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FINANCIAL PLAN

The Financial Plan summarizes the funding programs available at the federal, state, and local levels for transportation projects, and forecasts estimated project costs and available funds for all transportation projects programmed into the planning horizon of the RGVMP 2045 MTP.

ESTIMATING FUNDING

Federal regulations require that proposed investments in an MTP show fiscal constraint by demonstrating that projects can be implemented using committed, available, or reasonably available revenue sources. This funding must reasonably support the anticipated project costs, while validating the ability to adequately operate and maintain the transportation system.

The Financial Plan includes descriptions of the funding categories, sources, and specific dollar amounts that are expected to be available to fund projects listed in the RGVMP 2045 MTP. This chapter also steps through the process of determining available funding levels and project cost development for Year of Expenditure (YOE).

Federal regulations also require these financial forecasts to consider inflation regarding the value of the dollar over time, which should be considered for both funding sources and project costs that are discussed within this chapter. These funding sources and project costs were estimated in year-of-receipt and YOE dollars, respectively.

The following sections will summarize the processes used to forecast both roadway and transit funding levels over the 25-year period in the RGVMP 2045 MTP.

Roadway Funding Sources

Federal, state, and local funding programs were considered when reviewing and forecasting the total amount of funding for roadway projects within the 2045 MTP timeframe. The funding estimated to be available for projects in the RGVMP through the lifespan of the 2021 UTP (2021-2030) was used in conjunction with a review of historical spending by each funding category. These estimates were used to form the base-year funding assumptions that were extrapolated to complete the funding forecast for the duration of the MTP.

The following section describes funding sources at the federal, state, and local levels available for roadway projects.

Potential Federal Funding Sources

In late 2015, the federal administration enacted the Fixing America's Surface Transportation Act (FAST Act), which provides funds for surface transportation activities. The FAST Act provided just over \$300 billion dollars for surface transportation projects through the fiscal years of 2016 to 2020. The FAST Act builds upon the Moving Ahead for Progress in the 21st Century Act (MAP-21), which was enacted in 2012, by expanding its scope to include improving highway mobility, supporting economic growth by creating jobs, and accelerating project delivery and promoting innovation. MAP-21 set out to make surface transportation projects streamlined, performance based, and multimodal, while improving safety, maintaining infrastructure, reducing traffic congestion, improving efficiency, protecting the environment, and expediting project delivery.

NATIONAL HIGHWAY PERFORMANCE PROGRAM (NHPP)

Every year the FAST Act provides a little over \$23 billion for the NHPP to preserve the condition and performance of the National Highway System (NHS). NHPP funds can also be used to construct new NHS facilities and ensure that projects are making progress toward performance goals set out in each state's asset management plan.



MAP-21 eliminated the programs with dedicated funding for repair by consolidating the Interstate Maintenance and Highway Bridge Repair programs and shifting these funds to the new NHPP. NHPP provides funding for improvements to rural and urban roads that are part of the NHS, including the Interstate System and designated connections to major intermodal terminals. Under certain circumstances, NHS funds may also be used to fund transit improvements in NHS corridors.

The FAST Act created additional eligibilities for the NHPP:

- A State may use NHPP funds to pay the subsidy and administrative costs for Transportation Infrastructure Finance and Innovation Act (TIFIA) credit assistance.
- Vehicle-to-Infrastructure (V2I) communication equipment.
- Reconstruction, resurfacing, restoration, rehabilitation, or preservation of a non-NHS bridge if the bridge is on a Federal-aid highway.

SURFACE TRANSPORTATION BLOCK GRANT (STBG) PROGRAM

Previously titled the Surface Transportation Program (STP) The STBG is a block grant funding program with subcategories for states and urban areas. STBG funding may be used for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals.

These funds can be used for any road, including an NHS roadway, that is not functionally classified as a local road or rural minor collector. The state portion can be used on roads within (or outside) an urbanized area, while the urban portion can only be used on roads within an urbanized area. The funding ratio is 80/20 (federal/local).

For urban areas with a population of greater than 200,000 people (such as within the RGVMAB), the MPO is the lead agency for funding allocation in consultation with the State. Urban areas with a population of less than 200,000 people the State is the leading agency for fund allocation in consultation with the MPO.

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)

As referenced in Chapter 5, the purpose of the HSIP is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned public roads and roads on tribal lands.

"The primary features of the current HSIP are retained, including the requirement for a comprehensive, data-driven, SHSP that defines State safety goals and describes a program of strategies to improve safety. To obligate HSIP funds, a State must develop, implement and update a SHSP, produce a program of projects or strategies to reduce identified safety problems, and evaluate the SHSP on a regular basis.

The SHSP remains a statewide coordinated plan developed in cooperation with a broad range of multidisciplinary stakeholders.

States are required to have a safety data system to perform problem identification and countermeasure analysis on all public roads, adopt strategic and performance-based goals, advance

data collection, analysis, and integration capabilities, determine priorities for the correction of identified safety problems, and establish evaluation procedures.”¹

The FAST Act continues MAP-21 authorization of a lump sum for this program, and it is the responsibility of the State to divide up these funds according to the State’s priorities. For a project to be eligible under the HSIP program, the project must be consistent with the State’s SHSP and correct or improve a hazardous road location or feature or address a highway safety problem. Workforce development, training, and education activities are also eligible uses of HSIP funds. The Federal share for HSIP is 90%.

TRANSPORTATION ALTERNATIVES (TA) PROGRAM

The FAST Act replaced the MAP-21 Transportation Alternatives Program (TAP) with a set-aside of STBG program funding for Transportation Alternatives (TA) to provide funding for a variety of alternative transportation projects that were previously eligible activities TAP. Unless a State opts out, it must use a specified portion of its TAP funds for recreational trails projects. Eligible activities include:

- Facilities for pedestrians, bicyclists, and other non-motorized forms of transportation
- Safe routes for non-drivers
- Conversion and use of abandoned railroad corridors for trails
- Community improvement activities

States and MPOs (for urbanized areas with more than 200,000 people) conduct a competitive application process for use of the sub-allocated funds. Other than the recreational trails set-aside, States are given broad flexibility to use these funds. A 20% local funding match is required for most projects.

CONGESTION MITIGATION AND AIR QUALITY (CMAQ)

Urban areas that do not meet ambient air quality standards are designated as non-attainment areas by the U.S. Environmental Protection Agency (EPA). CMAQ funds are apportioned to those urban areas for use on projects that contribute to the reduction of mobile source air pollution through reducing vehicle miles traveled, fuel consumption, or other identifiable factors. Both roadway and transit projects are eligible for CMAQ funds. Starting in FY 2013, all CMAQ projects were required to provide a 20% local match, with the exception of carpool and vanpool projects, which will remain 100% federally funded. To be eligible for CMAQ funds, projects must meet the following three criteria:

- Be a transportation project;
- Contribute to emission reductions; and
- Located in or benefit a nonattainment or maintenance area for ozone, carbon monoxide, and particulate matter.²

Neither Cameron or Hidalgo County are currently considered non-attainment or maintenance areas.

¹ <https://www.fhwa.dot.gov/fastact/factsheets/hsipfs.cfm>

² https://www.nps.gov/subjects/transportation/upload/CMAQ_Fact_Sheet_Final.pdf



COMPETITIVE HIGHWAY BRIDGE PROGRAM (CHBP)

These funds go toward highway bridge replacement or rehabilitation projects on public roads that demonstrate cost savings by bundling at least two highway bridge projects into a single contract.

Potential State Funding Sources

The State of Texas maintains categorized funding programs that coincide with Federal funding programs. Traditionally this funding is used to match federal sources and to fund the operations of the state Department of Transportation. The primary funding source for the Texas state program comes from motor fuels taxes allocations, motor vehicle registration fees, severance taxes allocations, and many other revenue sources and fees, including voter approved constitutional amendments Proposition 1 and Proposition 7, which redirect funding from the general fund to be spent on transportation projects. Categories 1-9 of the Texas UTP are federal and state programmatic funding categories, while categories 10, 11, and 12 are strategic and discretionary funding categories.

TxDOT's 2021 UTP provides the following definitions and criteria for each funding category.

CATEGORY 1: PREVENTATIVE MAINTENANCE AND REHABILITATION

Category 1 deals with preventative maintenance and rehabilitation of the existing highway system, which includes pavement, signs, traffic signalization, and other assets that can be considered part of the highway infrastructure. Preventative maintenance works to preserve, rather than improve the structural integrity of current pavements and structures. Rehabilitation focuses on repairing (which can also be considered modernizing) existing main lanes, structures, frontage roads, and other infrastructure assets.

Projects are selected by districts using a performance based prioritization process that assesses district-wide maintenance and rehabilitation needs. The Texas Transportation Commission allocates funds through a formula allocation program.

CATEGORY 2: METROPOLITAN AND URBAN AREA CORRIDOR PROJECTS

Category 2 addresses mobility and added capacity projects on urban corridors to mitigate traffic congestion, as well as increasing traffic safety and improving roadway maintenance or rehabilitation. Projects must be located on the state highway system. Roadway widening (both freeway and non-freeway), interchange improvements, and roadway operational improvements are common within Category 2.

Projects are selected by MPOs in consultation with TxDOT using a performance based prioritization process that assesses mobility needs within the MPO boundaries. Project funds must be authorized by the Texas Transportation Commission by formula.

CATEGORY 3: NON-TRADITIONALLY FUNDED TRANSPORTATION PROJECTS

Transportation-related projects that qualify for funding from sources not traditionally part of the state highway fund, including state bond financing under programs such as Proposition 12 (General Obligation Bonds), Texas Mobility Fund, pass-through toll financing, unique federal funding, regional toll revenue, and local participation funding. New-location roadways, roadway widening, and interchange improvements are common project types that receive Category 3 funds.

Projects are determined by legislation, Texas Transportation Commission approved Minute Order, or local government commitments.

CATEGORY 4: STATEWIDE CONNECTIVITY CORRIDOR PROJECTS

Category 4 funds are used for mobility and added capacity projects on major state highway system corridors that provide statewide connectivity between urban areas and other statewide corridors, to create a highway connectivity network composed of the Texas Highway Trunk System, NHS, National Freight Network, hurricane evacuation routes, and connections to major ports of entry on international borders and Texas water ports.

Corridors are selected by the Texas Transportation Commission based on engineering analyses of three corridor types; mobility, connectivity, and strategic. Funds are allocated by the Commission to TxDOT districts. Districts select projects along approved corridors in consultation with MPO's, the Transportation Planning and Programming Division (TPP), and TxDOT Administration using a performance-based evaluation.

CATEGORY 5: CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT (CMAQ)

Congestion mitigation and air quality improvement projects address attainment of a national ambient air quality standard in non-attainment areas of the state, which does not include the RGVMAB. Projects that relate to maintaining the non-attainment status may also be eligible for CMAQ funds.

Projects are selected by MPOs in consultation with TxDOT. The Texas Transportation Commission allocates funds distributed by population and weighted by air quality severity to non-attainment areas. Nonattainment areas are designated by the EPA.

CATEGORY 6: STRUCTURES REPLACEMENT & REHABILITATION (BRIDGE)

Replacement and rehabilitation of deficient existing bridges located on public highways, roads, and streets in the state; construction of grade separations at existing highway and railroad grade crossings; and rehabilitation of deficient railroad underpasses on the state highway system.

Projects are selected by the Bridge Division (BRG) based on a listing of eligible bridges prioritized first by deficiency categorization (structurally deficient followed by functionally obsolete) and then by sufficiency ratings. Railroad grade separation projects are selected based on a cost-benefit index rating. Projects in the Bridge Management and Improvement Program (BMIP) are selected statewide based on identified bridge maintenance and improvement needs to aid in ensuring the management and safety of the state's bridge assets. The Texas Transportation Commission allocates funds through the Statewide Allocation Program.

CATEGORY 7: METROPOLITAN MOBILITY & REHABILITATION

Projects that address transportation needs within the boundaries of designated metropolitan planning areas of metropolitan planning organizations located in a transportation management area (areas with populations of 200,000 or more).

Projects are selected by MPOs operating in transportation management areas, in consultation with TxDOT. The MPOs use a performance-based prioritization process that assesses mobility needs within the MPO boundaries.

CATEGORY 8: SAFETY

Safety-related projects both on and off the state highway system including the federal Highway Safety Improvement Program, Safety Bond Program, Systemic Widening Program, Federal Railway Set-Aside, and Road to Zero (RTZ).



Projects are selected statewide by federally mandated safety indices and a prioritized listing. Projects selected in each program are evaluated by relevant safety or railroad factors and indexes. The Texas Transportation Commission allocates funds through the Statewide Allocation Program.

CATEGORY 9: TRANSPORTATION ALTERNATIVES SET-ASIDE PROGRAM

Transportation-related activities as described in the Transportation Alternatives (TA) Set-Aside Program, such as on- and off-road pedestrian and bicycle facilities, and infrastructure projects for improving access to public transportation. For urbanized areas with populations over 200,000, the MPO selects TA projects through a competitive process in consultation with TxDOT.

Funds allocated to small urban areas and non-urban areas (i.e., areas with populations below 200,000) are administered by TxDOT through a competitive process to be managed by the Public Transportation Division through a competitive process. The Texas Transportation Commission selects projects for funding under a TxDOT administered call for projects. Statewide TA Flex projects are also selected by the Commission. All projects are selected using a performance-based prioritization process that assesses local transportation needs, including bicycle and pedestrian access.

CATEGORY 10: SUPPLEMENTAL TRANSPORTATION PROGRAMS

Transportation-related projects that do not qualify for funding in other categories, including landscape and aesthetic improvement, erosion control and environmental mitigation, construction and rehabilitation of roadways within or adjacent to state parks, fish hatcheries, and similar facilities, replacement of railroad crossing surfaces, maintenance of railroad signals, construction or replacement of curb ramps for accessibility to pedestrians with disabilities, and miscellaneous federal programs.

Coordinated Border Infrastructure Program (CBI), Congressional High Priority Projects, and Federal Lands Access Program (FLAP)

CBI projects are selected by districts with FHWA review and approval. Discretionary funds are congressionally designated. In FLAP, project applications are scored and ranked by the Programming Decision Committee (PDC). Members of the PDC include a representative from FHWA, a representative from TxDOT, and a member from a political subdivision of the state. Projects selected under FLAP are managed by TPP.

Supplemental Transportation Projects

The Texas Parks and Wildlife Department (TPWD) selects State Park Roads projects in coordination with districts. The TxDOT Rail Division in coordination with districts selects Railroad Grade Crossing Re-planking and Railroad Signal Maintenance projects. Landscape Incentive Awards are distributed to 10 locations based on the results of the Keep Texas Beautiful Awards Program and managed by the TxDOT Design Division. Green Ribbon allocations are based on one-half percent of the estimated letting capacity for the TxDOT districts that contain air quality non-attainment or near non-attainment counties and managed by the TxDOT Design Division. Curb Ramp Program projects are selected based on conditions of curb ramps or the location of intersections without ramps and are managed by the Design Division.

CATEGORY 11: DISTRICT DISCRETIONARY

Projects eligible for federal or state funding selected at the district engineer's discretion. Additionally, Category 11 addresses transportation needs that may impact the Energy Sector and Border

Infrastructure (Rider 11(b)). Projects are selected by districts. The Texas Transportation Commission allocates funds through a formula allocation program. A minimum \$2.5 million allocation goes to each district per legislative mandate. The Commission may supplement the funds allocated to individual districts on a case-by-case basis to cover project cost overruns, as well as energy sector initiatives. Rider 11 (b) is also selected by the Commission dependent on the number of land border ports of entry, incoming commercial freight traffic, incoming personal motor vehicles and buses, and the weight of incoming cargo by commercial trucks.

CATEGORY 12: STRATEGIC PRIORITY

Projects with specific importance to the state, including those that generally improve congestion and connectivity, energy sector access, and border and port connectivity, promote economic opportunity, increase efficiency on military deployment routes or retain military assets in response to the federal military base realignment and closure reports, and maintain the ability to respond to both manmade and natural emergencies. The Texas Transportation Commission selects projects statewide using a performance-based prioritization process.

Potential Local Funding Sources

It is typically the responsibility of the local government jurisdictions to cover any costs not covered by federal and state programs. Local funding can come from a variety of sources including property taxes, sales taxes, user fees, special assessments, and impact fees. Match requirements make local funds critical to maintain eligibility for several federal and state funding sources, which is typically around 20% of total project costs for federal funding sources.

PROPERTY TAXES

Property taxation has historically been the primary source of funding for local governments in the United States. Property taxes account for more than 80% of all local tax revenues. Property is not subject to federal government taxation but is taxed at a high rate within the state of Texas given the lack of state and local-option income taxes.

GENERAL SALES TAXES

The general sales and use tax is also an important funding source for local governments. The most commonly known form of the general sales tax is the retail sales tax. The retail sales tax is imposed on a wide range of commodities, and the rate is usually a uniform percentage of the selling price.

USER FEES

User fees are fees collected from those who use a service or facility. The fees are collected to pay for the cost of a facility, finance the cost of operations, and/or generate revenue for other uses. User fees are commonly charged for public parks, water and sewer services, transit systems, and solid waste facilities. The theory behind the user fee is that those who directly benefit from these public services pay for the costs.

SPECIAL ASSESSMENTS

Special assessment is a method of generating funds for public improvements, whereby the cost of a public improvement is collected from those who directly benefit from the improvement. In many instances, new streets are financed by special assessment. The owners of property located adjacent to the new streets are assessed a portion of the cost of the new streets based on the amount of frontage they own along the new streets.



IMPACT FEES

Development impact fees have been generally well received in other states and municipalities in the United States. New developments create increased traffic volumes on the streets around them, and development impact fees are a way of attempting to place a portion of the burden of funding improvements on developers who are creating or adding to the need for improvements. There are currently no municipalities in the RGVMAB that assess a transportation-specific impact fee.

BOND ISSUES

Property tax and sales tax funds can be used on a pay-as-you-go basis, or the revenues from these taxes can be used to repay general obligation or revenue bonds. These bonds are issued by local governments upon approval of the voting public.

REVENUE FORECAST DEVELOPMENT

Historically, transportation improvement projects in the RGVMAB have been funded through a combination of Federal, State, and local dollars. The process of developing reasonable expectations for future revenues includes several factors in reviewing these historical funds. Historical TIPs and lists of obligated projects from the last 20 years were compiled and project funding was sorted by year and funding category. The revenue history was then screened for outliers. Events such as changes in funding categories or additional funds received after a hurricane could ostensibly create a skew in understanding the normal trends and are identified early in the process. The resulting normalized trends in funding were analyzed over that historical 20-year period to establish preliminary growth rates for funding by category. Table 8-1 summarizes the totals for each applicable funding category broken out into 5-year periods over the last 20 years. Historical transit funding was compiled through a similar process using historical TIPs and compared to the current 2021-2024 TIP.

Table 8-1: Historical Roadway Funding

UTP Category	2001-2005	2006-2010	2011-2015	2016-2020
1	\$106,475,070	\$146,873,380	\$137,592,995	\$175,176,929
2*	\$0	\$0	\$14,916,819	\$160,646,855
3	\$237,763,856	\$79,866,202	\$107,901,095	\$57,480,479
4	\$153,628,235	\$0	\$18,712,000	\$157,069,355
6	\$25,771,532	\$16,088,976	\$29,982,000	\$17,411,736
7	\$46,565,092	\$71,833,047	\$56,590,778	\$89,525,572
8	\$11,157,753	\$28,463,055	\$21,368,320	\$33,275,266
9	\$6,647,048	\$3,982,675	\$6,598,805	\$13,265,206
10	\$52,480,451	\$85,504,150	\$94,811,651	\$36,987,633
11	\$82,246,778	\$66,659,183	\$7,191,837	\$40,362,174
12	\$1,400,000	\$9,000,000	\$10,511,460	\$204,580,000
LC	\$20,339,204	\$26,304,676	\$42,509,893	\$38,207,678

*Includes 2M and 2U

Roadway Funding Forecast

To determine the fiscal feasibility of implementing a program of projects in the MTP, an analysis of programmed funding was conducted. The RGVMPO coordinated with TxDOT to determine projected funding and acceptable inflation rates for projects. This resulted in a compounded annual inflation rate of 4.0% in Texas.

The RGVMPO 2045 fiscally constrained MTP is partitioned into segments of time. The first two segments of time are developed to coincide with other planning and programming efforts such as the TIP which typically covers three to four years, and the UTP covering ten years. The remaining fifteen years of the MTP planning horizon are banded into segments to help set up future TIP and UTP development efforts.

The first ten years of the RGVMPO 2045 MTP, FY 2021-2030, are fiscally constrained by funding category based on funding allocations identified through the Texas 2021 UTP. The remaining 15 years are also fiscally constrained based on the comparison of project costs submitted through the MTP project listings and funding projections estimated based off historical funding totals and funding targets established by TxDOT for certain funding categories for the RGVMAB.

For some of the UTP funding categories, the UTP does not identify specific projects, but rather identifies funding levels for programs. Individual projects are then identified through a performance-based prioritization process. Examples of these programs include Category 1-Preventative Maintenance and Rehabilitation, Category 6-Structure Replacement and Rehabilitation, and Category 8-Safety. Local contributions above the required local match to federal funds are captured under Category 3.

Unless otherwise noted, most of these funding categories continue throughout the RGVMPO 2045 MTP. For the periods within the current 2021 UTP, the funding targets set out by TxDOT were used to populate revenue forecasts where available. For the outlying years beyond 2030, the historical growth rates based on the previous 20 years of funding were used to generate a revenue forecast out to the 2045 horizon, which were adjusted for inflation by applying the expected average statewide inflation rate (2.23%).

Most of the funding categories under which the RGVMAB receives funding are administered by TxDOT in consultation with the MPO. However, there are two specific funding categories that the RGVMPO leads the administrative process in conjunction with TxDOT. These categories include:

- Surface Transportation Program for metropolitan mobility projects (STP-MM) allocated through TxDOT UTP Category 7
- Transportation Alternatives (TA) Program allocated through TxDOT UTP Category 9

The total amount estimated to be available from 2021-2045 in the RGVMAB through the TA program is \$54M. TxDOT introduced additional funding assumptions in the RGVMPO 2045 MTP for non-programmatic funding categories:

- \$12.5M reconstruction of Mile 3 N. by widening to 4 lanes, in 2023
- \$18.3M reconstruction of Liberty Blvd. by widening to 4 lanes, in 2022



- \$203M to construct 4 lanes with overpasses and 2 lanes with frontage roads on US-281 in 2024
- \$216M to construct a new 4-lane divided rural highway facility on SH 68 in 2024
- \$301M to construct a 4-lane controlled access facility on 365 Tollway in 2021
- \$312M for construction of the International Bridge Trade Corridor and toll facility in 2021-2022

Roadway Funding Overview

Reviewing the project funding, annual forecast amounts, appropriate growth rates to relevant funding categories, and appropriate inflation rates resulted in the following levels (Table 8-2) of roadway funding estimated to be available for each stage of the plan. Table 8-3 displays the total funding estimated to be available by source over the 25-year period of the MTP. Federal funding administered by the RGVMP in the 2045 MTP is in line with historical trends and no reduction of these funds are expected in the future.

Table 8-2: Total Roadway Funding by Stage- All Categories

Stage	Amount
2021-2024	\$902,545,042
2025-2030	\$1,733,933,310
2031-2036	\$1,842,362,870
2037-2045	\$1,529,493,080
Total (2021-2045)	\$6,008,334,302

Table 8-3: 2021-2045 Total Estimated MTP Funding by Category

Stage	Amount
1 – Preventative Maintenance & Rehabilitation	\$1,004,287,994
2 – Metropolitan Area (TMA) Corridor Projects	\$1,013,893,078
3 – Local Contribution	\$678,447,888
4 – Statewide Urban Connectivity Corridor Projects	\$203,372,437
6 – Structures Replacement & Rehabilitation	\$171,308,637
7 – STP – MM	\$256,282,574
8 – Safety Projects	\$170,206,534
9 – Transportation Alternatives-Set Aside	\$54,097,074
10 – Transportation Enhancements Program (TxDOT)	\$569,566,767
11 – District Discretionary	\$126,437,254
12 – Strategic Priority	\$1,388,661,491
Local Funds	\$270,158,066
TBD	\$101,614,509
Total MTP Estimated Roadway Funding	\$6,008,334,303

Transit Funding Sources

Transit providers in the RGVMAB are funded through a combination of federal, state, and local sources. Aside from local funding, the FTA administers the primary funding programs used by transit providers in the study area. Of these programs, the Section 5307 Urbanized Area Formula program is the largest source of funding. Other FTA funding programs are more limited in nature.

Federal Funding Sources

SECTION 5307 (URBANIZED AREA FORMULA PROGRAM)

Section 5307, the Urbanized Area Formula program (49 U.S.C. 5307) makes federal funding available to urbanized areas for transit capital and operating assistance and for transit-related planning activities. Funding for the formula program is determined based on the level of transit service provision, population, and other factors.

SECTION 5311 (FORMULA GRANTS FOR RURAL AREAS)

This formula-based program (49 U.S.C. 5311) provides states and tribal governments with funding for administration, capital, planning, and operating assistance to support public transportation in rural areas, defined as areas with fewer than 50,000 residents.

There are set-asides within this program for the Intercity Bus Program, the Rural Transit Assistance Program (RTAP), Public Transportation on Indian Reservations, and the Appalachian Development Public Transportation Program.

SECTION 5310 (ENHANCED MOBILITY OF SENIORS AND INDIVIDUALS WITH DISABILITIES)

The Enhanced Mobility program provides formula funding to assist in meeting the transportation needs of the elderly and persons with disabilities when the primary transportation service provided is unavailable, insufficient, or inappropriate to meeting these needs. The purpose of this program is to enhance mobility for seniors and persons with disabilities by providing funds for programs to serve the special needs of transit-dependent populations beyond traditional public transportation services and paratransit services.

Funds from the 5310 program can be used for both capital improvements and operating expenses. However, at least 55% of program funds must be used on capital projects ("traditional" project) that are public transportation projects planned, designed, and carried out to meet the special needs of seniors and individuals with disabilities when public transportation is insufficient, inappropriate, or unavailable. The remaining 45% of program funds may be used for capital and operating expenses for new public transportation services ("nontraditional" projects) and alternatives beyond those required by the ADA, designed to assist individuals with disabilities and seniors.

Funds are apportioned for urbanized and rural areas based on the number of seniors and individuals with disabilities. The federal share for capital projects (including acquisition of public transportation services) is 80%; the federal share for operating assistance is 50%.

SECTION 5339 (BUS AND FACILITIES)

This formula-based program (49 U.S.C. 5339) provides capital funding to states and designated recipients to replace, rehabilitate, and purchase buses, vans, and related equipment, and to construct bus-related facilities.



OTHER FTA FORMULA AND DISCRETIONARY FRANTS

There are several other FTA grant programs with funding available. Most of these grant programs are focused on fixed guideway systems or on temporary assistance.

Section 5309 (Capital Investment Grants)

The Capital Investment Grant (CIG) Section 5309 program is a discretionary grant program for funding major transit capital investments. These investments includes:

- Heavy rail
- Commuter rail
- Light rail
- Streetcars
- Bus rapid transit

By law, projects seeking CIG funding must complete a series of steps over several years to be eligible for funding. New Starts and Core Capacity projects are required by law to complete the Project Development and Engineering phases in advance of receipt of a construction grant agreement. Small Starts projects are required by law to complete the Project Development phase in advance of receipt of a construction grant agreement.

- New Starts Projects
 - Total project cost is equal to or greater than \$300 million or total New Starts funding sought equals or exceeds \$100 million
 - New fixed guideway system (light rail, commuter rail etc.)
 - Extension to existing system
 - Fixed guideway BRT system
- Small Starts Projects
 - Total project cost is less than \$300 million and total Small Starts funding sought is less than \$100 million
 - New fixed guideway systems (light rail, commuter rail etc.)
 - Extension to existing system
 - Fixed guideway BRT system
 - Corridor-based BRT system
- Core Capacity Projects
 - Substantial corridor-based investment in existing fixed guideway system
 - Located in a corridor that is at or over capacity or will be in five years
 - Increase capacity by 10%
 - "Not include project elements designated to maintain a state of good repair"³

By law FTA rates projects at various points in the process, evaluating project justification and local financial commitment according to statutory criteria. FTA provides policy guidance on the CIG process and the evaluation criteria on their website.

³ <https://www.transit.dot.gov/funding/grant-programs/capital-investments/about-program>

Flexible Federal Funding Sources

Funding from the NHPP, the STP, CMAQ, and TAP can be “flexed” to transit projects, with certain eligibility restrictions depending on the funding source.

Transit Funding Forecast

From 2021-2024, the RGV MPO will continue to receive traditional FTA 5307 & 5310 formula funds for programs such as capital maintenance, planning and ADA Paratransit for nearly \$101M, and for Transit Enhancement projects covered by FTA 5339 funds for just over \$4M, which includes funding to purchase both buses and bus facilities. Based on historical funding trends and population growth in the RGV MAB, the FTA 5307, 5310, and 5339 funds are expected to grow at a modest rate of just over 6.31% through 2045.

Transit Funding Overview

Table 8-4 shows the total transit funding forecast for the various stages of the RGV MPO 2045 MTP. Table 8-5 breaks down forecast transit funding by source. Including local matching funds, the total amount of transit funding estimated to be available for the duration of the MTP is approximately \$888M.

Table 8-4: 2021-2045 Transit Funding Forecast (All-Sources)

Stage	Amount
2021-2024	\$104,995,340
2025-2030	\$189,891,761
2031-2036	\$214,326,717
2037-2045	\$379,187,658
Total (2021-2045)	\$888,401,476

Table 8-5: 2021-2045 Transit Funding Forecast by Source

Section Funding	Amount
5307	\$820,821,178
5310	\$32,964,068
5339	\$34,616,230
Total	\$888,401,476

ESTIMATING COSTS

Federal regulations define “total project cost” for the purpose of estimating fiscal constraint in the MTP to include:

- Planning elements (e.g. environmental studies and functional studies);
- Engineering costs (e.g. preliminary engineering and design);
- Preconstruction activities (e.g. ROW acquisition);
- Construction activities; and
- Contingencies.



The following assumptions helped guide the development of cost estimates for the proposed projects in the MTP as well as the maintenance and operation of the existing transportation system.

1. Because federal regulations do not require that the cost of maintenance and operations activities be computed for individual projects, the funding needed for maintenance and operation of the transportation infrastructure was estimated on a system-wide level.
2. Whenever a detailed engineering estimate for a particular project was not available, generalized planning-level cost figures (developed by the RGVMPPO in close coordination with TxDOT Pharr district) were used to assess the cost of each of the project's elements. These generalized cost figures were based on estimates provided by TxDOT, and other available resources.
3. In the absence of detailed, local inflation information for construction related activities, an inflation rate of 4.0% for Texas portions of projects was used for project cost estimation based on TxDOT guidance.
4. Project costs are estimated to include construction costs as well as right-of-way acquisition and engineering costs in consultation with project sponsors.

Both typical improvement costs and local knowledge of other project costs were used to develop cost estimates for the projects considered for the MTP. In keeping with federal regulations, cost estimates were computed in average YOY dollars across 5-year periods within the MTP planning horizon using the inflation factors outlined above in accordance with FHWA, TxDOT guidance. Table 8-6 displays the aggregate total estimated project costs for each period addressed by the MTP. Each period also includes programmatic cost estimates for general system maintenance and operation. The complete list of projects considered for inclusion in the MTP, along with estimated YOY costs, can be found in Chapter 6.

Estimated roadway funds include the Statewide Mobility Program (Categories 2, 3, 4, 5, 7, 8, 9, 10, 11, & 12) and the Statewide Preservation Program (Categories 1 & 6).

The process of summarizing the funding for both mobility and preservation programs in contrast to the total costs of projects shows fiscal constraint not only for the development and construction of the planned projects, but for the sustained maintenance and operations of these projects as well.

Table 8-6: Summary of Estimated Costs (YOE)

Stage	Roadway Costs	Transit Costs
2021-2024	\$1,450,753,182	\$104,995,340
2025-2030	\$1,572,155,945	\$189,891,761
2031-2036	\$303,900,577	\$214,326,717
2037-2045	\$460,795,908	\$379,187,658
Total (2021-2045)	\$3,787,605,612	\$888,401,476

Maintenance and Operations

The maintenance and operation of the transportation system was considered in the development of the RGVMPPO 2045 MTP and its staged improvement program. Typically, maintenance costs are applicable to the system as a whole. Where possible, maintenance projects are identified individually. However, it is not possible to develop project-specific maintenance schedules beyond the near term. The maintenance costs identified in this plan are the responsibility of various governmental jurisdictions.

The balancing act of meeting identified transportation improvement needs and maintaining the present transportation system will continue as the system ages. Recommendations in this plan are conservative, because they factor in the impact of maintenance costs in the determination of available funding.

A variety of federal and state funds are used to implement the statewide overlay, maintenance, and operations program. Based on the review of funds available for Categories 1 and 6, it is estimated that \$1.17B and \$171M will be available within the next 25 years, respectively.

Reviewing the estimated funding available in the RGVMAB for maintenance and operations as administered by the TxDOT Pharr district helps to better inform decision making at the MPO level when coordinating strategies with regional planning partners. This includes considerations for operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods as described in greater detail in the grouped project categories listed in Chapter 6.

CONSTRAINING THE PLAN

Projects not already included in the current TIP or UTP were sorted into 2031-2036 and 2037-2045 stages by priority ranking, estimated project costs, and expected funding availability. Projects remaining once expected levels of funding were exhausted have been categorized as unfunded projects.

Total anticipated constrained program costs are estimated to be just under \$3.79 billion in YOE dollars for roadway projects and just under \$888.4 million for transit. Because the total program funding is expected to be greater than program costs the RGVMPPO 2045 MTP is fiscally constrained. In accordance with TxDOT's UTP process, the first ten years of the plan (2021-2030) are also fiscally constrained by funding category based on the projected UTP allocations in the 2021 UTP.



Table 8-7 shows the fiscal constraint summaries for the years covered in the 2045 MTP. It includes a summation of the estimated roadway (Table 8-2) and transit (Table 8-4) funds in comparison to the programmed and planned costs.

Table 8-7: 2021-2045 MTP Fiscal Summary

	Estimated Funding	Estimated Costs
Roadway	\$6,008,334,303	\$3,787,605,612
Transit	\$888,401,476	\$888,401,476
Total	\$6,896,735,779	\$4,676,007,088

A full listing of the fiscally constrained program of projects over the lifespan of this MTP update (2021-2045) can be found in Chapter 6. This listing includes 2021 UTP Projects, regionally significant District Area projects within the RGVMAB, and the MPO prioritized list of projects discussed in Chapter 6.

A listing of unconstrained projects, or unfunded needs projects is also included in Chapter 6. The unconstrained projects represent project costs exceeding expected funding for mobility projects over the next 25 years as has been stated. Although the current projections show an unexpended amount and some of the unfunded illustrative projects could be advanced into the program, there is a basis for caution. As the economic impacts of the shutdown associated with COVID-19 become better understood, there is a likelihood that the financial revenue projections may need to be adjusted downward. Maintaining a cushion between expenditures and revenues pending further insight into current economic trends provides a conservative outlook that allows the RGVMPO to be confident that the MTP is financially constrained even if the economy is slow to recover from the current economic uncertainties.