro	Austin	MetroRapid BRT	BRT	\$47.6	FTA SS	\$38.0	–	–	\$9.6
2012	SunMetro	El Paso	Mesa Corridor BRT	BRT	\$27.1	FTA SS	\$13.5	\$2.0	\$6.1	\$5.4
2014	SunMetro	El Paso	Dyer Corridor BRT	BRT	\$35.3	FTA SS	\$20.4	\$6.1	\$1.5	\$7.3
2016	SunMetro	El Paso	Montana Avenue BRT	BRT	\$43.4	FTA SS	\$25.7	\$8.9	–	\$8.8

Source: FTA, 2016c.

Section 5339 Bus and Bus Facilities (Discretionary)

The FAST Act reestablished a Bus Discretionary Program that allows states to apply for project-specific funding through a competitive process. Many of the grants are expected to fund replacements for aging fleets or facilities. In FY 2016, \$268 million in funding will be available. Of that amount, \$55 million has been designated for Low- or No-Emission Bus Deployment projects. Also included in the Bus and Bus facilities program, is a new pilot program for Cost-Effective Capital Investment, which encourages states to share bus-funding resources among a partnership of recipients. As of 2016, VIA's average bus fleet age is 12 years, which is a sign of an aging fleet, with over 50 percent of its vehicles at or close to the end of their useful life (i.e., 12 years).

- **Revenue Yield:** Low; the FAST Act authorizes \$213 million for FY 2016, increasing to \$289 million by FY 2020. These are total amounts at the national level. Criteria for eligibility includes asset age and condition. Will depend on size of grant award.
- **Stability:** Low; highly competitive grant program.
- **Viability:** High; Federal discretionary grant program.
- **Ease of Administration:** Moderate; may require technical capacity for preparation of competitive grant applications.

A.2 State Funding Sources

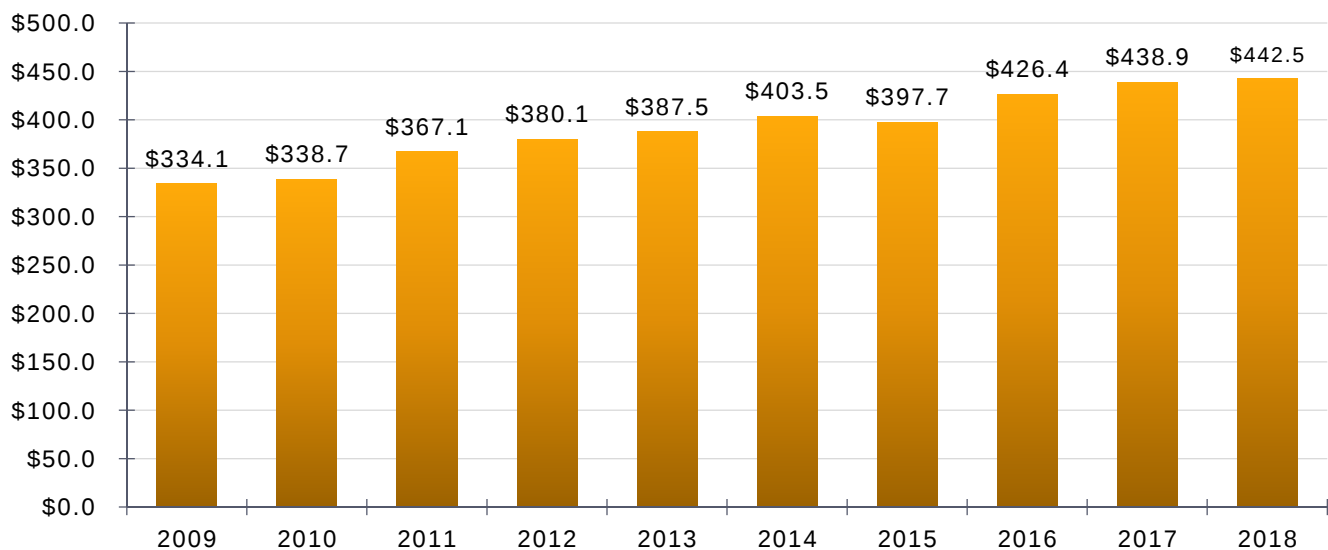
Texas Mobility Fund

The Texas Mobility Fund allows the Texas Department of Transportation (TxDOT) to issue bonds secured by future revenue (TxDOT, 2016). The Texas Mobility Fund is funded from vehicle inspection fees, driver license fees, and certificate of title fees. Funds can be used to finance reconstruction, acquisition, and expansion of state highways, including costs of any necessary design and costs of

acquisition of rights-of-way, and public transportation projects. Revenues that feed into the Texas Mobility Fund have steadily increased; however, the majority of funds are awarded to the construction and design of highway projects.

Over the past five years, the Texas Mobility Fund has received an annual average of \$361.5 in total dedicated revenues, illustrated in Figure A.4. Projecting forward to FY 2018, TxDOT projects revenues continuing to increase up to \$450 million.

Figure A.4 Texas Mobility Fund Dedicated Revenues (in millions)



Source: TxDOT, 2014c.

In FY 2013, the VIA Board of Trustees approved the programming of \$92 million from the Texas Mobility Fund for the development of capital projects (TxDOT, 2014c).

- **Revenue Yield:** Low for transit investments; the majority of projects funded are highway projects.
- **Stability:** Low; the \$92 million TxDOT allocation was a one-time allocation of funds, and does not represent a steady stream of revenues over the long term.
- **Viability:** Moderate; in 2015, law prohibits issuing additional bonds (except for refunding/refinancing existing debt) to increase the fund's capacity. Any additional funding capacity will be limited to revenue growth after debt service and committed projects.
- **Ease of Administration:** High; this funding mechanism already exists.

Texas Rail Relocation and Improvement Fund

In 2005, Texas citizens approved the creation of the Texas Rail Relocation and Improvement Fund (RRIF), which enables the cost of relocating and improving public/private rail facilities to be shared

around the state. The Texas Rail Relocation and Improvements Association is a statewide coalition in support of the Fund, consisting of state, county, and municipal elected officials, groups, and concerned Texans. In 2010, the legislature appropriated \$182 million for use as supplement and leverage for several billion dollars in public and private rail investment, but the funding appropriation was not approved by the state comptroller (TxDOT, 2010). The program at this time remains unfunded (TxDOT 2016d). Once funded by the Texas Legislature, rail projects will be prioritized based on environmental and economic benefit, as well as need to the state and region. TxDOT has already identified 10 projects with funding potential, with one located within the San Antonio region, the Union Pacific Freight Services in the Austin-San Antonio Corridor. Due to the program's focus on freight rail, it is unclear if VIA-sponsored projects would qualify for funding through the Texas RRIF (Texas Rail Relocation and Improvement Association, 2016).

- **Revenue Yield:** N/A; the program is currently unfunded.
- **Stability:** Moderate; would highly depend on the particular project and award amount.
- **Viability:** Moderate; already approved by Texas voters in 2005 and awaiting funding approval by Texas Legislature.
- **Ease of Administration:** Moderate; would depend on particular project.

A.3 Local Funding Sources

Local Sales Tax

Existing MTA Sales Tax

Sales taxes are one of the most common forms of funding for transit agencies of all sizes across the country. Several states and regions have enacted dedicated sales taxes to finance new transportation projects and programs, or accelerate projects already in the planning or construction phases. According to American Association of State Highway and Transportation Officials (AASHTO), local option sales taxes are becoming a “significant and increasingly popular revenue source for surface transportation,” since they produce high revenue, have favorable public perception, are considered fair from a modal perspective, and are an attractive way to exact revenue from nonresident users of transportation facilities (AASHTO, 2016). Historically, dedicated sales taxes have been especially important in funding rail transit projects.

Transit authorities in Texas may adopt a local sales and use tax of up to 1 percent dedicated to transit services (including capital and operations), subject to voters' approval. The cities and towns within VIA's service area have enacted a one-half percent sales and use tax for transit. MTA sales tax revenues levied within the VIA service area in FY 2014 amounted to \$130 million, accounting for 75 percent of the agency funding.

VIA's service area is made up of the unincorporated parts of Bexar County and the following municipalities: Alamo Heights, Balcones Heights, Castle Hills, China Grove, Converse, Elmendorf, Kirby, Leon Valley, Olmos Park, San Antonio, Shavano Park, St. Hedwig, Terrell Hills, and the Bexar County portion of Cibolo.

- **Revenue Yield:** High; applied to a broad tax base.
- **Stability:** Moderate; susceptible to instability and falling revenue in response to economic downturns, but increases over time with economic growth.
- **Viability:** High; legislation in Texas allows metropolitan transit agencies to adopt local sales taxes up to 1 percent for transit, subject to voters' approval via referendum. The VIA sales tax of one-half percent was approved by voters in November 1977.
- **Ease of Administration:** High; mechanism already in place and collected.

Increasing MTA Sales Tax

As noted above, transit authorities in Texas are authorized to adopt up to 1 percent in dedicated local sales taxes. VIA currently receives levies of a one-half percent sales tax; therefore, current service area members could adopt an additional 0.5 percent for transit. However, existing state law limits the amount a city or county is allowed to tax itself. Local option sales taxes (i.e., the combination of city, county, transit, and special purpose district) cannot exceed 2 percent. Many cities and towns within VIA's service area are already at the statutory cap. Increasing the current local sales and use tax dedicated to transit across VIA's service area would require the Texas Legislature and governor to approve a legislative amendment or for cities to adjust their sales tax allocations.

San Antonio's current sales tax rate is 8.25 percent, which is currently the maximum sales tax rate allowed under Texas law. Other jurisdictions at the sales tax cap within VIA's service area are Balcones Heights, Castle Hills, Converse, Olmos Park, and Shavano Park. In Bexar County, the total gross taxable sales amount was \$25.0 billion in 2014, indicating a 0.25 percent increase would yield approximately \$63 million per year for the County (Texas Comptroller on Public Accounts, 2016a). This is similar to an estimate of \$65 million, calculated based on the existing MTA sales tax revenue of \$130 million for a 0.5 percent existing tax.

- **Revenue Yield:** High, based on a 0.25 percent increase; applied to a broad tax base.
- **Stability:** Moderate; susceptible to instability and falling revenue in response to economic downturns, but increases over time with economic growth.
- **Viability:** Low; first, it requires legislative amendment to remove or increase two percent local sales tax cap, and then it would require approval by VIA's service area voters through referendum. Sales taxes are regressive, but are generally accepted as everyone pays (residents, visitors, and businesses).
- **Ease of Administration:** High; this funding mechanism already exists.

Advanced Transportation District

Creation of the Advanced Transportation District (ATD) and authorization of the imposition of a local sales and use tax for advanced transportation (Senate Bill 769) was enacted by the Texas Legislature during the 1999 session. The Texas Legislature amended this legislation in 2003. In 2004, San Antonio residents voted to improve traffic, streets, and public transit by creating the ATD, a sales tax increase of one-quarter of one percent.

The ATD funds are distributed as follows: one-half to VIA, one-quarter to the City of San Antonio (COSA), and one-quarter to TxDOT. VIA's share of the ATD funds totaled \$29.5 million in 2014 out of a total \$59.1 million collected under the program. The ATD applies within the City of San Antonio. This additional sales tax is subject to the same economic fluctuations as the MTA sales tax. Advanced transportation as defined in the legislation includes rail, fixed guideways, busways, bus lanes, technologically advanced bus transit vehicles, passenger amenities, transit centers, and much more. To date, VIA has used these funds to add service, facilities, technology, and fleet to its system.

- **Revenue Yield:** High; totaled \$29.5 million in 2014.
- **Stability:** Moderate; sales taxes are subject to economic business cycles, and sales tax revenues tend to decline during recessionary periods.
- **Viability:** High; passed by voter referendum in 2004.
- **Ease of Administration:** High, existing funding mechanism.

Operating Revenues

Farebox Revenues

Farebox revenues are often the largest source of operating support drawn from local areas, and are predominantly used to support operations. VIA receives farebox revenues at flat rates from passengers on all VIA facilities, including Regular Bus, Express Bus Service, Transfers, VIAtrans, Special Events, and Vanpool service. In addition, VIA also offers four types of passes for riders, 31-Day, 7-Day, Day Pass, or a Semester Pass. Reduced fares are also available to children ages 5 through 11, senior citizens 62 or older, Medicare recipients, persons with certain disabilities, active-duty military and students. Current prices for fares and passes are listed below in Table A.5.

Table A.5 VIA Fares and Passes (as of March 2016)

	Full	Reduced ¹
Fares		
Regular Bus	\$1.30	\$0.65
Express Bus Service	\$2.60	\$1.30
Transfers	\$0.15	\$0.07
VIATrans Service	\$2.00	
VIATrans Child	\$0.90	
Special Events Service	\$2.50	\$1.25
Vanpool Service	See pricing schedule	
Passes		
31-Day Pass	\$38.00	
7-Day Pass	\$12.00	

	Full	Reduced ¹
Day Pass		\$2.75
Semester Pass		\$38.00

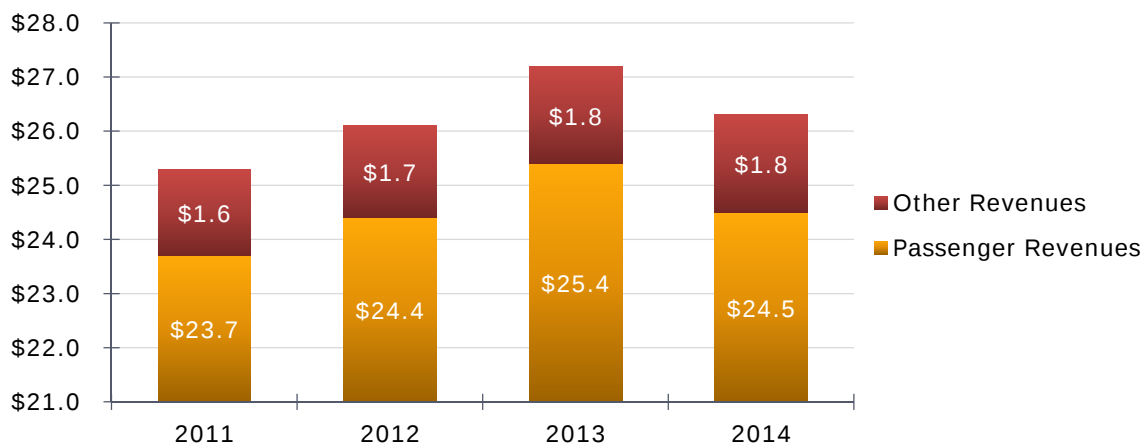
¹Note: Reduced fares are available to children 5011, senior citizens 62 or older, Medicare recipients, persons with certain disabilities, active-duty military, and students.

Source: VIA, 2016.

Over the past decade, VIA's farebox revenue has steadily increased, averaging a total of \$26.2 million in revenue per year (Figure A.5). During those years, VIA raised fares in 2009, 2013, and most recently in January 2016. According to the American Public Transit Association (APTA), VIA services an average of 131,900 boardings each weekday (APTA, 2016), totaling just over 44 million boardings in FY 2014 (NTD, 2016). As a reference point, in FY 2014, VIA fare revenues totaled \$26.2 million, and VIA's total operating expenses totaled \$182.9 million (NTD, 2016), for a farebox recovery ratio of approximately 15 percent.

One of the objectives of VIA's fare policy is to achieve a farebox recovery ratio of 18 percent (excluding depreciation), with the goal of reaching an "aspirational" farebox recovery ratio of 20 percent. The fare policy recommends fare increases every two years (until achieving the 20 percent farebox recovery ratio). VIA's Board of Trustees and the Local Government Approval Committee must approve any proposed fare increases.

Figure A.5 VIA Farebox Revenue (in millions)



Source: VIA 2013 and 2014 CAFR.

- **Revenue Yield:** High; VIA receives \$26.2 million in revenue on average per year, including both passenger revenues (\$24.5 million on average per year) and other revenues (\$1.7 million on average per year).
- **Stability:** Moderate; farebox revenues have continued to increase over past decade despite economic challenges. Generally, ridership growth correlates to changes in the economy and it is

susceptible to fare increases. Depending on the frequency and size of fare increases, farebox revenues may or may not keep pace with growth in operating expenses.

- **Viability:** Moderate; while the decision to implement fare increases lies within VIA, frequent fare increases can help maintain a target farebox recovery ratio, but it may result in general public discontent and ridership losses. VIA's fare policy recommends fare increases every two years.
- **Ease of Administration:** High; existing funding source.

Other Operating/Miscellaneous

Other operating/miscellaneous revenues include advertising revenue, real estate development, or other miscellaneous revenues that are derived from operating the transit service. While these funds do not make up a high percentage of revenues, they are helpful in maximizing revenues available to VIA.

- **Revenue Yield:** Moderate; VIA has averaged just over \$1.0 million of these revenues over the past few years.
- **Stability:** Moderate; advertising fees are subject to fluctuations in the economic business cycle. Miscellaneous revenues are often one-time or opportunistic.
- **Viability:** High; no legislative authority or voter approval required.
- **Ease of Administration:** High; existing sources with low burden of collection.

Local Contracts

Another potential funding source for transit agencies comes from service contracts or agreements. These service contracts are often with universities to support routes serving the school, within the service area of that transit agency. In other cases, it can be a contract with a neighboring city or county to provide service in that area. The payments can be in the form of a fixed payment from the university, a fixed fee per student, or other mechanism. The revenues from this funding source are typically a very small percentage of an agency's budget and generally cover the fully allocated cost of service.

- **Revenue Yield:** Low.
- **Stability:** High; based on contractual terms.
- **Viability:** High; no changes to existing legal structures are necessary. VIA Board of Trustees approval may be required. Contracts must be structured such that the cost of providing services are covered and that no financial burden is imposed to VIA's current services.
- **Ease of Administration:** High; contractual payments from the University or City.

Naming Rights

Naming rights are a payment for the right to put a company name on a piece of infrastructure. In the context of transit, this could mean a transit station or rail line. Used commonly in other settings such as sports stadiums or arenas, there are relatively few examples in transit: Southeastern Pennsylvania Transportation Authority (SEPTA) and Metropolitan Transportation Authority (MTA) have sold naming rights to stations near sports arenas, Cleveland's Bus Rapid Transit (BRT) line is sponsored by a

medical center, and Dallas Area Regional Transit (DART) is offering the naming rights for four train lines and 61 stations. In 2016, RTD-Denver sold naming rights for the A train (between Downtown and Denver International Airport) to the University of Colorado for \$5 million for 5 years (annual revenue of \$1 million). Naming rights for transit lines and stations are somewhat controversial, in particular in cases where the name might reduce the ease of wayfinding.

- **Revenue Yield:** Low.
- **Stability:** High; based on contractual terms.
- **Viability:** High; no changes to existing legal structures are necessary. May require VIA's Board of Trustees approval for adoption.
- **Ease of Administration:** High; contractual payments from naming entity.

Traditional Taxes

Property Tax

Property taxes are the second-most commonly used dedicated funding source for public transit agencies in the US (Cambridge Systematics et al., 2009). Property taxes are assessed on the value of their property, and serve as the primary funding sources for city and county governments, community colleges, schools, and other local public services and entities in the Greater San Antonio Region. To provide context for potential revenue yield from an increased property tax dedicated for transit, Bexar County's net taxable base is \$127.8 billion, taxed at a rate of \$0.3145 per \$100 in taxable value. This currently yields about \$400 million per year in revenue, distributed over several agencies for a variety of purposes (Bexar County Budget Department, 2015). Based on these figures, each \$0.01 in tax rate per \$100 in taxable property value will yield approximately an additional \$12.7 million per year.

- **Revenue Yield:** Moderate.
- **Stability:** Moderate; property taxes are relatively stable and growing in large urban areas such as San Antonio; stability is highly affected by the State of the local economy. Recessionary impacts are generally delayed, dictated by the schedule of property value assessments.
- **Viability:** Low; legislative action would be required to implement this option for transit, as it is not coded in Texas State Law. Would likely also require a local voter referendum.
- **Ease of Administration:** High; this funding mechanism already exists.

Motor Fuel Tax

States commonly levy motor fuel taxes for transportation, and most of the state funding for transit comes from fuel tax revenues unless the state has Constitutional or statutory restrictions. At the local/regional level, motor fuel taxes are generally dedicated to roadways, although some local governments can dedicate local option fuel taxes to transit. Motor fuel taxes are an excise tax or sales tax that is applied to both gasoline and diesel fuel purchases. The reason why the Federal transportation system, states, and regions have relied primarily upon gasoline taxes is the rationale of the “benefits principle,” those who use the transportation network the most (by purchasing the most gas) pay most for its continued operation and improvement. Gasoline tax revenue is typically used for highway funding, directly circulating back into improvements and maintenance that directly benefit the tax contributors. Under the assumption that gasoline taxes operate on the “benefits principle” by charging users for their “wear and tear” on a transportation system, they are typically seen to be equitable policies.

Motor fuel taxes, when implemented as an excise tax, are relatively stable over time, although the yield per penny has been declining over time due to increases on fuel efficiency and the introduction, and shift, to alternative fuel vehicles. Fuel taxes implemented as a percentage sales tax are vulnerable to large swings in revenue as the price of fuel fluctuates (Heritage Foundation, 2004).

The State of Texas currently enacts a \$0.20/gallon fuel excise tax. Using population as a proxy to consumption, a local 1 cent/gallon tax could yield about \$10 million per year in the Greater San Antonio Region (Texas A&M University, 2016). A local-option motor fuels tax would be applied only to the specified local area. The revenue from this funding source could go entirely to transportation projects in the local jurisdiction.

- **Revenue Yield:** Moderate; excise taxes are not adjusted with inflation and with erosion due to higher fuel efficiency, yield (on a cent per gallon basis) is expected to decline over time.
- **Stability:** Low; highly dependent upon VMT and resident travel patterns. Increases in fuel efficiency reduce yields at stable rates and affect Stability over the long term. If supporting transit and encouraging nonauto travel, would be counterintuitive since it relies upon highway use.
- **Viability:** Low; legislative action would be required to implement this option, as it is currently prohibited in Texas tax code (Title 2, Subtitle E, Chapter 162). Depending on the details of the legislation, may need local approval also.
- **Ease of Administration:** High; this funding mechanism already exists.

Vehicle Registration/License Fees

Vehicle registration fees are assessed annually on each vehicle. This tax is assessed at the State level, and Texas also authorizes counties to add county-level fees to pay for local road and bridge projects. Bexar County last increased its local vehicle registration fee by \$10 in 2014 to fund long-term transportation projects, bringing the total vehicle registration fees to \$21.50. Bexar County currently applies the maximum fee authorized by the Legislature (TxDMV, 2016); additional increases would require legislative action.

Bexar County currently yields \$42 million per year in motor vehicle fees, which include vehicle licenses, certificates and transfers of titles, mail registration fees, child safety fees, and duplicate license receipts. It is estimated that a \$1.00 vehicle registration fee would yield about \$1.0 million to \$1.5 million per year.

- **Revenue Yield:** Low; narrower tax base, compared to other local option taxes/fees, and any additional fee will be restricted by the total registration fees levied at the State and county levels.
- **Stability:** Moderate; stable base, but does not grow with inflation.
- **Viability:** Moderate; collection system is in place; needs legislative action for a new fee.
- **Ease of Administration:** High; this funding mechanism already exists, no new technology is required, and additional administration costs would be marginal.

Car Rental Tax

Motor vehicle rental taxes are assessed on the short-term rental of passenger cars, vans, sports utility, and light trucks. Texas currently assesses a 10 percent tax on car rentals, and allows local jurisdictions to impose an additional tax to support sports and community venues. There does not appear to be current legal authority to direct these tax revenues to transportation projects. Since this tax is already collected at the state and local levels, the administrative costs of implementation would be very low.

Bexar County currently levies a 5 percent motor vehicle rental tax (along with a 1.75 percent hotel tax) in support of local sports and community venues. The revenues from the venue taxes support \$415 million in venue bonds for amateur sports, San Antonio River, community arenas, and cultural arts venues. In addition, a \$4.50 per day customer facility charge is assessed on rental cars at the San Antonio International Airport, which is paying for a \$163 million consolidated rental car facility at the San Antonio Airport.

- **Revenue Yield:** Moderate.
- **Stability:** High; existing venue bonds based on motor vehicle rental taxes are rated highly by ratings agencies.
- **Viability:** Low; legislative action would be required to implement this option. Depending on the details of the legislation, may also need local approval also. Several existing fees may indicate this revenue source may be already saturated.
- **Ease of Administration:** High; this funding mechanism already exists, no new technology is required, and additional administration costs would be marginal.

Vehicle Emissions Tax

Texas Transportation Code (State of Texas, 2016) allows transit authorities to impose a motor vehicle emissions tax, to be collected through the county assessor-collector. No Texas transit authority has yet implemented this funding mechanism. The maximum annual tax rate authorized under this legislation is outlined in the Texas Transportation Code (State of Texas, 2016); however, an estimate of the yield of this funding source will require more detailed analysis.

- **Revenue Yield:** Moderate.

- **Stability:** Low; revenue may decline with emission technology improvements.
- **Viability:** High; legislation is in place to implement.
- **Ease of Administration:** Low; this funding mechanism does not currently exist; no new technology is required if it is combined with existing vehicle fees, but additional administration costs would be necessary.

Toll Revenues

Tolling is a direct user fee and pricing strategy used to raise new revenues and to influence more efficient traffic flow. Congestion pricing is a specific type of tolling that is based on varying the cost to users depending on time of day, volume of traffic and/or the level of congestion to be experienced on the route. Generally, higher prices are set during peak hours with the purpose to combat congestion and provide a reliable travel option for transit riders and other drivers who pay the toll. There are no toll roads in operation in the San Antonio region.

All future tolls will be collected electronically through the TxTag Radio-Frequency Identification Detection (RFID) sticker system using electronic tag readers along the toll system.

- **Revenue Yield:** Moderate; further analysis is necessary. Toll revenues will pay first for toll system operations, toll facility maintenance, and debt service. In the case these are implemented as Public-Private Partnerships (P3), revenues may be collected by concessionaire and there will be no regional/local authority on the use of excess revenues. Narrower tax base (only users of the facility pay).
- **Stability:** Moderate; unresponsive to inflation, depends on traffic demand. Economic recession and other factors such as fuel prices, mode shift, and changes in job market distribution would impact revenues.
- **Viability:** Low; not clear whether funds could be used for transit projects.
- **Ease of Administration:** High; this funding mechanism already exists, no new technology is required for an incremental toll, and additional administration costs would be marginal.

Taxi and Car-Hailing Fees

Taxicab fees are used in several large metropolitan cities to help fund transit agencies, such as the New York City MTA, which assesses a \$0.50/ride taxicab fee. Other cities, including Chicago, have taxicab taxes assessed on a per-day or per-month basis for each licensed cab. San Antonio currently enacts a similar fee of \$1.00/trip for taxicabs departing the San Antonio International Airport. San Antonio has over 800 medallion taxicabs. A \$1.00 per-day fee on each would yield approximately \$300,000 annually. Some cities have begun applying per-ride fees on car-hailing services: Chicago applies a \$0.50 per-ride surcharge, while a \$0.25 per ride surcharge is proposed in Annapolis. In the City of Seattle, a recent rule collects a surcharge of \$0.10 per trip from medallion taxicabs and ride-hailing services and used for wheelchair accessible taxi services.

- **Revenue Yield:** Low.

- **Stability:** Low; impact of alternative taxi and ridesharing services (such as Uber and Lyft) are highly uncertain.
- **Viability:** Low; may require new legislation to impose fees.
- **Ease of Administration:** Low; this funding mechanism does not currently exist, therefore, it would require a new system for reporting and collecting fees, and additional administration costs would be necessary.

General Fund Allocations

General fund allocations are non-dedicated revenues that can be directed to a transit agency by a state, county, or local government. This is a relatively common funding source for transit around the country, and this funding source refers to funds for agencies without dedicated funding sources. This funding source is subject to annual or biannual budgeting and appropriations from the local government body, and competes with other general fund services, like education, healthcare, and police within government budgets.

- **Revenue Yield:** Moderate.
- **Stability:** Low; nondedicated so in competition with nonrelated services.
- **Viability:** Moderate; no changes to existing legal structures are necessary, but faces competition with other local priorities.
- **Ease of Administration:** High; simply requires an allocation from the government body.

Local Assistance

Local assistance differs from General Fund Allocation in that the transit agency has other dedicated revenue sources, and local funds are in addition to the dedicated revenues. These allocations generally represent a small portion of an agency's local funding in comparison with their dedicated sources. This source is dependent on the annual budgeting and appropriations process of the local government bodies, so these funds compete with the other priorities of local governments, including police and fire, education, and healthcare.

- **Revenue Yield:** Low.
- **Stability:** Low; non-dedicated source competes with nonrelated services.
- **Viability:** Moderate; no changes to existing legal structures are necessary, but faces competition with other local priorities. Decision to provide funding lies outside VIA.
- **Ease of Administration:** High; simply requires an allocation from the government body.

Local Allocation Agreement

Some transit agencies have formalized agreements and/or cost allocation formulas defining how much funding will be allocated every year and how the funding shares by funding partners are determined. These transit agencies generally do not have a dedicated funding source, and most of their revenues come from jurisdictions in the service area. Examples include Hampton Roads Transit and Washington Metropolitan Area Transit Authority (WMATA) in the Washington, D.C.

area. In these cases, the local funding model distributes operating and capital funds across the jurisdictions.

- **Revenue Yield:** Moderate.
- **Stability:** High; non-dedicated but formalized.
- **Viability:** Moderate; requires agreement between local jurisdictions.
- **Ease of Administration:** High; requires an allocation from the government bodies.

“Sin” Taxes

“Sin” taxes are applied to particular goods and activities, such as alcohol, tobacco, and gambling. These taxes are unique in that their amount is meant to be a disincentive to engaging in certain behavior, yet they have the potential to raise considerable revenue for states and local governments. While lottery proceeds has long been used to support education programs, some states with legalized gambling or a statewide lottery have designated revenues generated through these activities for public transportation services. For example, New Jersey taxes 8 percent of casino gross revenues (roughly \$30 million per-month in 2007), and dedicates a portion of this fund to supporting paratransit services for elderly and disabled persons. Pennsylvania dedicates a percentage of lottery proceeds to transit programs for the elderly. Oregon’s cigarette tax has used revenues to support Portland’s MAX light rail transit system. More recently, Massachusetts adopted an increase of \$1 tax on cigarette and tobacco products, dedicating the revenues to transportation that was estimated to generate about \$144 million annually.

The current excise tax on cigarettes in Texas is \$1.41 per pack, yielding \$1.5 billion statewide in 2015. Beer is taxed at \$0.19 per gallon, wine at \$0.20 per gallon, and distilled spirits at \$2.40 per gallon; these combined to net \$1.1 billion in 2015. These taxes are assessed statewide, so legislative action would be needed to assess additional sin taxes at the local level. Texas Lottery generates \$1.2 billion per year, but this money is channeled primarily to public education. Veterans-themed scratch-off games generated \$11.5 million for the Texas Veterans Commission, a transfer that required legislative approval.

- **Revenue Yield:** Low; very narrow tax base.
- **Stability:** Low; different options have varied expected future trajectories. Source is applied as an excise tax, not responsive to inflation but based on consumption.
- **Viability:** Low; legislative action would be required to implement these funding sources. Depending on the details of the legislation, may need local approval also.
- **Ease of Administration:** High; this funding mechanism already exists, no new technology is required, and additional administration costs would be marginal.

Business, Activity, and Related Funding Sources

Employer/Payroll and Income Taxes

Employer taxes are imposed directly on the employer for the amount of gross payroll paid for services performed within the transit district. There are several examples of employer/payroll taxes dedicated for transit throughout the United States.

- The New York Metropolitan Transit Agency (NYMTA) payroll tax is charged on employers and self-employed individuals engaging in business within the 12 counties of the Metropolitan Commuter Transportation District in the State of New York to help fund mass transit projects. The tax has been in place since 2009. The rate varies between 0.11 to 0.34 percent of payroll expenses, depending on total quarterly payroll expenses. The tax generates about \$1.3 billion in revenue annually for NYMTA, which has a budget of about \$13 billion (New York Department of Taxation and Finance, 2016). MTA was sued by the counties in 2012 to repeal the tax, but it appealed the repeal and was reformed to lower taxes for smaller businesses through its current tiered system (Mid-Hudson News Network, 2014).
- TriMet in Portland, Oregon collects a 0.82 percent payroll tax from employers and self-employed workers in the transit district. The tax makes up more than half of the agency's funding available for operations (\$291.3 million in 2015) (Trimet, 2016). The tax is restricted to improving or maintaining bus service; it cannot be used for other modes of transportation, including light rail (Oregon Live, 2016).
- The City of Louisville and Jefferson County in Kentucky collect an occupational license fee of 0.2 percent on the gross annual wages of employees to go toward a Mass Transit Trust Fund.

The occupational license fees on wages and net profits have similar revenue generation as taxes. A practical distinction between a "tax" and these occupational "license fees" is that whereas taxes are generally imposed on all income, the license fees are imposed only on earned income (City of Louisville, 2016). A potentially more significant distinction between a fee and a tax is the process for adoption, as fees are often easier to implement and can often be approved by ordinance. A transit district would need to be defined prior to estimating the potential yield of an employer/payroll tax for VIA. Current rates from the above examples range from 0.11 percent to 0.82 percent. A fee of 0.10 percent on Bexar County's Bureau of Labor Statistics (BLS)-reported payroll of \$36.2 billion (2014) would generate \$36.2 million per year.

- **Revenue Yield:** High; based on a tax district (presumably the VIA service area, which is the majority of Bexar County).
- **Stability:** High; constant revenue source, responsive to inflation and to expansion of the job market. Increases in unemployment as experienced during an economic recession will impact revenues.
- **Viability:** Low; no income tax in Texas, an income tax requires change of State law; a fee may be possible to implement.
- **Ease of Administration:** Moderate; new administrative processes would need to be established, but additional administration costs would be marginal.

Utility Fees/Taxes

Utility taxes can encompass taxes on some or all public utilities, including telephone, sewer, water, electricity, gas, and garbage collection. These franchise taxes are generally applied to monthly user charges and are calculated as a percent of the charge, similar to a sales tax.

Utility fees are widely used in Oregon for operations and maintenance expenditures and capital improvements of transportation infrastructure, including local roads and streets. As an example, Pullman Transit in Pullman, Washington is funded locally with a 2 percent utility tax (Transportation Cooperative Research Program, 2009). Utilities taxes are paid monthly by subscribers (households and businesses). The tax is levied in lieu of a business and occupation tax and sales tax (Washington State Transportation Commission, 2014). The tax generates about \$1.1 million annually. Local governments in states such as Florida and Washington have enacted utility fees for transportation; however, their use is not widespread.

Rates vary by utility from 0.10 percent to 5.0 percent of the bill. Based on an average residential utility bill of \$129 per-month (Expatistan, 2016), a 2.0 percent tax would generate approximately \$20.3 million per year in Bexar County.

- **Revenue Yield:** High, based on a 2 percent utility tax applied to all households in Bexar County.
- **Stability:** High; utilities usage and rates are relatively stable and growing in large urban areas such as San Antonio.
- **Viability:** Low; utilities taxing is limited to businesses and some residential utilities in Texas.
- **Ease of Administration:** High; no new technology is required, and additional administration costs would be marginal.

Room/Occupancy Taxes

Room/occupancy taxes are charged to hospitality businesses with temporary stay rooms to help fund local tourism projects. These taxes are based upon a percentage of net receipts and are charged to guests on a per room night basis. In Texas, the occupancy tax is imposed on the rental of a room or space in a hotel costing \$15 or more each day. The purpose of the tax must be to promote the tourism, convention, and hotel industries. The law specifically prohibits the use of the local hotel tax to cover the costs for a transportation system that serves the general public. While this type of tax may be permissible to help fund a trolley/shuttle system to get to and from a tourist attraction, it cannot be used to help fund the entire service.

A city may impose a hotel occupancy tax (HOT) by passage of an ordinance. A county may impose a HOT by adopting an order or a resolution. Adoption of a hotel occupancy tax by a city or county requires a majority vote by the governing body, but it does not require voter approval. These taxes apply also to AirBnB, VRBO, and other such personal home rentals.

Currently, the State hotel tax rate is 6 percent. Cities and some counties can each levy local hotel taxes, generally at rates varying up to 7 percent above the State level to a total combined maximum of 13 percent. Sports and community venue projects can levy hotel taxes at rates varying up to

2 percent, except for Dallas County, which can impose a hotel venue tax at a rate of up to 3 percent. San Antonio's current Hotel Occupancy Tax rate of 16.75 percent is levied on every room night charge and is distributed as follows: 6.0 percent State of Texas, 7.0 percent City of San Antonio; 1.75 percent Bexar County; and 2.0 percent City of San Antonio Convention Center Expansion (City of San Antonio, 2016). Texas caps the tax rate at 17 percent; therefore the maximum additional amount that San Antonio can raise the existing HOT is 0.25 percent (City of Austin, 2016). Based on 2015 total City lodging revenues, an additional 0.25 percent HOT in the City of San Antonio would raise an estimated \$921,000 in tax revenues (Table A.6).

Table A.6 Hotel Occupancy Tax Example

Fiscal Year	Total COSA Hotel Revenue	Revenue from Existing HOT	Potential Revenue from Additional Tax
Existing HOT Rate: 16.75%			
Maximum Potential Additional Tax Rate: 0.25%			
2014	\$357,611,940	\$59,900,000	\$894,030
2015	\$368,358,209	\$61,700,000	\$920,896
2016 (estimated)	\$381,492,537	\$63,900,000	\$953,731

Source: City of San Antonio; Economic and Planning Systems.

- **Revenue Yield:** Low; for a 0.25 percent increase that remains available within the HOT cap. The estimate only considered HOT in the City of San Antonio.
- **Stability:** High; constant revenue source.
- **Viability:** Low; the purpose of a HOT is to fund tourism and convention business and may be used to fund a trolley or shuttle system; however, by state law, it cannot be applied to other operations.
- **Ease of Administration:** High; no new technology is required, and additional administration costs would be marginal.

Real Estate Transfer Taxes

Real estate transfer taxes (RETT) are taxes imposed by states, counties, and municipalities on the transfer of the title of real property within the jurisdiction. Real estate transfer taxes can be used for specific purposes, such as affordable housing and open space development. A few examples of RETTs dedicated to transit include the New York Metropolitan Transit Authority (NYMTA), Chicago Transit Authority (CTA), and Park City Transit.

There are no existing state or locally imposed RETTs in Texas. Therefore, the authority to impose such a tax would need to be approved. It is unlikely the voters would approve such a tax for transit alone; however, a tax of 0.25 to 0.50 percent for a larger package of roadwork and transportation investments could generate \$12.5 to \$25 million as shown in the example in Table A.7.

Table A.7 Real Estate Transfer Tax Example

Potential Real Estate Tax Rate	Potential Revenue
Average Sold Price: \$200,000	
Average Residential Transfers/Year: 25,000	
0.25%	\$12,500,000
0.50%	\$25,000,000

Source: City of San Antonio; Economic and Planning Systems.

- **Revenue Yield:** High.
- **Stability:** High; constant revenue source; note that RETTs experienced significant revenue decline during the housing market crisis of 2007 to 2009; however, under standard market conditions, RETTs are a highly stable source of funding.
- **Viability:** Low; would require citywide vote; not commonly connected to transit.
- **Ease of Administration:** High; no new technology is required and additional administration costs would be marginal.

Mortgage Recording Fees

Recording fees are charged by a government agency for registering or recording a real estate purchase or sale, so that it becomes a matter of public record. Fees are generally charged by the county, since it maintains records of all property purchases and sales. The recording fee varies from county to county. Recording fees (including mortgage recording) are used to run recording operations, preserve, and restore county clerk records, and the rest go to the General Fund. Recording fees (including mortgage recording) in Texas range by county from \$10 to \$30 for the first page and \$4 for each additional. In Bexar County, the fee for the first page is \$26 and \$4 for each additional (Stewart Total Guaranty Company, 2014). These fees are charged mainly for the purposes of recording operations and maintenance. It is not likely that these fees could be raised to an amount that would significantly contribute to a new fund (major transit project). In some regions of the nation, the recording fee is applied to the value of the real estate transaction; thus the recording fee functions in the same manner as a real estate transfer tax. While not the focus of this alternative, it is noted as an alternative application of the fee.

- **Revenue Yield:** Low; the existing revenue from this fee is dedicated to ongoing operations; a fee increase of \$4 to the base price would generate approximately \$100,000 per year.
- **Stability:** High; constant revenue source. Depends on the state of the real estate market.
- **Viability:** Low; a fee increase would not require a new vote, but increasing the fee to \$30 would make Bexar County among the most expensive in Texas.
- **Ease of Administration:** High; no new technology is required and additional administration costs would be minimal.

Business-Related Fees

Business-related taxes or fees are charges to businesses meeting certain criteria in order for the business to obtain or renew licenses to operate. They can be charged according to business type and/or location to help offset costs for transit with the justification that those businesses benefit from the transit service. They can be also used to curb environmental impacts of certain energy businesses.

- The State of Pennsylvania charges a corporate franchise tax that is a cents-per-gallon tax on all taxable liquid fuels. Revenues are deposited in various restricted and unrestricted state funds.
- Through the State Legislature, the NYMTA in New York uses a number of business-related fees and taxes in addition to a 0.25 percent sales tax:
 - The Petroleum Business Tax is levied on any company that produces, refines, or imports petroleum.
 - The Corporate Tax Surcharge is imposed on corporations, transportation and transmission companies, banks, and insurance companies.
 - The Corporate Franchise Tax (also known as a Long Lines tax) is a tax on transportation and transmissions companies (Christopher MacKechnie, 2015).
 - These dedicated taxes and fees account for approximately \$4.8 billion, approximately 40 percent of NYMTA's fare, toll, tax, and fee revenues. Any Metropolitan Transportation Trust Fund revenue left over after debt service is paid is allocated by statute to the transit and commuter systems: 85 percent flows to the subway and bus systems and 15 percent flows to MTA Long Island Rail Road and Metro-North Railroad (New York Independent Budget Office, 2011).
- Park City, Utah uses business license fees and a resort community tax (1.1 percent) in addition to the transit sales tax (0.30 percent) to fund operations and maintenance for their bus system, which is free citywide. The bus is free to ride, so revenues are solely from the mentioned local funds, as well as state and Federal funds (City of Park City, 2013).

A business tax in Texas could potentially yield a large funding amount if it taxes certain major industries (e.g., oil); however, major lobbies in those industries would likely oppose any such bill.

- **Revenue Yield:** High.
- **Stability:** High; constant revenue source.
- **Viability:** Low; in Texas, establishments and changes to business taxes such as the franchise tax must be majority voter-approved on the State level.
- **Ease of Administration:** High; no new technology is required and additional administration costs would be marginal.

Carbon Taxes

A carbon tax can be levied on residential, commercial, and industrial energy users. The tax is typically low, but it enables energy consumers to see how increasing or decreasing their usage or switching to

renewable sources could reduce their bill (Washington Post, 2007). Carbon taxes are more common outside of the United States; however, a number of jurisdictions in the United States have tested and evaluated pilot programs in recent years.

- Boulder, Colorado passed the first municipal carbon tax in the United States in 2006. It is a tax on Xcel gas and electric utility bills. Tax revenues are directed to the City's Office of Environmental Affairs to fund programs to reduce community-wide greenhouse gas emissions. The carbon tax has generated approximately \$1.8 million a year. Most of this money is generated from industrial customers, who pay approximately \$9,600 a year; businesses and individual households \$94 and \$21 respectively. These funds go toward implementing the Boulder Climate Action Plan. Funds support investments in public transit, as well as in public education, energy audits, and energy rebates (Smart Growth America, 2016).
- The Bay Area Air Quality Management District, which covers nine counties in the San Francisco Bay Area, charges a carbon tax on businesses at a rate of 4.4 cents-per-ton of carbon dioxide emitted. Revenue is used to fund a variety of programs to reduce GHG emissions.
- Montgomery County, Maryland enacted the first county-level carbon tax in the US in 2010. While it was in use, the tax charged only very large emitters (only one coal-fired power plant is charged in the whole county). The law provided for half of the revenue to go toward creating a low interest loan plan for county residents to invest in residential energy efficiency upgrades. The tax was repealed in 2012 after a lawsuit by the power plant (County of Montgomery, 2012).

In most national and international cases, businesses bear the larger burden of these taxes, as they cause a greater proportion of emissions. The rate for businesses can be charged per unit of carbon dioxide (e.g., 4.4 cents-per-ton in the Bay Area). The rate for households can vary, but are typically minimal for the average household. The example calculation below uses the average annual carbon tax collected per household in Boulder, Colorado. This rate could yield annual carbon tax revenues up to \$10.6 million as illustrated in Table A.8, excluding revenues from charges on businesses, which would likely be higher.

Table A.8 Carbon Tax Example

	Total Households (2015)	Average Household Tax/Year	Annual Tax Revenue (Residential)
Boulder, Colorado	41,302	\$21	\$867,000
VIA Service Area	669,548	\$21	\$14,060,508

Source: Electricity Local; ESRI; Economic and Planning Systems.

Critics argue that this kind of user-based tax disproportionately affects low-income groups (who may not have energy-efficient appliances and units); however, a nominal fee of less than \$4 per month, may not be perceived to be overly burdensome.

In Boulder, implementation of a carbon tax has had a clear impact on reducing greenhouse gas emissions. As such, Boulder has found that creating and revisiting benchmarks for emissions has been important to the progress of the program. The City has also found that the ability to adjust the rates without putting it up for vote has been useful for responding to the changing consumption behaviors over the years and maintaining an adequate revenue stream.

If selected to move forward for VIA's purposes, a carbon tax in San Antonio would be the first program created specifically for public transit funding. San Antonio can administer a carbon tax and use the revenues for transit programs and infrastructure the way that Boulder uses its carbon tax revenues for rebates, incentives, and energy audits. Transit may be an appropriate use for carbon tax revenues, as it serves to reduce carbon emissions by reducing automobile use; it would, however, be a new and unique application. A next step for San Antonio would be to revisit the SA Tomorrow Sustainability Plan in the implementation phase and align the potential use of carbon tax revenues with transit initiatives (City of San Antonio SA Tomorrow, 2016).

- **Revenue Yield:** High.
- **Stability:** High; energy usage and rates are relatively stable and growing in large urban areas such as San Antonio.
- **Viability:** Moderate; would require a vote, as it is the first of its kind in Texas; strong connection with transit.
- **Ease of Administration:** High; no new technology is required and additional administration costs would be marginal.

Parking Fees

Parking fees are charged for parking motor vehicles in designated spaces within a defined area or district. Parking fees can work in a number of ways.

Citywide Parking Fund

A common practice is to establish enterprise parking funds that go toward parking operations and city funds. Revenues come from fees charged to parking meters and spaces citywide and are generally split between continuing parking operations and the city's General Fund. Use of funding from the General Fund is subject to the annual appropriations process of the city.

The Municipal Parking Fund in Fort Worth, Texas is an enterprise fund that generates revenues from the fees paid for the use of metered parking spaces, the lease of office space, the use of surface lots, spaces at city parking garages, and designated street parking spaces. Funds go toward constructing and maintaining city-owned parking structures, meter upkeep, and enforcement (City of Fort Worth, 2013). The Parking Management Fund in Houston, Texas is an enterprise fund that generates revenues from meters, garages, etc. Funds are split between parking (maintenance, operations, and enforcement) and the General Fund. The General Fund portion is then dedicated to police protection, street maintenance, etc. (City of Houston, 2016). The Division of Center City Development and Operations Department (CCDO) in San Antonio already serves this purpose and dedicates the majority of these funds to ongoing parking operations and the rest toward the General Fund. While it is possible

to apply for General Fund dollars, as with all General Funds, funding is dependent on availability and competing projects. The CCDO Parking Fund budget projected for FY 2016 is \$168,580.

- **Revenue Yield:** Low; annual budget is under \$200,000 and the majority is dedicated to ongoing parking operations.
- **Stability:** High; constant revenue source.
- **Viability:** Low; while it is legal to use parking funds for transit, it is foremost for ongoing parking operations and only the remainder is placed in the General Fund.
- **Ease of Administration:** Moderate; requires deployment, collection, and maintenance of parking meters, pay-by-phone, and parking permits.

Parking Benefit District

Parking Benefit District (PBD), charges parking fees and dedicates net revenues for local improvements that promote walking, cycling and transit use, such as sidewalks, curb ramps, lights and bicycle lanes within or benefitting the district. It is also a way to encourage drivers to consider other ways to reach their destination without driving and parking (City of Austin, 2016).

- The Austin West Campus PBD dedicates half of the funds to streetscape projects, including sidewalk and curb enhancements, benches, crosswalks, transit shelters, and bike lanes; the other half goes to the General Fund (Metropolitan Planning Council, 2013). Enforcement runs five days a week from 8 a.m. to 5:30 p.m. at a flat \$1-per-hour rate with a two-hour time limit. West Campus residents are exempted from paying any parking charges. West Campus PBD is the only PBD in Austin, but more than one PBD can be established in a given jurisdiction upon adoption of a city ordinance (City of Austin, 2016).
- Outside of Texas, a district in Boulder, Colorado has used the PBD model since 1970 to help fund transit passes for employees, a WiFi network, and improvements to the Pearl Street Mall.
- Old Pasadena, California established a PBD in 1993 and borrowed against future meter revenues to fund substantial streetscape, parking, maintenance, and safety projects. Implementing these improvements in the first year of the PBD resulted in a 100 percent increase in sales tax revenues.
- San Diego, California has had a PBD since 1997 to revitalize a historic district through infrastructure improvements. Improvements include directional signs, landscaping and pedestrian improvements.
- A PBD in Washington, D.C. has established an 85 percent occupancy rate with their demand-based pricing model. Community improvements include bike racks, lighting, street furniture, and trash compactors.
- The Dynamic Parking Pilot Program in San Francisco, California designated 19,250 spaces in certain areas of the City to charge rates according to time of day and area demand. The pilot was successful and applied citywide in 2012. Revenue went toward the transit service general fund.

Currently, paid parking in San Antonio functions as a self-supporting enterprise fund that accounts for revenues and expenditures associated with the operation and maintenance of the City's parking

facilities. The paid parking space inventory includes 6,400 garage and lot spaces and approximately 2,000 street meter/pay station spaces mostly in the downtown area. Garage and lot spaces range from \$3 to \$10 per day and the street parking spaces range from \$1.50 to \$3.00 per-hour. During fiscal years 2012 and 2013, parking generated approximately \$9.2 and \$9.4 million in revenue, respectively; net income for the fiscal years was \$1.1 million and \$778,000, respectively (City of San Antonio Office of the City Auditor, 2014).

If the City of San Antonio or other municipalities were to pursue parking benefit districts to support VIA transit operations the following factors should be considered:

- **Location:** The optimal location is where parking is currently or expected to be in high demand. These blocks are in the busiest areas with limited parking spaces and high turnover rates for spaces during operating hours. In the Greater San Antonio Region, these areas can be determined via proximity to the UTSA campus, the Riverwalk, Hemisfair, Pearl, and popular retail destinations. Since funds from the PBD would be used to help fund transit, it would be a best practice to locate the spaces along or near transit. Local residents and business owners should be involved in this discussion.
- **Demand:** Approximately 15 percent vacancy is generally agreed as an effective parking demand goal for a district to be feasible. City of San Antonio parking garages, lots, and meter spaces currently achieve approximately 50 to 60 percent occupancy on average, based on total revenue by space derivations from a 2014 City Auditor's report (City of San Antonio Office of the City Auditor, 2014).
- **Rates and Hours of Operation:** A study should be conducted to identify peak days and hours where parking management is beneficial. In the aforementioned case studies, the timeframe spanned 7 a.m. to 12 a.m., with the median band between 8 a.m. and 6 p.m., Monday to Saturday. While parking management will in theory ensure space availability, over regulation may deter drivers from visiting the area; merchants and business owners may want to reserve parking spaces for this reason. Within the PBD, certain areas may be identified for metered parking at discrete times of the day/week, depending on demand. Other considerations also include whether to charge residents with a permit or only visitors, enforcing time limits, premium rates for special events, etc. Rates in different areas ranged from \$0.25 to \$6.00 per hour, with a median range between \$2.50 and \$3.00 per hour. San Antonio may wish to charge substantially less than this amount, because there is relatively less parking demand compared to peer cities.
- **Evaluation:** Occupancy is a reliable measurement of effectiveness. The PBD should only encompass areas with high parking activity. If the occupancy is low, it is likely that the district is too large and there are too many spaces in the PBD.
- **Implementation:** City and VIA staff would need to coordinate the decision-making. Additionally, consult or create an advisory committee or merchants' association to represent the needs of the community. If this funding tool is taken into further consideration, VIA should work with the City to determine how a PBD may work in conjunction with the existing paid parking functions.

Existing examples of PBDs have been set up for small-scale projects such as streetscape improvements. While there are no restrictions in Texas to prohibit using funds from PBDs for

large-scale transit projects, they are not typically used for this purpose. If after conducting potential revenue studies, VIA and the City find that net revenues to transit would be fairly minimal, it may not be conducive to pursue a PBD.

The net revenue potential of a PBD in the City of San Antonio is illustrated in Table A.9.

Table A.9 Parking Benefit District Example

Example Number of Spaces	Total / Day	Total / Year (excluding Weekends and Holidays)	Net Revenue (Total less Operating and Maintenance)
Rate/Hour	\$2.00		
Operating Hours	9.00		
Occupancy	60%		
800	\$8,640	\$2,151,360	\$178,000
2,000	\$21,600	\$5,378,400	\$445,000
5,000	\$54,000	\$13,446,000	\$1,113,000
10,000	\$108,000	\$26,892,000	\$2,226,000
20,000	\$216,000	\$53,784,000	\$4,451,000

Source: City of San Antonio; Economic and Planning Systems.

- **Revenue Yield:** Moderate.
- **Stability:** High; constant revenue source.
- **Viability:** Moderate.
- **Ease of Administration:** Low; requires the creation of an advisory committee, formal city council review after 18 months, and deployment, collection, and maintenance of parking meters, pay-by-phone, and parking permits.

Transit Agency Parking Facilities

Transit agencies can also receive parking revenues from surface lots and structured parking facilities that they own. There are a number of different approaches to pricing the parking in these facilities, including charging daily parking fees, monthly reserved parking, short-term metered parking, and long-term/multiday parking. A 2010 study for the Denver Regional Council of Governments compared case studies using each of these methods (Denver Regional Council of Governments, 2010):

- **Daily Parking Fees:** Bay Area Rapid Transit (BART) in California adopted daily parking fees at four stations that involve raising and lowering parking rates based on observed occupancy. As of April 2010, daily parking fees generated more than \$8 million per year in gross revenues for BART.

- **Monthly Reserved Parking:** BART also offers a monthly reserved parking program (with fees ranging from \$30 to \$115 by station, based on demand). As of April 2010, gross revenues from monthly reserved parking at BART stations exceeded \$4 million per year.
- **Short-Term Metered Parking:** TriMet in Portland, Oregon reserves preferential parking spaces near the entrance to two of its busiest park & ride stations for short-term-metered parking. Meter rates of \$0.50 per-hour, and five-hour time limits serve to increase turnover and consequently the total number of transit patrons using each space each day. Metered spaces also provide a station access choice for midday travelers who might otherwise have no auto access to busy stations.
- **Long-Term / Multiday Parking:** Since 2001, BART has accommodated travelers seeking long-term parking (e.g., for multiday airport trips) with designated parking spaces at selected stations. A limited number of permits can be purchased for \$5.00 to \$6.00 per day, depending on the station. This price represents a significant premium over the daily parking fee charged at most stations (\$1.00 to \$2.00 at all stations except West Oakland), yet is far less than airport parking fees. The fee partially covers BART's cost to forego fare and fee revenue that the agency might otherwise collect if the spaces were used for daily commute parking.

VIA currently offers free parking for VIA riders at eight park & ride stations, totaling 1,572 spaces and five Transit Centers with limited parking (385 additional spaces). If VIA decided to charge for parking at its park & rides, an average daily charge of \$4.00 per vehicle would generate approximately \$1.2 million per year as shown in Table A.10.

Table A.10 Parking Facility Example

Description	Number of Spaces	Daily Commuter Parking
Example Rate: \$4.00		
Weekdays per Year: 260		
Occupancy: 75%		
Park & Rides	1,572	\$1,226,000
Transit Centers	385	\$300,000
Total	1,957	\$1,526,000

Source: City of San Antonio; Economic and Planning Systems.

- **Revenue Yield:** Moderate.
- **Stability:** High; constant revenue source.
- **Viability:** High; requires VIA's Board approval.
- **Ease of Administration:** Moderate; requires deployment, collection, and maintenance of parking meters, pay-by-phone, and parking permits.

Value Capture/Special Districts

Impact Fees

An impact fee is imposed to assess the cost of new capital improvements upon new developments that utilize the improvements. Impact fees may only be used for capital improvements as operations, maintenance, and repair work are not permitted. It has historically been used for essential utilities such as water and sewage. Impact fees have been expanded to address other capital infrastructure needs, including roads, transit, parks, and affordable housing.

- Fort Worth, Texas has a transportation impact fee program to fund construction of roads and bridges in newly developing areas. There is a flat fee for single-family residences, and varying fees for nonresidential development (service, retail, warehouse, etc.) based upon square footage of the development (City of Fort Worth, 2016).
- New Braunfels and McKinney, Texas have roadway impact fees to offset the cost of new road construction as a result of new development. Each land use is associated with a different fee (City of McKinney, 2016).
- San Francisco, California's Transit Impact Development Fee (TIDF) is an impact fee levied on most nonresidential new development citywide to offset new development's impacts on the transit system (\$5 to \$10 per square-foot of nonresidential development citywide). Revenue generated by the fee is directed to the San Francisco Municipal Transportation Agency (SFMTA) and is used to fund Muni capital projects. The TIDF generates approximately \$10 million per year.
- Portland, Oregon Transportation System Development Charge is a fee on all land uses (except affordable housing and some small businesses) used to fund a variety of transportation projects, including transit projects; it generates approximately \$5 million per year.
- The Transit Currency Fee in Broward County, Florida is used for transit capital as well as operating expenditures and administration expenses. The fee generates approximately \$5.6 million per year (Transportation Cooperative Research Program, 2008; Mathur et al., 2015).

The main challenge with establishing impact fees is the requirement to conduct a nexus study to establish a "rational nexus" between the improvements to be funded and the development that is being assessed. Impact fees must:

- Be reasonably connected to the need for new or improved facilities associated with the new development;
- Benefit the payer of the fee; and
- Be calculated by a set formula that fairly assesses the amount of the fee.

The San Antonio Water System (SAWS) already has an impact fee in place for water and sewer service. Thus, the approach is not new to the region. While impact fees are widely used for other infrastructure types throughout Texas, they have not yet been used for transit purposes. They have potentially low-viability because they arguably discourage development by increasing costs, especially in San Antonio, where developable land is relatively abundant.

An impact fee of this nature would most likely be initiated and managed under the City of San Antonio Transportation and Capital Improvements Department. A supportable fee would be calculated based on the improvements to be funded. A fee of \$100 to \$200 per unit would generate between \$2.5 and \$5.0 million per year based on an annual average of 25,000 new housing units.

- **Revenue Yield:** Moderate.
- **Stability:** Moderate; one-time fees on new housing unit starts that fluctuate with the economy; revenue reflects development cycle, once approved, a Capital Improvements Plan (CIP) lasts for a 10-year period with updates every 5 years.
- **Viability:** Low; impact fees are legal for the funding of transit projects; however, there are currently no impact fees for transit in Texas.
- **Ease of Administration:** Moderate; impact fees in Texas must adhere to a set of rules as stated in Local Code 395, which include establishing an advisory committee, preparing 10-year Land Use Assumptions and a CIP, and semiannual reviews.

Public Improvement Districts

A public improvement district (PID) applies an additional property tax or assessment to a specific improvement area to pay for new public infrastructure. A PID can cover multiple public infrastructure goals and can be structured to address the acquisition, construction, improvement, or rerouting of mass transportation facilities, as well as other public improvements, such as parking garages, pedestrian improvements, and/or storm water management. PIDs are commonly used to fund shared infrastructure facilities within a master planned development; however, a PID can be also created to cover improvements in a larger subarea with multiple property owners.

- The City of Waco, Texas manages a PID in the downtown Waco area to help fund a shuttle service and the use and expansion of bike lanes among several other public improvements. The PID was first established in 1988 and was reestablished in 2012 for another 15 years. The annual budget is approximately \$1.0 million, with roughly 33 percent earned from tax and assessment revenues, and the remainder from a combination of carryover funds, interest earned, and grants (City of Waco, 2014).
- The Centro San Antonio PID was first established in 2000 to help fund streetscaping and maintenance services, as well as safety and wayfinding ambassadors. In 2013, it was renewed by petition and Council vote for another 10 years. The annual assessment budget is estimated at \$3,300,000, with an additional \$600,000 in estimated public- and private-sector contributions.

More than one PID can be formed within a jurisdiction. Centro San Antonio is the only active PID in San Antonio. As a comparison, there are 12 active PIDs in the City of Dallas.

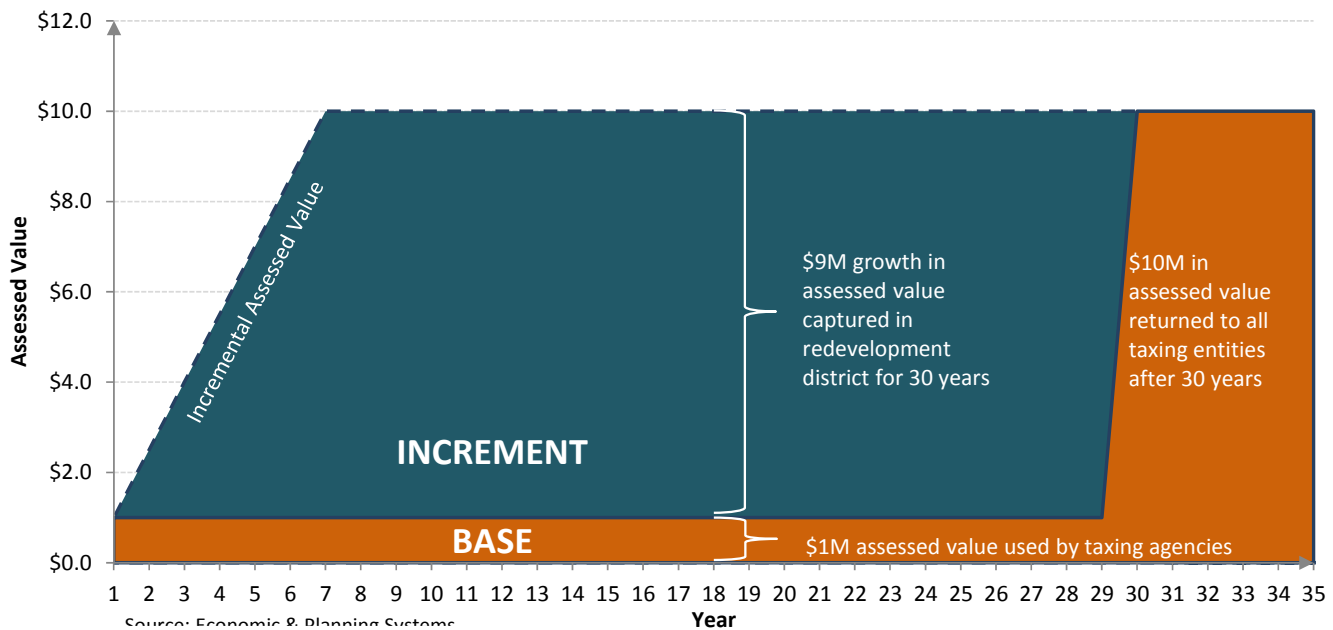
- **Revenue Yield:** Low.
- **Stability:** High; PIDs are up for renewal every 15 years.

- **Viability:** High; there must be a strong nexus between the use of the improvement within the established district and revenue source. PIDs can be formed based on a majority vote of the governing body rather than a voter referendum.
- **Ease of Administration:** Moderate; PIDs require a minimum of one committee (at least an organizational board, plus additional design and stakeholder committees) and requires special taxing and assessments.

Tax Increment Financing

Tax increment financing (TIF) is a local government financing tool that diverts the incremental property taxes (and in some instances also sales taxes) created by new development to pay for project-related infrastructure costs. Through TIF, a district is created and the project is financed in part by the revenues the district will generate through taxes over the course of a set number of years following the project's initiation (Figure A.6). In order to capitalize the initial phases of a project, the responsible agency issues a bond for a project. In other words, at the initiation of the project, the agency and city agree to earmark the added tax benefit to service debt.

Figure A.6 Tax Increment Financing Example Calculation



Source: Economic and Planning Systems.

In Texas, TIF for tax increment redevelopment zones (TIRZ) are authorized under Chapter 311 of the tax code titled Tax Increment Financing Act. The use of TIF for transportation reinvestment zones (TRZs) is authorized under Chapter 222 of the Tax Code titled "Funding and Federal Aid."

The tax increment financing tool in Texas allows for voluntary participation by other taxing districts, including the county and school district. The Texas TIF statutes allow each taxing unit within the designated TIF zone to negotiate with the municipality the amount of tax increment they will

contribute. All taxing entities may opt out or may contribute anywhere from 0 to 100 percent of their tax increment revenue to a TIF fund. In the past, school districts could reduce the value of taxable property reported to the State to reflect any increase in appraised value that was captured by a tax increment-financing fund in which the school district participated. In 1997 and 1999, the Legislature changed school funding laws, eliminating the ability of school district to reduce their taxable property value due to TIF. The City can also voluntarily include the local (City) portion of sales taxes as part of TIF.

Tax Increment Reinvestment Zones

A tax increment reinvestment zone (TIRZ) is a political subdivision of a municipality or county in the State of Texas created to address redevelopment through the use of tax increment financing. They may be initiated by the City or county or by petition of owners whose total holdings in the zone consist of a majority of the appraised property value. The tax increment is derived from the difference in appraised value between the year in which the reinvestment zone is established (base year) and each year the reinvestment zone is in existence. Generally, for every \$1,000,000 added to the properties' base value, the TIRZ fund will be able to collect about \$8,800 per year. A number of variables will ultimately influence this calculation: the number of taxing entities that are participating in the TIRZ, their level of participation, changes in tax rates, collection rates, and the phasing of the public and private improvements. This type of tax increment financing is best where it is possible to create substantial property value.

Tax increment collected in a TIRZ can only be used as specified by Texas statute. Eligible project costs include: the acquisition and construction of public works, engineering, surveying, contingency, construction management, public improvements, streets and approaches, drainage, sewer, water, sidewalks, street lights, site work, new public buildings, rehabilitation costs of existing buildings, financing costs, and administrative costs (Texas Ahead, 2016). TIRZ is not directly applicable to transit projects nor operations.

- **Revenue Yield:** Not Applicable.
- **Stability:** Not Applicable.
- **Viability:** Low; TIRZ revenues can only be used for specific improvements, not including transit.
- **Ease of Administration:** N/A (or Moderate for TOD, pursuant to TIF Act, Tax Code Chapter 311 rules, regulations, and oversight).

TOD TIF Districts

In 2005, the Tax Increment Financing Act was amended to allow a Tax Increment District, or Transit-Oriented Development TIF District (TOD TIF), to pay for land outside of the district if the zone is served by a rail transit project or bus rapid transit project. TIF revenues can be used to “pay for the costs of acquiring, constructing, operating, or maintaining property located in the zone or to acquire or reimburse acquisition costs of real property outside the zone for right-of-way or easements necessary to construct public rights-of-way or infrastructure that benefits the zone” (Title 3, Subtitle B, Section [311.010](#) (b)). TOD TIF Districts essentially work in the same way most TIF Districts work, except that the districts are mapped around transit lines and stations. These prospective

redevelopment areas contain significant amounts of underutilized land parcels that would not be developed without public assistance.

- The Dallas TOD TIF District was created in 2008, to encourage transit-oriented developments adjacent to DART light rail stations. It has been used primarily for station area improvements. The estimated base value for the District, amended in 2010, is \$206,028,349, and anticipated to grow to \$3.4 billion by 2038, with \$2.43 billion forecast from new private investment. The primary benefit of creating the TOD TIF District has been that higher-income, more densely developed areas (e.g., Lancaster Corridor) can help support struggling areas (e.g., Mockingbird/Lovers Lane). The City's first TIF District, State-Thomas, closed in 2008, and experienced a \$366 million growth in value over 20 years. Since the inception of the TIF program in 2009, the 17 active districts have leveraged an estimated \$6.2 billion in added or anticipated property value from \$506 million in TIF expenditures and allocations (City of Dallas, 2014).

The ability to transfer TIF revenues from a popular development area to one in need of greater assistance would benefit municipalities within the Greater San Antonio Region and the VIA service area as a whole. As in the case of DART, an essential component of the Dallas TOD TIF was the planning effort that went alongside the district formation and implementation stages. Strategically combined with a corridor-based or systemwide TOD TIF district that can reallocate revenues to areas that will most benefit from catalytic TOD infrastructure, improvement districts will complement the existing public funding and the private on-site improvements provided by individual property owners. Coordinating these various funding elements through a formal Station Area Financing Plan or a similar document increases the ability of VIA and municipalities to ensure that the essential layers of financing are in place to provide the necessary infrastructure and improvements at catalytic stations throughout the service area.

To date, TOD TIF Districts have only been used for properties and not transit infrastructure, but it is a high-yield financing tool that can help the areas around transit investments and help direct further investment to these areas.

- **Revenue Yield:** High, captures the tax revenue increase resulting from new development and/or redevelopment.
- **Stability:** High.
- **Viability:** High, no new legislation nor voter approval required.
- **Ease of Administration:** Low; pursuant to TIF Act, Tax Code Chapter 311 rules, regulations, and oversight and requires extensive planning over a large coverage area of districts.

Transportation Reinvestment Zone

Transportation reinvestment zones (TRZ) are authorized by Section 222.106 of the Transportation Code. TRZ are enabled to finance transportation improvements using TIF. The local governing body designates a zone in which it will promote a transportation project. Once the zone is created, a base year is established and the increase in property tax revenue collected inside the zone is used to finance a project in the zone. A TRZ does not require a local entity to create a board. It differs from a TIRZ

in that a TRZ cannot be established by petition; it requires a vote of approval from the property owners in the district. The revenues also cannot be transferred across different TRZs (TxDOT, 2016).

In 2013, State Bill 1110 lifted previous restrictions from the original legislation in 2007, which limited TRZs to highways or road projects within municipalities or counties. TRZs can now be established by port authorities and navigation districts and can finance improvements or construction of rail, transit, ferries, airports, and parking lots (Texas A&M Transportation Institute, 2013).

Sales tax increment is not collectable for projects that have to do with transit. In 2013, HB 563 enabled the use of sales tax increment in addition to property tax increment, but only for projects that were in areas of oil and gas production for the purposes of rehabilitating the deteriorating infrastructure resulting from shale drilling and other oil and gas activities.

- The Port of Corpus Christi and the Counties of Nueces and San Patricio, Texas are replacing the Corpus Christi Harbor Bridge, which spans across multiple jurisdictions. The cost is estimated at \$870 million and funded through a mix of Federal, state, and local sources. The counties are expecting to finance \$25 to \$40 million through TRZs.
- Jurisdictions in Bexar County, Texas are also looking into using TRZs to fund capacity enhancements on Loop 1604 to improve safety, and increase mobility and operational efficiency. Three of the affected jurisdictions are interested in using the TRZ mechanism to raise the local match for the project (10 to 20 percent of cost) (Texas A&M Transportation Institute, 2013).

TRZ finance covers anywhere between 5 percent and 20 percent of project cost (as in the examples of Corpus Christi and Bexar County).

- **Revenue Yield:** High.
- **Stability:** High.
- **Viability:** High; specifically designed to fund transportation improvements. No new taxes required with TIF.
- **Ease of Administration:** Moderate; pursuant to TIF Act, Tax Code Chapter 311 rules, regulations, and oversight.

Out-of-the-Box Ideas

Federal EB-5

The Immigrant Investor Program (EB-5) was created in 1990 to stimulate the national economy through job creation and capital investment by foreign investors. For each foreign investor, US Citizenship and Immigration Services (USCIS) looks for a minimum investment of \$500,000 within targeted employment areas (TEA), which are rural areas or urban areas with high unemployment (150 percent of the national average rate), or a minimum investment of \$1,000,000 in areas outside of TEAs. The investment must also create at least 10 new jobs or the 40 percent expansion of an existing business. The total number of jobs that a particular transportation project will create determines the maximum amount of potential EB-5 funding (includes “indirect” jobs, such as

employees of materials suppliers). The program attracts investors with the motivation to obtain US visas, so the belief is that they will agree to invest in a project with relatively low returns (Brookings Institute, 2014).

As part of this program, each year, 3,000 of the 10,000 allocated EB-5 visas are set aside for investors in regional centers designated by USCIS based on proposals for promoting economic growth. A regional center is defined as any area engaged in the promotion of economic growth, improved regional productivity, job creation, and increased investment. Most centers specify industries for which they accept investments; in many of the centers in Texas, transportation is a targeted industry. There are currently 63 funded regional centers in Texas. Bexar County is included within the geography of several centers, including the 40-county Texas Urban Triangle Regional Center, and the 31-county Encore Texas Regional Center, which serves the Dallas, Austin, San Antonio, and Houston area.

The program has become an increasingly popular tool, especially for real estate projects (less so for transit), largely due to its flexibility. The program attracts investors with a primary motivation to obtain US visas. As a result, many projects have been structured with relatively low return in investment (Brookings Institute, 2014). Funding can be structured as a short-term low-interest nonsecured loan without diluting the property owner's equity, thus allowing a project to receive credit for job creation after construction has commenced and EB-5 capital has been received to replace interim or bridge financing. As such, EB-5 financing can be used even if it is not contemplated prior to acquiring the temporary bridge financing (Lexis Nexis, 2015). Two EB-5 transportation-related projects are described below.

- In 2012, Southeastern Pennsylvania Transportation Authority (SEPTA) approved the largest EB-5 project to date, raising \$175 million in financing with 100 percent investor approvals. The SEPTA Rebuilding for the Future Project is an \$809 million capital improvement program comprised of the development, construction, and purchase of an integrated system of machinery and equipment to improve and update SEPTA's public transportation system while creating over 8,400 new jobs for the local economy. Specifically, the work to be performed includes City Hall Station Rehabilitation, Elwyn-Wawa Rail Service Restoration, Substation Rehabilitation Program, and Frazer Yard Expansion and Locomotives & Rail Car Acquisition (Delaware Valley Regional Center, 2016).
- For the renovation of the George Washington Bridge Bus Station in New York City, the New York Regional Center organized EB-5 investments estimated between \$87 million and \$91 million to help fund expansion and improvements at the station. Improvements included increasing bus capacity by 50 percent and building approximately 120,000 square feet of additional retail space. The full cost of the station improvement project was approximately \$180 million (Baker Tilly, 2015 and IIUSA).
- The Hudson Yards Redevelopment Project in New York City was a joint venture between the City and the Metropolitan Transportation Authority to encourage development along the Hudson River. EB-5 investments account for approximately \$600 million of the \$20 billion cost for the Hudson Yards Redevelopment project. The \$600 million in funds is sourced from approximately 1,200 investors through the EB-5 program and will be used to build the foundation for three skyscrapers

totaling 17 million square feet of office, retail, and residential space when completed. To date, Hudson Yards is the largest project to utilize the EB-5 program and has collected the largest amount of investment (e-Council Inc.com, 2016 and Brown, 2014).

The EB-5 program offers a unique way to fund and finance economic development projects, but case studies have shown that not all projects and developments are suited to use it. For-profit and local governmental economic development agencies are set up to attract and guide foreign investors through the choices and the processes of the program. As such, investors are able to choose between several opportunities and will likely choose the most reliable and profitable project. While transit projects do not typically result in high returns on investment, investors may opt for them over real estate projects because large infrastructure projects are perceived as low-risk investments backed by government authorities.

- **Revenue Yield:** High; the majority of the revenue would be from foreign private investment. Typically, foreign investors who participate in this program do not expect high returns on investment.
- **Stability:** Low.
- **Viability:** High; it is legal to use EB-5 for transit in Texas. Although there are currently no precedents in the State, examples in other cities show that it is a viable option for transit.
- **Ease of Administration:** Moderate; the program has a specific set of requirements, but USCIS has made the program more flexible in recent years so the administration is getting easier.

Financing/Cash Flow Tools

Tax-Exempt Bonds

Tax-exempt bonds include revenue bonds, General Obligation (G.O.) Bonds, or city transportation bonds. Issuing bonds is a way to leverage expected future revenues for current spending. Usually used for capital projects, tax-exempt bonds are backed by a local government or transit agency and paid back (principal and interest) over time. Bonds can be backed by a specific revenue source (i.e., farebox revenues, sales tax, Federal grants), or by the general fund of a jurisdiction (G.O. Bonds).

It should be noted that bonds are not a funding source, but rather a financing mechanism. They reorganize an organization's revenues over time, pulling future expected revenues into the present-day spending. The ability of an agency to use this financing mechanism depends on the stability and yield of the funding source it is based upon.

Revenue Bonds

Revenue bonds are secured by a specific revenue source, such as a dedicated sales tax. Subchapter H of Chapter 451 of the Texas Transportation Code authorizes the issuance of revenue bonds by metropolitan transit authorities. As of September 2014, VIA had issued \$86.3 million in revenue bonds backed by VIA's dedicated sales tax, ATD tax, and farebox revenues.

- **Revenue Yield:** Not Applicable.

- **Stability:** Moderate; dependent on funding source it is based on; support for capital only, not for operations. Requires a repayment source.
- **Viability:** High; bonds must be approved by the Attorney General and by resolution of VIA's Board of Trustees.
- **Ease of Administration:** High; this finance mechanism already exists.

G.O. Bonds

General Obligation (G.O.) Bonds are bonds that are backed by the “full faith and credit” of the issuer. The issuer can make interest and principal payments using any source of revenue, such as property tax revenues, fees, or the issuance of new securities. G.O. Bonds are low-risk investments because if a city encounters fiscal difficulty, it would be required to raise taxes to offset the shortfall. G.O. Bonds are therefore seen as being safe, and defaults are rare. G.O. Bonds are typically issued on a tax-exempt basis, meaning that interest earned by investors is exempt from Federal income tax. G.O. Bonds have historically provided local agencies with the lowest borrowing costs among the types of long-term bonds they may issue because of their broad security pledge, which yield the highest possible bond rating and widest investor acceptance (California Debt and Investment Advisory Commission, 2008). G.O. Bonds must be voter-approved through a bond election.

The City of San Antonio has historically issued G.O. Bonds every five years for a package of city infrastructure improvements, including streets and sidewalks, parks, libraries, and other community facilities. Total authorization for the 2012 G.O. Bonds was \$596 million and the 2017 Bonds issues is estimated at \$850 million. It is possible that transit improvements with broad community support could be added to the package of improvements taken to the voters.

- **Revenue Yield:** Not Applicable.
- **Stability:** High; G.O. Bonds are secured by property tax and the full faith and credit of the City.
- **Viability:** Moderate; competes with other capital projects for inclusion in bond issue. In some instances, there are limits as to how much outstanding debt an issuer may carry.
- **Ease of Administration:** High; no new technology is required, and additional administration costs would be marginal.

Commercial Debt

Commercial debt or corporate bonds is another financing mechanism that can leverage expected future revenues for current spending. However, commercial debt is taxable for Federal income tax purposes and carries higher interest rates compared to tax-exempt bonds because of the riskier nature of private investments (FHWA, 2010). Interest rates will depend on the creditworthiness and financial standing of the borrower. Commercial debt could be used in the context of a public-private partnership (P3), as private investors may have to issue debt to finance the project. In this case, VIA would not be issuing the debt.

Grant Anticipation Notes

A Grant Anticipation Note (GAN) is a short-term loan of Federal funds to transportation agencies that commit future Federal and state trust fund distributions in advance of when they would normally be received in order to complete funding packages needed to build projects today. When a GAN, or Grant Anticipation Revenue Vehicle (GARVEE) is issued, the main form of security backing this debt-financing instrument is the State's obligation of future Federal-aid apportionments. According to TxDOT, GANs and GARVEEs have not been used as in Texas (TxDOT, 2013).

GAN's are widely used for projects funded through the FTA Section 5309 Capital Investment Grants program (formerly known as the New Starts/Small Starts grant program). Based on FTA guidance, annual program apportionments for any given project are not expected to exceed \$100 million in any given year. Therefore, some grantees issue GANs to accelerate anticipated Capital Investment Grant Program funding to address cash flow needs during construction.

- **Revenue Yield:** Not Applicable.
- **Stability:** Moderate; for FTA Section 5309 funds as the source of repayment, grant reimbursements to agency depend on annual appropriations.
- **Viability:** High; like bonds, GANs would be approved by the Attorney General and by VIA's Board of Trustees resolution.
- **Ease of Administration:** High; the process is similar to issuing revenue bonds, which VIA already does.

Credit Assistance

TIFIA

The Transportation Infrastructure Finance and Innovation Act (TIFIA) is a financing program for surface transportation projects of national and regional significance (highway, transit, and rail) through the provision of direct loans, loan guarantees, and lines of credit. There are currently approximately a dozen active TIFIA loans have been issued for transit projects nationwide. Several cities in Texas have received TIFIA loans in the past few years; Austin, Dallas, and Houston, mostly for major toll road projects (US DOT, 2016a). The only transit project financed through TIFIA in Texas was the DART Orange Line Extension. DART received a TIFIA loan of \$120 million to advance construction on the third phase of the light rail extension project to DFW Airport Terminal A, which was completed in August 2014. The TIFIA loan accounted for 30 percent of the project eligible costs, and it will be repaid with sales tax revenues from DART's 1 percent sales tax (US DOT, 2016b). TIFIA funded projects in Texas are listed in Table A.11.

Table A.11 TIFIA Funded Projects in Texas

Project	Location	Total Project Cost	TIFIA Amount	Interest Rate	Project Type
SH 130 (Segments 5 and 6)	Austin, TX	\$1,328 million	\$430 million	4.46%	Roadways/ Bridges
183-A Turnpike	Austin, TX	\$305 million	\$66 million	4.75%	Roadways/ Bridges
US 183S Bergstrom Expressway	Austin, TX	\$860 million	\$282 million	n/a	Roadways/ Bridges
Central Texas Turnpike System	Austin, TX	\$3,250 million	\$900 million	5.51%	Roadways/ Bridges
Grand Parkway Segments, D-G	Houston, TX	\$2,941 million	\$841 million	3.65%	Roadways/ Bridges
IH 635 Managed Lanes	Dallas, TX	\$2,615 million	\$850 million	4.22%	Roadways/ Bridges
Dallas Area Rapid Transit Project Orange Line Extension (I-3)	Dallas, TX	\$397 million	\$120 million	2.91%	Transit
President George Bush Turnpike Western Extension	Dallas, TX	\$1,268 million	\$418 million	4.51%	Roadways/ Bridges
North Tarrant Express Segments 1 and 2A	Dallas, TX	\$2,047 million	\$650 million	4.52%	Roadways/ Bridges
North Tarrant Express (Segments 3A and 3B)	Dallas, TX	\$1,638 million	\$531 million	3.84%	Roadways/ Bridges

Source: US DOT, 2016b.

To receive TIFIA funding for a major (i.e., cost equal or greater than \$50 million) transit project, VIA must submit a detailed letter of interest and if accepted by US DOT, begin the formal application process (US DOT, 2016a). TIFIA loans and loan guarantees are limited to no more than 49 percent of the anticipated eligible project costs, and if Federal funds are used, the combined share of Federal funding plus TIFIA cannot exceed 80 percent. To receive a TIFIA loan for a transit project, VIA would have to identify a revenue source, such as a sales tax or value capture, to repay the loan and to provide the necessary local match funds.

- **Revenue Yield:** Not Applicable.
- **Stability:** Moderate; one-time loan for a specific project/investment.
- **Viability:** Moderate; no changes to state or local law. It is a highly competitive program and requires a local funding source for repayment.
- **Ease of Administration:** Moderate; as a loan, would require minimal use of new technology and marginal administrative costs. However, it requires technical capacity to apply for the loan, and, if loan is awarded, to meet annual requirements after loan is disbursed.

TxDOT Infrastructure Bank

In 2005, the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) expanded legislation authorizing every state to operate a State Infrastructure Bank (SIB). Through SIBs, states can manage a revolving loan fund, provide credit, or issue bonds capitalized with seed money from Federal and state sources. Seed funding for the SIB is provided through a percentage of Federal funds that are transferred from specific modal accounts, and these funds are matched with state money. States can also create their own accounts funded with their own money through non-Federalized SIBs.

While the Texas Infrastructure Bank has only extended loans to highway projects in its history, SIB funding should be considered for transit agency projects. Federal law allows the creation of a transit account within a SIB, which would have to be either funded with FTA funds or state seed money (TxDOT, 2013).

- **Revenue Yield:** Not Applicable.
- **Stability:** Low; one-time lump sum payment for a specific project that requires submitting an application, and requires the borrower to identify a repayment source.
- **Viability:** Moderate; requires funding of a transit account within the Texas Infrastructure Bank and finding the seed money to create the revolving loan account.
- **Ease of Administration:** High; SIB already in operation in Texas.

Rail Rehabilitation and Improvement Financing

The RRIF program was established by the Transportation Equity Act for the 21st Century (TEA-21). Under this program, the Federal Railroad Administration (FRA) Administrator is authorized to provide direct loans and loan guarantees up to \$35.0 billion to finance development of railroad infrastructure. Up to \$7.0 billion is reserved for projects benefiting freight railroads other than Class I carriers. Direct loans can fund up to 100 percent of a railroad project with repayment periods of up to 35 years and interest rates equal to the cost of borrowing to the government. The funding may be used to:

- Acquire, improve, or rehabilitate intermodal or rail equipment or facilities, including track, components of track, bridges, yards, buildings, and shops;
- Refinance outstanding debt incurred for the purposes listed above; and
- Develop or establish new intermodal or railroad facilities

Though the RRIF program has historically funded primarily railroads, in recent years, the program has provided loans to transit agencies such as the Denver Union Station Project Authority in 2010 and the New York Metropolitan Transportation Authority in 2015 (FRA, 2016). The FAST Act expanded eligibility of RRIF loans to include planning and design costs, economic development, and commercial and residential development near passenger rail stations. Loan program capacity is significant; only \$2.7 billion in loans out of \$35.0 billion have been issued to date.

- **Revenue Yield:** Not Applicable; loan program and dependent upon award amount from FRA.

- **Stability:** Moderate; one-time loan for a specific project/investment.
- **Viability:** High; no changes to state or local law. Like TIFIA, requires local funding source for repayment.
- **Ease of Administration:** Moderate, it requires technical capacity to apply for the loan, and, if loan is awarded, to meet annual requirements after loan is disbursed.

Cash Flow Management Tools

Transportation Development Credits

Toll or transportation development credits (TDC) are a Federal transportation-funding tool used to meet Federal funding matching requirements. It is a financing tool approved by FHWA that allows states to use Federal obligation authority without the requirement of providing matching dollars. State credits are accrued when capital investments are made in Federally approved tolled facilities, including toll roads and bridges. A state may substitute toll credits for state match only if the state demonstrates that the prior year highway spending equaled or exceeded the average of the prior three years' expenditures. The amount of TDCs a state can earn is determined by the amount of toll revenue used by toll authorities for capital expenditures to build or improve public highway facilities that serve interstate travel. Toll revenues are derived from toll receipts, concession sales, right-of-way leases, interest earnings, bonds, or loan proceeds that are backed by these revenue streams (TxDOT, 2016b).

Essentially, these credits are used as a "soft match," meaning that the credits reduce the amount of funding a state or local entity has to contribute and allow many programs to be funded with 100 percent Federal funds as opposed to the traditional 80/20 percent split between Federal and state/local funding sources (Texas A&M University, 2013). TxDOT allocates to local municipal planning organizations at least the lesser of 15 million credits or 50 percent of the total number of credits available within a given fiscal year specifically to public transit projects (no maximum) (Texas Transportation Commission, 2012). Transit eligible expenses include facilities, shelters, vehicles, and planning. The State allocates 75 percent of credits to MPOs in whose region they were earned, and 25 percent on a competitive statewide basis.

- The Austin-San Antonio Intermunicipal Rail District used \$1.44 million in TDCs for the feasibility study of a commuter rail project. The TDCs helped them qualify for \$5.63 million in Federal funding (20/80 match) (City of Waco, 2015).
- Fort Bend County used \$2.21 million in TDCs for operating support for demand response and commuter bus services. The TDCs helped them qualify for a \$2.21 million match in Federal funding (50/50 match).

Toll credits are not actual revenue, but a cash management tool that allows the use of 100 percent Federal funds, instead of the typical share of 80 percent Federal/20 percent state-local. For example, if VIA has a Federal grant of \$100,000, by using toll credits, it can use the full \$100,000 without providing the local match. Without toll credits, VIA must provide \$25,000 in local money to use the Federal grant. Toll credits are useful when local funds are scarce and Federal funds could go unused due to the lack of matching funds. An illustration of how toll credits work is shown in Table A.12.

Table A.12 Toll Credits

Scenario	Federal Funding	Local Funding	Total Funding
With Toll Credits	\$100,000	N/A	\$100,000
Without Toll Credits	\$100,000	\$25,000	\$125,000

VIA is the designated recipient for TDC matches allocated to the San Antonio urbanized area.

- **Revenue Yield:** Not Applicable; this is not a revenue source, but a cash management tool.
- **Stability:** Low; dependent on availability of toll credits at any given time.
- **Viability:** High; transit funding is not directly linked to cause for raising tolls. It is an existing mechanism for which eligibility to match FTA grants is already authorized.
- **Ease of Administration:** High; mechanism already in place, no new technology is required, and additional administration costs would be marginal.

Public-Private Partnerships

A public-private partnership (P3) is a broad term that applies to a range of partnerships to finance and build public facilities with participation by the private sector. With respect to transportation, public-private partnerships are contracts with private entities for the design, build, and operation of a transit line or other transportation facility. The private team invests in the project and assumes the majority of the risk associated with the construction and long-term operations. Transferring the risk allows the public entity to spread out large upfront costs and preserve public cash for early construction.

Public-private partnerships help leverage both the financial and organizational stability of the public sector and the expertise of the private entities, in theory ensuring mutual benefits. Traditional Design-build contracts reduce design risk, but can require extensive specification as they do not allow the design-builder to share in life-cycle cost risk or savings. Design-Bid-Build contracts leave many risks with the public side but provide significant control over the outcomes. The following section describes two other types: design build finance operate maintain (DBFOM) and joint development.

Design Build Operate Maintain Finance

In the design-build-finance-operate-maintain (DBFOM) structure, the responsibilities for designing, building, financing, and operating are bundled together and transferred to a private sector partner (the concessionaire). DBFOMs are either partially or fully financed by debt leveraging revenue streams dedicated to the project. Direct user fees (i.e., farebox revenues) are the most common revenue source.

A second option for revenue is through a “63-20” tax-exempt structure. Under the IRS Rule 63-20, a nonprofit corporation can be formed to issue tax-exempt debt to finance the project. Using this type of debt keeps interest costs low and is particularly helpful when neither the public nor private entities

are willing to take on the substantial revenue risks associated with major transit projects. A 63-20 arrangement can be structured either by leveraging future fare revenues or by lease-back arrangements where the transit agency would agree to lease the asset from the nonprofit during the development phase and the nonprofit leverages the future lease payments to issue its debt (Federal Highway Administration, 2016). In practice, the 63-20 model has not yet contributed to any long-term success examples. For example, the monorail in Las Vegas was financed using a 63-20 model and has by most accounts underperformed. The 63-20 model encouraged overly ambitious goals from the public sector, compounded by the private sector overestimating its ability to deliver, that underestimated the risks associated with the project (George Mason University, 2013).

A third, more merit-based option is revenue through availability payments. An availability payment is a payment for the level of performance of the project. The payments are disbursed to the concessionaire over the course of the project's lifespan on a basis of how well it matches the criteria set out by the public entity. Generally, criteria involve the asset's safety and comfort, in addition to whether it is open and fully usable by the public (Federal Highway Administration, 2016). Lenders and equity investors provide financing based on how they expect the project to perform over time. As such, it is in the concessionaire's interest to maintain a high level of performance that meets or exceeds the expectations of the public entity. In addition to this essential mutual benefit, availability payment deal structures also contribute to predictable cash flows, lower debt service coverage ratio requirements, inherent incentive for an efficient construction term, and lower risk for all partners, among others. Unlike a full concession, the scope of services for the concessionaire in an availability payment DBFOM structure does not include ridership and demand risks or fare collection responsibilities (KPMG, 2009).

- The Eagle P3 Project in Denver Metro, Colorado is currently being delivered and operated under a DBFOM concession agreement between Regional Transportation District (RTD) Denver, the transit agency, and Denver Transit Partners (DTP), the concessionaire (comprised of Fluor Enterprises, Uberior Investments and Laing Investments, Ames Construction, Balfour Beatty Rail, Hyundai-Rotem USA, Alternative Concepts Inc., Fluor/HDR Global Design Consultants, PBS&J, Parsons Brinckerhoff, Interfleet Technology, Systra, Wabtec and others). The Eagle P3 Project concession agreement requires DTP to design, build, finance, operate, and maintain three commuter rail lines and part of a fourth-line under a single contract. RTD will retain all assets while shifting much of the risk of designing and building the project to DTP. The Concessionaire has also arranged around \$450 million of private financing for the project. This allows RTD to spread out large upfront costs over approximately 30 years, making it more affordable over time. In return, RTD will make service payments to DTP based on their performance of the operation and maintenance of the project. The total project funding is estimated at \$2.2 billion, which includes \$1.03 billion in Federal funding (FTA New Starts grant) and \$450 million in private financing. The involvement of a private sector company is estimated to save about \$300 million in construction costs (approximately 14 percent of total) compared to estimates of the cost if the RTD were solely responsible for the project (Metropolitan Planning Council, 2011).

DBFOMs are often supplemented by public-sector grants in the form of money or contributions in kind, such as right-of-ways. The Eagle P3 project would not have been viable without the FTA New Starts grant, which accounts for nearly one-half of the up-front investment.

Alamo Regional Mobility Authority (Alamo RMA) is the RMA for Bexar County. As an RMA, Alamo RMA can build, operate, and maintain toll roads, along with other transportation projects and would be the primary entity for enacting a P3. For a transit project, VIA, Alamo RMA, and the private partner would need to negotiate a working partnership. Regulations under Texas Transportation Code Ann. 370.305 to 317 apply, including state and local legislative review (National Conference of State Legislatures, 2016).

Public-private partnerships for transit projects ensure the long-term success of projects through the expertise and ownership of the private side, and at the same time, reduces the financial risk by securing public funds and administrative continuity. With that said, several factors need to align for DBFOMs to succeed.

DBFOMs require significant up-front investment (equity contribution) on the part of the concessionaire. As such, it is prudent to select a concessionaire that not only has the technical expertise necessary to execute the contract, but also has private capital reserves large enough to support project initiation.

In all case studies to date, DBFOMs require significant financial support from Federal grants, such as New Starts, and Federal financing, such as TIFIA and PABs, to help jumpstart the project before fare revenues are available. VIA would need to continue pursuing these sources of funding to better position itself for DBFOMs.

- **Revenue Yield:** Not Applicable.
- **Stability:** High; long-term contract; yield to the transit agency occurs in the D-B-F portion of the project.
- **Viability:** High; no vote is required and fares are required to remain affordable; regulations under Texas Transportation Code Ann. 370.305 to 317 apply, including state and local legislative review.
- **Ease of Administration:** Moderate; transit agency must periodically evaluate the availability and performance of the project. Technical capacity required at all stages of P3, from procurement to oversight of the project over the concession period.

Joint Development or Site/Station Specific

Joint development refers to private real estate development on transit agency property for the purpose of promoting transit ridership and/or for generating agency revenues. As such joint development is considered a subset of transit-oriented development (TOD). An example would be the where a transit agency enters into a partnership with a private developer to build market rate or affordable housing on surplus agency land at a transit station or center which generates additional ridership for the transit line and also generates revenue to the agency through a long-term land lease.

Revenues earned from the joint development may be designated for specific purposes such as capital development, including transit development, or it may fall into the General Fund; however, revenues

are modest except in the cases of large metropolitan cities with long-established systems such as in Washington, D.C., San Francisco, and New York. In fact, revenue is generally not the primary motivation for promoting joint development. In a survey conducted by DART in 2014, transit agencies reported that real estate development revenues amount to less than one percent of their annual operating budgets. WMATA receives approximately \$7.2 million in annual lease revenue from joint development projects. Other agencies receive much less, with BART generating \$1.3 million per year, Santa Clara Valley Transportation Agency (VTA) receiving \$650,000 per year, and TriMet and Utah Transit Authority (UTA) receiving mostly one-time sale payment, and generating less than \$100,000 per year on an ongoing basis.

- **Revenue Yield:** Low; based on lack of existing fixed guideway station development opportunities.
- **Stability:** High; long-term lease between transit agency and private development partner.
- **Viability:** High; use of agency land. Legal within FTA guidelines (FTA C 7050.1).
- **Ease of Administration:** High; additional administration costs would be marginal.



B. Summary of Sales Tax Ballot Measures, 2010 to 2016

Local sales taxes are among the most popular funding sources dedicated to public transit. The Center of Transportation Excellence (CFTE) has developed a database of transportation ballot measures since 2000. This appendix summarizes sales tax ballot measures since 2010 (Table B.1), and explains the specifics of these measures as it relates transit funding.

Table B.1 Proposed Sales Tax Measures in the 2010 to 2016 Period (Adapted from the Center of Transportation Excellence 2016)

Year	State	Jurisdiction	Type	Transit Only	Outcome	Measure Specific to Transit
2010	Florida	Hillsborough County	New	N	Loss	Increase sales tax by 1%
		Polk County	New	Y	Loss	Increase sales tax by 0.5%
	Missouri	St. Louis	New	Y	Win	Increase sales tax by 0.5%
	South Carolina	Richland County	New	N	Loss	Increase sales tax by 1%
	Washington	Bellingham	Increase Existing	Y	Loss	Increase sales tax from 0.6% to 0.9%
		Bellingham	New	N	Win	Increase sales tax by 0.2%
		Olympia	Increase Existing	Y	Win	Increase sales tax by 0.2%
		Walla Walla	Increase Existing	Y	Win	Increase sales tax from 0.3% to 0.6%
2011	Colorado	Avon	Increase Existing	Y	Loss	Increase sales tax by 0.35%
		Sterling	Extension	Y	Win	Extension of 0.1% sales tax
	North Carolina	Durham	New	Y	Win	Increase sales tax by 0.5%
	Ohio	Stark County	Extension	Y	Win	Extension of 0.25% sales tax
		Lorain County	Increase Existing	N	Loss	Increase sales tax by 0.25%
	Washington	Clark County	Increase Existing	Y	Win	Increase sales tax from 0.5% to 0.7%
		Jefferson County	Increase Existing	Y	Win	Increase sales tax from 0.5% to 0.7%
		Pierce County	Increase Existing	Y	Loss	Increase sales tax from 0.6% to 0.9%

Year	State	Jurisdiction	Type	Transit Only	Outcome	Measure Specific to Transit
2012	Arkansas	Washington County	New	Y	Loss	Increase sales tax by 0.25%
	California	Alameda County	Increase Existing	N	Loss	Increase sales tax by 0.5%
		Los Angeles County	Extension	N	Loss	Extension of 0.5% sales tax
	Colorado	El Paso County	Extension	N	Win	Extension of 0.55% sales tax
	Georgia	Atlanta	New	N	Loss	Increase sales tax by 1%
	Missouri	Kansas City	New	Y	Win	Increase sales tax by 1%
	North Carolina	Orange County	New	Y	Win	Increase sales tax by 0.5%
	Ohio	Mahoning County	Extension	Y	Win	Extension of 0.25% sales tax
	South Carolina	Richland County	New	N	Win	Increase sales tax by 0.1%
	Washington	Clark County	Increase Existing	Y	Loss	Increase sales tax by 0.1%
		Pierce County	Increase Existing	Y	Loss	Increase sales tax by 0.3%
2013	Ohio	Lake County	Increase Existing	Y	Win	Set aside 0.25% of the sales tax
	Oklahoma	Tulsa	Increase Existing	N	Win	Extension of 1.1% sales tax
	Washington	Grays Harbor County	Increase Existing	Y	Win	Increase sales tax by 0.1%
		Okanogan County	New	Y	Win	Increase sales tax by 0.4%

Year	State	Jurisdiction	Type	Transit Only	Outcome	Measure Specific to Transit
2014	California	Alameda County	Extend and Increase Existing	N	Win	Increase sales tax from 0.5% to 1%
		Monterey County	New	Y	Win	Increase sales tax by 0.125%
	Georgia	Clayton County	New	Y	Win	Increase sales tax by 1%
		Cobb County	Extension	N	Win	N/A
	Florida	Alachua County and City of Gainesville	New	N	Loss	Increase sales tax by 1%
		Pinellas County	New	Y	Loss	Increase sales tax by 1%
		Polk County	New	N	Loss	Increase sales tax by 1%
		Seminole County	Increase Existing	N	Win	Increase sales tax by 1%
	Missouri	Statewide	New	N	Loss	Increase sales tax by 0.75%
		Kansas City	New	Y	Loss	Increase sales tax by 0.125%
	Kansas	Wichita	New	N	Loss	Increase sales tax by 1%
	New Mexico	Dona Ana County	New	Y	Loss	Increase sales tax by 0.25%
		Sierra County	New	Y	Loss	Increase sales tax by 0.25%

Year	State	Jurisdiction	Type	Transit Only	Outcome	Measure Specific to Transit
2015	Arizona	Phoenix	Extension	Y	Win	Extension of 0.4% sales tax
	California	Sonoma County	Increase Existing	N	Loss	Increase sales tax by 0.25%
	Colorado	Fraser	New	Y	Win	Increase sales tax by 1 %
		Winter Park	Increase Existing	Y	Win	Increase sales tax by 2%
	Michigan	Statewide	New	N	Loss	Increase sales tax by 1 %
	Utah	Box Elder County	New	N	Loss	Increase sales tax by 0.25 %
		Davis County	New	N	Win	Increase sales tax by 0.25 %
		Salt Lake County	New	N	Loss	Increase sales tax by 0.25 %
		Tooele County	New	N	Win	Increase sales tax by 0.25 %
		Utah County	New	N	Loss	Increase sales tax by 0.25 %
		Weber County	New	N	Win	Increase sales tax by 0.25 %
	Washington	Snohomish County	New	Y	Win	Increase sales tax by 0.3 %
		Spokane	New	Y	Loss	Increase sales tax by 0.3 %
2016	Arizona	Flagstaff	Extension	Y	Win	Extension of 0.295% sales tax
	Arkansas	Pulaski County	New	Y	Loss	Increase sales tax by 0.25 %
	California	Contra Costa County	New	N	Loss	Increase sales tax by 0.5 %
		Humboldt County	New	N	Loss	Increase sales tax by 0.5 %
		Los Angeles County	Extension and New	N	Win	Renew 0.5 % sales tax and increase sales tax by an additional 0.5 %
		Monterey County	New	N	Win	Increase sales tax by 0.375 %
		Placer County	New	N	Loss	Increase sales tax by 0.5 %
		Sacramento County	New	N	Loss	Increase sales tax by 0.5 %
		San Diego County	New	N	Loss	Increase sales tax by 0.5 %
		San Francisco	New	N	Win	Increase sales tax by 0.5 %

	San Luis Obispo County	New	N	Loss	Increase sales tax by 0.5 %
	Santa Clara County	New	N	Win	Increase sales tax by 0.5 %
	Santa Cruz	New	N	Win	Increase sales tax by 0.5 %
	Stanislaus County	New	N	Win	Increase sales tax by 0.5 %
	Ventura County	New	N	Loss	Increase sales tax by 0.5 %
Colorado	Boulder	Extension	N	Win	Extension of 0.125 % sales tax
Florida	Broward County	New	N	Loss	Increase sales tax by 0.5 % for transportation and 0.5 % for infrastructure
Georgia	Atlanta	New	N	Win	Increase sales tax by 0.4 %
	Atlanta	New	Y	Win	Increase sales tax by 0.5 %
	Fulton County	New	N	Win	Increase sales tax by 0.75 %
Missouri	Kansas City	New	Y	Win	Increase sales tax by 0.375 %
North Carolina	Wake County	New	Y	Win	Increase sales tax by 0.5 %
Ohio	Franklin County	Extension	Y	Win	Extension of 0.25 % sales tax
	Lorain County	New	N	Loss	Increase sales tax by 0.25 %
	Stark County	Extension	Y	Win	Extension of 0.25 % sales tax
Oklahoma	Tulsa	New	Y	Win	Allocate 0.085% of the sales tax for transportation
South Carolina	Charleston	New	N	Win	Increase sales tax by 0.5 %
Utah	Summit County	New	Y	Win	Increase sales tax by 0.25 %
	Summit County	New	N	Win	Increase sales tax by 0.25 %
	Washington County	New	N	Loss	Increase sales tax by 0.25 %
Washington	Ellensburg	New	Y	Win	Increase sales tax by 0.2 %
	Kitsap County	New	Y	Win	Increase sales tax by 0.3 %

	Spokane	New	Y	Win	Increase sales tax by 0.3 %
Wyoming	Jackson and Teton Counties	New	N	Loss	Increase sales tax by 1.0 %

Source: Center of Transportation Excellence, 2016