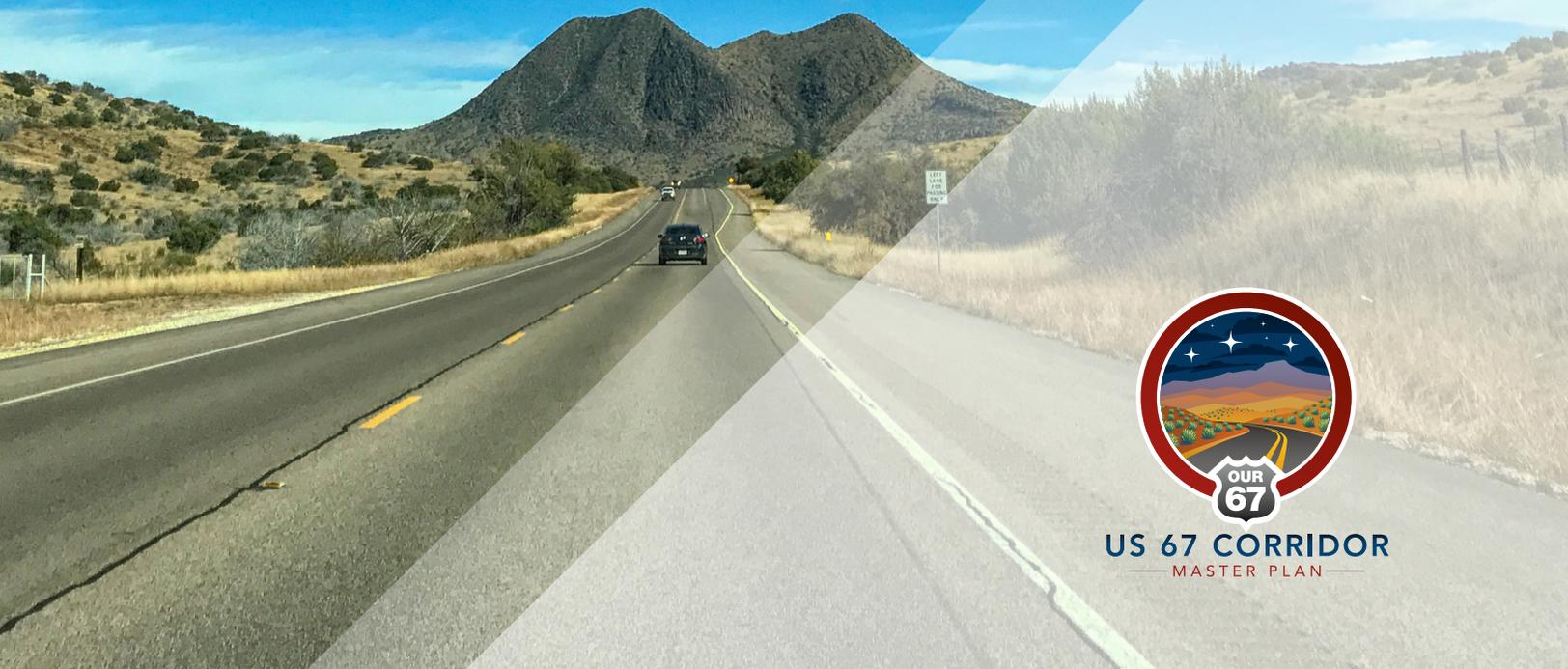
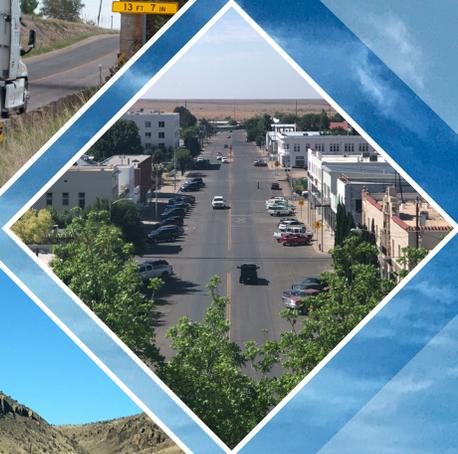




US 67 CORRIDOR MASTER PLAN

APPENDIX P

FEBRUARY 2020



US 67 CORRIDOR
MASTER PLAN

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US 67 CORRIDOR
— MASTER PLAN —

Memorandum

*To: Rebecca Reyes, TxDOT Project Manager
Christopher Weber, TxDOT Alpine Area Engineer*

From: CDM Smith

Date: February 2020

Subject: US 67 Corridor Master Plan Development of Funding Forecasts Technical Memorandum

1.0 Introduction

The purpose of this technical memorandum is to prepare a method of forecasting and develop modal funding forecasts for the recommended improvements along the US 67 corridor. For highway funding, this report utilized 10-year plan forecasts to determine future conditions and need gaps.

1.1 Background

The Unified Transportation Program (UTP) guides the districts, divisions and the Texas Transportation Commission (Commission) with transportation project development. The UTP is coordinated by the Transportation Planning and Programming (TPP) Division of the Texas Department of Transportation (TxDOT) and is developed annually in accordance with the Texas Administrative Code (TAC §16.105). The UTP is approved by the Commission annually prior to August 31 of the calendar year. The UTP is part of a comprehensive planning and programming process flowing from TxDOT's agency mission to project-level implementation. That is, the UTP is an intermediate programming document linking the planning activities of the Statewide Long-Range Transportation Plan (SLRTP), the Metropolitan Transportation Plans, and Rural Transportation Plan (RTP) to the detailed programming activities under the Statewide Transportation Improvement Program (STIP) and TxDOT's 24-month (2-year) Letting Schedule. **Figure 1** below briefly describes these plans.

The Unified Transportation Program (UTP) – 10-year plan linking the SLRTP, MTP and RTP to the STIP and Letting Schedule.

The Statewide Long-Range Transportation Plan (SLRTP) - 20+ year plan and includes roadways, pedestrian and bicycle facilities, transit, freight and passenger rail, airports, waterways and ports, pipelines, and intelligent transportation systems.

The Metropolitan Transportation Plan (MTP) – 20+ year plan that includes an integrated, intermodal transportation system.

The Rural Transportation Plan (RTP) – 20+ year plan that includes transportation needs outside of MPO boundaries and includes added capacity highway specific projects.

The Statewide Transportation Improvement Program (STIP) – Four-year program that includes the MPO and Rural TIPs and is consistent with the SLRTP and MTP. In non-attainment areas (Houston, Dallas-Fort Worth, Beaumont, and El Paso), projects must conform to the State Implementation Plan.

24-month letting schedule - Contains projects authorized by the Commission which have been identified as ready for letting (i.e. out for bids) or obligation of funds for that fiscal year by each District.

Figure 1: Description of Plans Captured in the UTP

The UTP allocates projected funding and authorizes projects for planning, development, and construction activities and includes projects involving highways, aviation, public transportation, and state and coastal waterways. As required by the Texas Administrative Code, TxDOT organizes the UTP into 12 prescribed funding categories that address specific project types or ranges of eligible activities. The UTP must also list certain projects TxDOT intends to develop or begin constructing during the 10-year UTP period and identify the categories through which each project is funded.

1.2 The US 67 Funding Landscape

The US 67 corridor benefitted from the creation of the RTP portion of the planning process. The RTP was established in 2012 in order to place a focus on the rural component of the SLRTP and provide a blueprint for the development of a safer, more efficient and less congested transportation network between population centers. The RTP is a component of the Statewide Long-Range Transportation Plan and identifies planned improvements for highways by focusing on rural added capacity projects that address statewide mobility and connectivity goals. US 67 has been designated by TxDOT as a Statewide Connectivity Corridor with a port of entry to Mexico; a part of the Texas Trunk System; and a part of the National Highway System. Projects along US 67 corridor are given preferential consideration versus other corridors that do not have these designations and characteristics.

The Odessa District is also heavily impacted by energy sector truck traffic due to oil and gas exploration and extraction activities within and around the Permian Basin area creating additional damages to US 67 compared to other roadways in the state. The US 67 alignment traverses directly through Upton and Pecos counties. However, as noted in **Figure 2** below, all counties within the Odessa District are within the Permian Basin, resulting in increased heavy truck traffic being directed to US 67 which is one of the few major corridors in the region. Increased truck traffic on US 67 from activities in the Permian Basin is also likely caused by energy sector traffic in Hudspeth, Culberson, Jeff Davis and Brewster counties of TxDOT El Paso District, but to a lesser extent than those counties in TxDOT Odessa District.



Figure 2: Counties in the Odessa District within the Permian Basin

As a result of the importance to connectivity and energy sector traffic, funding for projects that are needed along US 67 corridor, are most likely to be primarily funded from Category 4 - Statewide Connectivity, Category 11 - District Discretionary, and Category 12 - Strategic Priority which are described in **Table 1**, **Table 2**, and **Table 3** below.

Table 1: Category 4 Statewide Connectivity Corridor Projects

| | |
|--|--|
| <p>General Description</p> | <p>Category 4 addresses mobility on major state highway system corridors, which provide connectivity between urban areas and other statewide corridors. Projects must be located on the designated highway connectivity network that includes:</p> <ul style="list-style-type: none"> • The Texas Highway Trunk System • National Highway System (NHS) • Connections to major seaports or border crossings • National Freight Network • Hurricane evacuation routes <p>The designated connectivity network was selected by the Texas Transportation Commission and includes three corridor types:</p> <ul style="list-style-type: none"> • Mobility corridors—High-traffic routes with potential need for additional roadway capacity • Connectivity corridors—Two-lane roadways requiring upgrade to four-lane divided • Strategic corridors—Routes that provide unique statewide connectivity, such as Ports-to-Plains |
| <p>Distribution Methodology</p> | <p>Category 4 Regional Connectivity Funds distributed to specific projects based on performance scoring thresholds and qualitative analysis.</p> <p>Category 4 Urban Connectivity Funds are distributed via formula as follows:</p> <ul style="list-style-type: none"> • 20% - Total vehicle miles traveled (on and off system) • 25% - Population • 8% - Lane miles (on system) • 15% - Truck vehicle miles traveled (on system) • 4% - Percentage of census population below the federal poverty level • 8% - Centerline miles (on system) • 10% - Congestion • 10% Fatal and incapacitating crashes |
| <p>Project Selection Approach</p> | <p>TxDOT districts select Category 4 Regional projects in consultation with TPP using a performance-based prioritization process that assesses mobility needs on designated connectivity corridors in the district.</p> <p>TxDOT districts select Category 4 Urban projects in consultation with MPOs using a similar prioritization process. All Category 4 funding must be authorized by the Texas Transportation Commission.</p> |

Table 2: Category 11 District Discretionary

| | |
|--|---|
| <p>General Description</p> | <p>Category 11 addresses TxDOT district transportation needs through the sub-programs listed below. Common Category 11 project types include roadway maintenance or rehabilitation, added passing lanes (Super 2), and roadway widening (non-freeway).</p> <p>District Discretionary Projects selected at the discretion of each TxDOT District. Most projects are on the state highway system. However, some projects may be selected for construction off the state highway system on roadways with a functional classification greater than a local road or rural minor collector. Funds from this program should not be used for right of way acquisition.</p> <p>Energy Sector Safety and maintenance work on state highways impacted by the energy sector.</p> <p>Border Infrastructure Rider 11(b) funding is distributed to the three TxDOT districts with international ports of entry (Pharr, Laredo, and El Paso Districts) for highway projects within 50 miles of a port of entry. Federal funds designated for border state infrastructure follow project selection guidelines outlined under the CBI program (see Category 10 description in the UTP). Selection criteria include improvements that facilitate safe movement of motor vehicles at or across the land border between the United States and Mexico.</p> |
| <p>Distribution Methodology</p> | <p>District Discretionary Minimum \$2.5 million annual allocation to each TxDOT district per Rider 11(a). If additional funds are distributed, the formula below is used:</p> <ul style="list-style-type: none"> • 70% on-system vehicle miles traveled • 20% on-system lane miles • 10% annual truck vehicle miles traveled <p>The Texas Transportation Commission may supplement the funds allocated to individual districts on a case-by-case basis to cover project cost overruns.</p> <p>Energy Sector Allocation formula based on the following weighted factors:</p> <ul style="list-style-type: none"> • 40% three-year average pavement condition score • 25% oil and gas production taxes collected • 25% number of well completions • 10% volume of oil and gas waste injected <p>Border Infrastructure Rider 11(b): Under a provision in the FAST Act, TxDOT may designate 5% of the state’s federal Surface Transportation Block Grant (STBG) funds for border infrastructure projects. This funding is distributed to the three border districts with ports of entry — Pharr, Laredo, and El Paso Districts.</p> |

Table 2: Category 11 District Discretionary (continued)

| | |
|--|---|
| <p>Project Selection Approach</p> | <p>TxDOT districts select projects using a performance-based prioritization process that assesses district-wide maintenance, safety, or mobility needs. The Texas Transportation Commission allocates funds through a formula allocation program. 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): Selected by the Commission. Project selection criteria include, but are not limited to:</p> <ul style="list-style-type: none"> • Number of land border ports of entry • Number of incoming commercial trucks and railcars • Number of incoming personal motor vehicles and buses • Weight of incoming cargo by commercial trucks |
|--|---|

Table 3: Category 12 Strategic Priority

| | |
|--|---|
| <p>General Description</p> | <p>Category 12 addresses projects with specific importance to the state, including those that improve:</p> <ul style="list-style-type: none"> • Congestion and connectivity • Economic opportunity • Energy sector access • Border and port connectivity • Efficiency of military deployment routes or retention of military assets in response to the Federal Military Base Realignment and Closure Report • The ability to respond to both human-made and natural emergencies <p>Common project types include roadway widening (both freeway and non-freeway), interchange improvements, and new-location roadways.</p> |
| <p>Distribution Methodology</p> | <p>Funding in Category 12 is awarded to specific projects at the discretion of the Texas Transportation Commission, which selects from candidate projects nominated by TxDOT districts and MPOs.</p> <p>Texas Clear Lanes</p> <p>This subset of Category 12 projects is prioritized in collaboration with the MPOs in the state’s five largest metro areas (Dallas, Fort Worth, Houston, San Antonio, and Austin). Projects are intended to address the top 100 most-congested segments in the state (directly and indirectly).</p> |
| <p>Project Selection Approach</p> | <p>The Texas Transportation Commission selects projects statewide using a performance-based prioritization process.</p> |

Other funding categories that have typically had funds available for smaller projects include Category 8 - Safety, Category 9 - Transportation Alternatives Set-Aside Program and Category 10 - Supplemental Transportation Programs. There are five projects currently funded under Category 9 related to bicycle and pedestrian shared use facilities in Presidio County, four of which are in the City of Presidio and one in the City of Marfa. However, Category 8 - Safety has the greatest potential for funding for projects along US 67 corridor. Category 8 - Safety is managed by TxDOT Traffic Division and includes three programs: Highway Safety Improvement Program (HSIP), Safety Bond Program, and Systemic Widening Program. Safety projects are selected based on need measured by the safety improvement index, roadway safety, and project-specific characteristics. Category 8 - Safety has \$4 billion in funds available statewide over the 10-year period in the 2020 UTP that the El Paso and Odessa Districts would be eligible to pursue. The 2020 UTP has increased this funding category by \$600 million due to the new “Road to Zero” program implemented by TxDOT. This \$600 million represents a significant improvement in the volume and the potential size of projects funded from Category 8 - Safety. There are several projects in various planning stages for the use of Category 8 - Safety including adding passing lanes and safety treatments of fixed objects.

Federal loans and grants may also be available through, for example, the US Department of Transportation (USDOT); the Economic Development Administration (EDA) Public Works Program; and the US Department of Agriculture Community Facility Development Loans and Grants. The USDOT continues to distribute Better Utilizing Investments to Leverage Development (BUILD) grants and Infrastructure for Rebuilding America (INFRA) grants for transportation projects across the US. The evaluation criteria, minimum and maximum amounts of the grants and rules for applying are outlined in a Notice of Funding Opportunity (NOFO). In order for the US 67 to be competitive for these grant programs, some work needs to be done in advance of the NOFO as the time to respond is relatively short compared to the work needed to be done. Advance work includes project planning and development work and benefit-cost analysis to highlight the value that can be brought to a region if a particular project is implemented within the time frames described in the application.

Prior to FY 2019, the EDA Public Works Program provided grant funds to help distressed communities expand, revitalize and upgrade their infrastructure to attract and retain businesses, expand the availability of job opportunities, diversify the local economic base, and assist in the acquisition and development of land and infrastructure to locate or expand private sector industry and business operations. EDA Public Works Program grants are competitive, non-disaster infrastructure projects ranging from \$1.5 million to \$5 million. Although the FY 2018 Notice of Funding Opportunity (NOFO) remains open and several Public Works Program projects have been funded in FY 2019, most public works projects funded by EDA Public Works Program in 2019 are through disaster recovery funds for communities impacted by disasters in 2016 through 2018.

The EDA Public Works Program could provide financial resources for US 67 of a project that would directly benefit economic development in a community served by US 67 that might include partial funding for an interchange or a corridor connecting an industrial park or new industry.

USDA Community Facility Development Loans and Grants provide funding, primarily for utility infrastructure, through a NOFO. However, the maximum grant available in this fiscal year is \$300,000 and only \$40 million was appropriated for the entire program.

1.3 Potential Funding Levels

Because of the recent volatility in the cash forecast due to the uncertainty of the solvency of the Federal Highway Trust Fund, the increase in State Funding due to passage of Proposition 1 (generally redirecting Rainy Fund Deposits to the State Highway Fund) and Proposition 7 (generally redirecting sales tax to the State Highway Fund), it appears to be safest to focus on the more recent history of the 2018, 2019, and 2020 UTPs for estimating potential funding. It is reasonable to expect that some portion of the \$1.4 billion in funds that is likely to be available to the El Paso and Odessa Districts over the 10-year UTP planning horizon could be available to fund US 67 corridor improvements as noted in **Table 4** below. Category 8 Safety also has \$4 billion in funds available statewide over the 10-year period in the 2020 UTP that the El Paso and Odessa Districts should pursue for safety-related projects. The detailed information supporting **Table 4** is summarized and included as **Attachment A** to this report.

Table 4: Expected Funding Available over the Next 10-years to El Paso and Odessa Districts

| | Category 4 | | Category 11 | | Category 12 | Grand Totals |
|--------------|---------------|---------------|----------------------|------------------|---------------|----------------|
| | Connectivity | | Riders 11(a) &(b) | Energy Sector | | |
| District | Urban | Regional | | | | |
| El Paso | \$156 million | \$31 million | \$52 million | \$47 million | \$116 million | \$402 million |
| Odessa | \$76 million | \$221 million | \$37 million | \$434 million | \$227 million | \$995 million |
| Total | \$232 million | \$252 million | \$89 million | \$481 million | \$343 million | \$1.39 billion |

1.4 Need Gaps

While \$1.4 billion dollars is a significant sum of money, the needs of TxDOT's 25 Districts will exceed this anticipated funding over a 10-year period. As a result, US 67 projects identified through this US 67 Corridor Master Plan development process will need to compete with other needed projects within each district, for the funding categories for which the projects are eligible. The US 67 projects in **Table 5** below are within the limits of this master plan and currently included in the UTP or letting schedule for the El Paso and Odessa Districts. Scheduled letting dates and descriptions of work are included below from October 7, 2019 letting schedule or the UTP if not within the 24-month letting schedule window.

Table 5: Projects in the UTP or Letting Schedule

| Control Section Job | Funding Category | Description of Work | Estimated Construction Cost | County | UTP | Letting Date |
|---------------------|------------------|------------------------------------|-----------------------------|----------|-----|--------------|
| 0104-07-025 | 8 | Hazard Elimination & Safety | \$2,417,035 | Presidio | No | 5/2021 |
| 0020-08-046 | 8 | Hazard Elimination & Safety | \$613,351 | Presidio | No | 5/2021 |
| 0075-02-026 | 1 | Widen Road – Add Lanes & Shoulders | \$32,992,800 | Pecos | Yes | 6/2021 |

In addition to the UTP and letting schedule, there are also other projects reflected in TxDOT’s Project Tracker which is a database that follows the progress of most projects under development and under construction. The projects under development that are in Project Tracker and those that are not, should approximately total the \$1.4 billion estimated to be available over the next 10 years as the funding allocations by District in the UTP are targets that all Districts are always striving to utilize for project delivery. As a result, the \$129 million of projects identified through this US 67 Corridor Master Plan for the short-term (up to 5 years) and mid-term (5-10 years), would be additional projects competing for the same funding, creating a gap of \$129 million for the estimated UTP funds over the short- and mid-term as summarized by type in **Table 6** below.

Table 6: Projects Identified Through the Development of US 67 Corridor Master Plan

| Project Type | Cost | | |
|---|----------------------|----------------------|----------------------|
| | Short- and Mid-term | Long-term | Total |
| Complete Streets | \$6,500,000 | | \$6,500,000 |
| Pavement Concepts | \$5,700,000 | \$226,400,000 | \$232,100,000 |
| Intelligent Transportation Systems Concepts | \$19,400,000 | \$9,600,000 | \$29,000,000 |
| Safety Core Concepts | \$80,700,000 | \$251,400,000 | \$332,100,000 |
| Alternative Intersection Concepts | \$13,100,000 | \$500,000 | \$13,600,000 |
| Core Intersection Concepts | \$3,500,000 | \$3,000,000 | \$6,500,000 |
| Grand Total (rounded) | \$129,000,000 | \$491,000,000 | \$620,000,000 |

There are also \$491 million of long-term projects that are identified in the US 67 Corridor Master Plan that are outside of the UTP time frame that is the focus of this analysis. As US 67 projects are developed, the timing of when they can go to letting (i.e. out for bids) will determine in what year the funds will be needed. It may be necessary to coordinate with TxDOT TPP to ensure the needed amounts are available in the years for which the projects could be let.

1.5 Information Sources

The numbers and category descriptions included in this report came from the most current versions of the 2018, 2019, and 2020 UTPs. Because the UTP is a living document with periodic adjustments to allocation methodology to achieve evolving goals, the latest information regarding UTP allocations for FY 2018, 2019, and 2020 can be found [here](#). Information about US 67 being on the Statewide Connectivity Corridor can be found [here](#). Information about US 67 being on the Texas Trunk System can be found [here](#) and the National Highway System can be found [here](#).

2.0 Modes Funded Privately or Through other Agencies

The purpose of this section is to address future funding levels or amounts from existing industry-provided studies or capital plans for modes funded privately or through other agencies, if they are available. For the US 67 corridor, all project funding has to come through TxDOT and the UTP Categories and there are no modes currently funded privately or through other agencies. Federal grants may be available through the USDOT; the EDA Public Works Program; and the USDA Community Facility Development Loans and Grants Program as described in **Section 1.2**.

3.0 Conclusion

The purpose of this technical memorandum is to develop a modal funding forecast for the recommended improvements along US 67 corridor. For highway funding, this report utilized the 10-year plan forecasts for the most likely UTP categories of funding, to determine future conditions and need gaps.

Because of the importance of connectivity and energy sector traffic, funding for projects that are identified through the US 67 Corridor Master Plan, are most likely to be primarily funded from Category 4 - Statewide Connectivity, Category 11 - District Discretionary, and Category 12 - Strategic Priority. Other funding categories that have typically had funds available for smaller projects along US 67 corridor include Category 8 - Safety, Category 9 - Transportation Alternatives Set-Aside Program, and Category 10 - Supplemental Transportation Programs. Due to the sporadic nature and the smaller amounts allocated, these other funding categories are not included in the forecast.

Approximately \$1.4 billion has been forecasted to be available for the two Districts out of which projects need to secure funding along US 67 over the next 10 years. As the El Paso and Odessa Districts are always striving to utilize their full target allocations provided in the UTP, the \$1.4 billion has been allocated by the Districts to projects that are under planning and/or development. As a result, the \$129 million of projects identified through this US 67 Corridor Master Plan would be additional projects competing for the same funding, creating a gap of \$129 million. There are also \$491 million of long-term projects that are identified in US 67 Corridor Master Plan that would need to be addressed beyond the UTP time frame.

Attachment A

| El Paso District | | | | | | | |
|---|----------------|----------------|----------------------|-----------------------|---------------------|---------------------|----------------------|
| UTP Year | 10-Year Period | As of Date | Category 4 | Category 4 | Category 11 | Category 11 | Category 12 |
| | | | Urban Connectivity | Regional Connectivity | Riders 11a and 11b | Energy Sector | Strategic Priority |
| 2018 | 2018 thru 2027 | 12/14/2017 | \$152,690,000 | \$31,300,000 | \$55,300,000 | \$39,090,000 | \$63,930,000 |
| 2019 | 2019 thru 2028 | 8/30/2018 | \$166,780,000 | \$31,298,776 | \$45,700,000 | \$47,410,000 | \$63,930,000 |
| 2020 | 2020 thru 2029 | 8/29/2019 | \$148,560,000 | \$31,300,000 | \$56,010,000 | \$54,010,000 | \$220,320,000 |
| | | Average | \$156,010,000 | \$31,299,592 | \$52,336,667 | \$46,836,667 | \$116,060,000 |
| | | Totals | Category 4 | \$187,309,592 | Category 11 | \$99,173,334 | |
| Total Categories 4, 11, and 12 Avg | | | \$402,542,926 | | | | |

| Odessa District | | | | | | | |
|---|----------------|----------------|----------------------|-----------------------|---------------------|----------------------|----------------------|
| UTP Year | 10-Year Period | As of Date | Category 4 | Category 4 | Category 11 | Category 11 | Category 12 |
| | | | Urban Connectivity | Regional Connectivity | Riders 11a and 11b | Energy Sector | Strategic Priority |
| 2018 | 2018 thru 2027 | 12/14/2017 | \$77,390,000 | \$221,400,000 | \$36,270,000 | \$392,270,000 | \$140,010,000 |
| 2019 | 2019 thru 2028 | 8/30/2018 | \$74,540,000 | \$200,213,200 | \$35,900,000 | \$378,050,000 | \$136,200,000 |
| 2020 | 2020 thru 2029 | 8/29/2019 | \$75,000,000 | \$240,730,000 | \$37,960,000 | \$529,870,000 | \$405,450,000 |
| | | Average | \$75,643,333 | \$220,781,067 | \$36,710,000 | \$433,396,667 | \$227,220,000 |
| | | Totals | Category 4 | \$296,424,400 | Category 11 | \$470,106,667 | |
| Total Categories 4, 11, and 12 Avg | | | \$993,751,067 | | | | |

| | | | | | | | |
|---|--|--|------------------------|--|--|--|--|
| Total El Paso and Odessa Districts | | | \$1,396,293,992 | | | | |
|---|--|--|------------------------|--|--|--|--|



US 67 CORRIDOR
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