

The background of the top half of the page is an aerial view of a city at sunset. The sky is a mix of orange, red, and purple. A large white box with a thin black border is superimposed over the city, containing the main title and subtitle. The city lights are visible in the distance.

# REVIVE35:

*Fixing congestion in  
the heart of Texas*

The background of the bottom half of the page is an aerial view of a city at night. The city lights are visible, and a large white box with a thin black border is superimposed over the city, containing the subtitle and date. The city lights are visible in the distance.

**Infrastructure for  
Rebuilding America  
(INFRA) Grant  
Application**

March 2019

What is the Project Name?	Revive35: San Antonio I-35 Northeast Expansion Project
Who is the Project Sponsor?	Texas Department of Transportation
Was an INFRA application for this project submitted previously? (if Yes, please include title)	No
INFRA Request	\$154 million
Total Federal Funding (excluding INFRA)	\$426 million
Estimated Non-Federal Funding	\$426 million
Future Eligible Project Cost (Sum of three previous rows)	\$1.006 billion
Previously Incurred Project Costs (if applicable)	NA
Total Project Cost (Sum of 'previous incurred' and 'future eligible')	\$1.006 billion
Are matching funds restricted to a specific project component? If so, which one?	No
Approximately how much of the estimated future eligible project costs will be spent on components of the project currently located on National Highway Freight Network (NHFN)?	\$1.006 billion
Approximately how much of the estimated future eligible project costs will be spent on components of the project currently located on the National Highway System (NHS)?	\$1.006 billion
Approximately how much of the estimated future eligible project costs will be spent on components constituting railway-highway grade crossing or grade separation projects?	\$0
Approximately how much of the estimated future eligible project costs will be spent on components constituting intermodal or freight rail projects, or freight projects within the boundaries of a public or private freight rail, water (including ports), or intermodal facility?	\$0
State(s) in which project is located.	Texas
Small or large project	Large
Urbanized Area in which project is located, if applicable.	San Antonio Urbanized Area
Population of Urbanized Area.	1,946,610
Is the project currently programmed in the:	
TIP?	Yes
STIP?	Yes
MPO Long Range Transportation Plan?	Yes
State Long Range Transportation Plan?	Yes
State Freight Plan?	Yes



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# 1 Project Summary

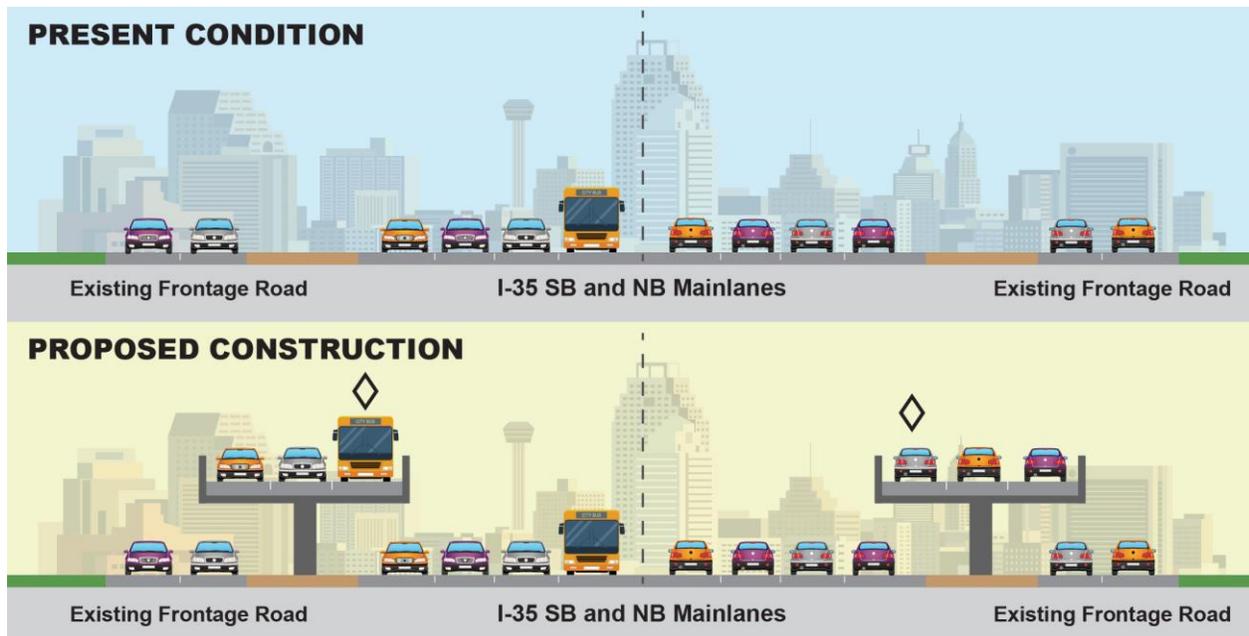
The Texas Department of Transportation (TxDOT) is pleased to submit this application for \$154 million of INFRA grant funding to leverage \$852 million of committed funding for the Revive35 project, locally known in San Antonio, Texas as the I-35 Northeast Expansion (I-35 NEX) project. **The project is expected to realize \$2.73 in benefits for every \$1 invested.**

The I-35 NEX project is an opportunity to partner with USDOT to meet the significant needs of the growing San Antonio region and enhance mobility in the I-35 corridor by adding three elevated express lanes in each direction, and upgrading existing ramp, frontage road, overpass and intersection facilities. Typical section comparisons between the existing and proposed facilities are shown in **Figure 1**.

The I-35 NEX project meets the Key Program Objectives of the INFRA grant program by leveraging state dollars to complete the project, improving mobility, managing vehicle congestion, promoting efficient use of existing facilities, improving local community access in a rapidly growing region, utilizing innovation to enhance project delivery and accounting for timely milestone achievement.

The I-35 NEX project is part of the Texas Transportation Commission's Texas Clear Lanes Initiative, a congestion relief program funded by voter approved gas and severance taxes and initiated to spur economic development and create jobs by addressing congestion in the state's largest metropolitan areas.<sup>1</sup>

**Figure 1 I-35 NEX Project - Present & Proposed Typical Section**

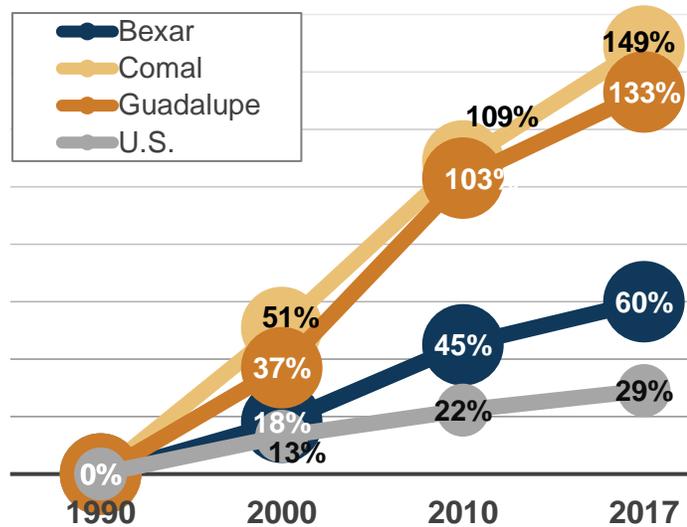


<sup>1</sup> The Texas Clear Lanes program identified I-35, from I-410 in San Antonio to FM 1103 in Schertz, as a priority project of state significance. <http://ftp.dot.state.tx.us/pub/txdot/commission/2018/0926/2-presentation.pdf>

The I-35 corridor is more than an interstate highway: it is a vital artery through the heart of San Antonio, Texas and the United States. As one of the state's primary freight and passenger vehicle corridors, I-35 facilitates national and international freight movement, as well as local and regional commute travel in major metropolitan cities like San Antonio and hundreds of smaller suburban communities and rural towns.

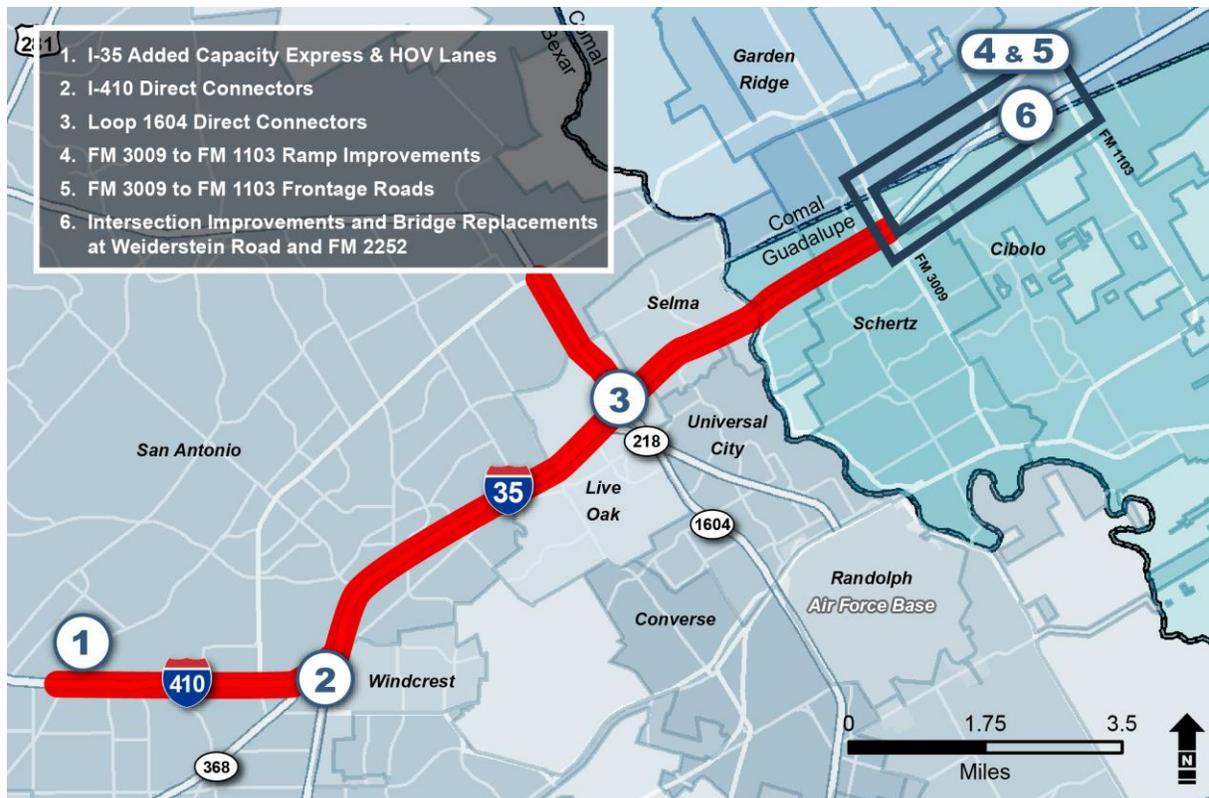
As an economic engine for the nation's economy, I-35 is critical to the international, national and regional transportation network. However, necessary improvements on I-35 have not kept pace with tremendous population growth (Figure 2) and subsequent increases in vehicular traffic in the San Antonio region of Bexar,

**Figure 2** Historic Regional Population Growth, by County



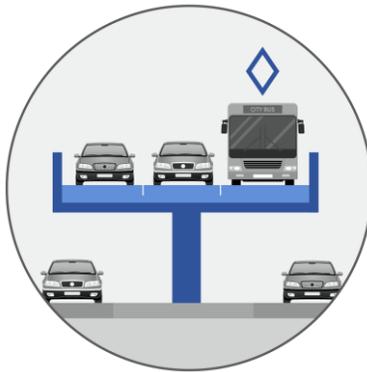
Source: U.S. Census Bureau, 2013-2017 American Community Survey, 5-year estimates

**Figure 3** I-35 NEX Project – Project Limits



Comal, and Guadalupe counties. Freight trucks and the traveling public face unreliable travel times and limited choices because travel demand on the I-35 corridor exceeds available capacity.

The limits of the I-35 NEX project improvements, shown in **Figure 3**, will provide congestion relief to three segments of Texas' most congested roadways.<sup>2</sup> The existing I-35 facility within the project limits is a major north-south, controlled-access interstate highway that varies between six to ten barrier-separated mainlanes and two to three lanes of continuous frontage roads in each direction. The success of the I-35 NEX project depends on several key components, outlined below.



## 1. I-35 Added Capacity Express Lanes and HOV Lanes

The added capacity express lanes in the I-35 NEX project are expected to have significant travel time reliability improvements for local, state, national and international freight movement and for traveling residents and employees of Bexar, Comal, and Guadalupe counties. The express lanes will improve commuting times between rapidly-growing suburban residential areas and central San Antonio, Fort Sam Houston and Randolph Air Force Base. Freight moving through the region will benefit from the express lanes and improved reliability.

The new HOV lanes will enable regional vanpool services and express service provided by VIA Metropolitan Transit along with Alamo Regional Transit rural demand response services provided by the Alamo Area Council of Governments. These services will ensure reliable trips to employment centers, education, and health facilities within the region.<sup>3</sup> Improving air quality in the San Antonio region has also become a priority; reducing congestion and increasing the number of people per vehicle means fewer emissions and cleaner air.

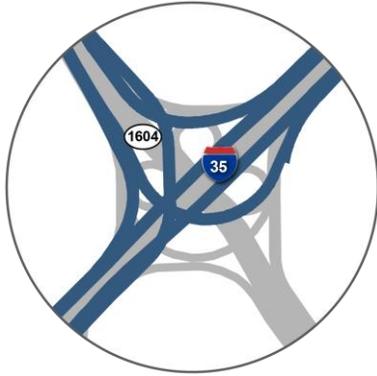


## 2. I-410 Direct Connectors

Facilitating direct access and direct connections, the I-35 NEX project maximizes travel time savings and trip reliability for regional commuters. The I-410 direct connectors provide essential access to the I-35 express lanes for regional travel to and from the San Antonio International Airport, employment centers and key freight industry assets along I-410.

<sup>2</sup> The 2018 Texas' Most Congested Roadways report by Texas A&M Transportation Institute Urban Mobility Information ranked I-35 from Connally Loop NE/I-410 to Connally Loop E/I-410 as the 45<sup>th</sup> most congested road segment. I-35 from Connally Loop NE to Charles West Anderson Loop/1604 NE was ranked 55<sup>th</sup>. Connally Loop N/I-410 from McAllister Freeway/US 281 to I-35 was ranked 76<sup>th</sup>.

<sup>3</sup> Future Metro Express service connecting New Braunfels, Schertz, Randolph Park and Ride and Downtown San Antonio was identified in VIA Metropolitan Transit's Long Range Plan, Vision 2040 [http://www.viainfo.net/wp-content/uploads/2018/05/2016\\_0824\\_VIA\\_2040\\_LRP.pdf](http://www.viainfo.net/wp-content/uploads/2018/05/2016_0824_VIA_2040_LRP.pdf)



### 3. Loop 1604 Direct Connectors

Regional commuters along I-35 will have uninterrupted access to Loop 1604 through direct connectors. This project element will facilitate improved mobility to major employment centers located along Loop 1604 including the corporate headquarters of CST Brands, regional hospital facilities in Stone Oak, the University of Texas at San Antonio, Valero Energy, and the retail and entertainment districts of Stone Oak, the Rim, and La Cantera.



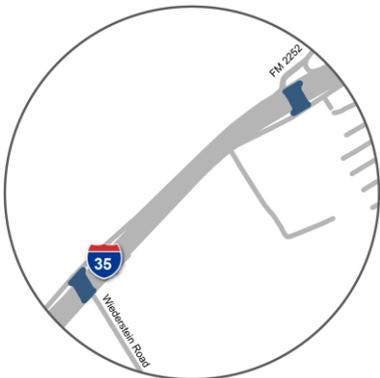
### 4. FM 3009 to FM 1103 Ramp Improvements

Supporting the significant commercial and residential growth and development of Comal and Guadalupe counties, the I-35 NEX project includes operational improvements from FM 3009 to FM 1103 including improved ramps providing greater capacity and access from the neighboring communities to I-35. These improvements will increase mobility, safety, and support economic development.



### 5. FM 3009 to FM 1103 Frontage Roads

Reconstructed frontage roads improve access to adjacent businesses, provide pedestrian and bicycle accommodations and allow for greater redundancy and reliability for freight movement by allowing traffic to detour onto frontage roads when blockages occur on I-35.



### 6. Intersection Improvements and Bridge Replacements at Weiderstein Road and FM 2252

To facilitate improved safety and capacity aimed at reducing congestion, the I-35 NEX project includes intersection improvements and bridge replacements at Weiderstein Road and FM 2252. These improvements will support the economic growth underway at these fast-growing nodes.



**Critical to national and regional long-term economic vitality**, the I-35 NEX project accomplishes the following:

- Increases U.S. global economic competitiveness by **alleviating supply-chain bottlenecks and enhancing last-mile connectivity** to freight-intensive industries, such as Port San Antonio and the Toyota Texas Manufacturing Plant in South San Antonio. I-35 is a major international trade corridor connecting Canada and Mexico with the United States. In Texas, I-35 terminates in Laredo, Texas, the largest land-based port of entry for the United States and locally serves Port San Antonio;
- **Supports critical military missions** at Joint Base San Antonio, comprised of Fort Sam Houston, Brooke Army Medical Center, Randolph Air Force Base, and Lackland Air Force Base, which are all located within 25 miles of the I-35 NEX project;
- **Enhances accessibility to numerous regional activity centers** and economic drivers such as Fort Sam Houston, Brooke Army Medical Center, Union Pacific Railroad Facilities, Randolph Air Force Base, the Forum at Olympia Parkway, and the Amazon Distribution Center;
- Optimizes roadway space with **transportation demand management strategies**, such as the HOV lanes supporting regional commute solutions;
- **Connects residents to jobs, education, and recreation and ensures businesses can deliver goods on time**; and
- **Boosts safety** by reducing traffic density and improving interactions between roadway users with improved design standards, bridge and intersection improvements and upgraded bicycle and pedestrian facilities.

**The I-35 NEX corridor is a quality investment because it:**

- Maximizes non-federal funding through the **Texas Clear Lanes Program**;
- **Incorporates innovative project elements aligned with FHWA investments in cutting-edge technology** through the 2017 Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) grant for the Texas Connected Freight Corridor Project; and
- Utilizes **innovative contracting and project delivery to minimize risks and expedite delivery**.

**Performance and accountability are ensured** with the I-35 NEX project due to:

- **Stable Texas Clear Lanes Program funding sources** that draw upon state funding initiatives recently passed by Texas voters; and
- Specific accountability measures to **ensure successful project delivery**.

Given the I-35 corridor's critical function within the region,<sup>4</sup> multiple planning studies over the last 20 years have underscored the importance of continued investment in mobility solutions for the corridor. The Northeast (I-35) Corridor Major Investment Study conducted in 1996 recommended major capacity

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<sup>4</sup> The corridor was deemed regionally significant in both the 2035 and 2040 Alamo Metropolitan Planning Organization (MPO) Metropolitan Transportation Plans. AAMPO Mobility 2035, [http://www.alamoareampo.org/Plans/MTP/docs/Mobility2035/Mobility2035\\_FULL.pdf](http://www.alamoareampo.org/Plans/MTP/docs/Mobility2035/Mobility2035_FULL.pdf)  
AAMPO Mobility 2040, <http://www.alamoareampo.org/Plans/MTP/docs/Mobility2040/Final%20MTP%20Revised%20March%2010%202015.pdf>

improvements including six general purpose lanes and four barrier-separated lanes (comprised of one express lane and one HOV lane in each direction).

In 2011, the My35 Citizen Committee, a citizen-led needs-based planning entity responsible for long-range statewide planning in the I-35 corridor, recommended expanding the I-35 mainlane capacity to a minimum of eight lanes, constructing a managed lane in each direction, and improving critical intersections (I-35 at Loop 1604 and I-35 at I-410).<sup>5</sup>

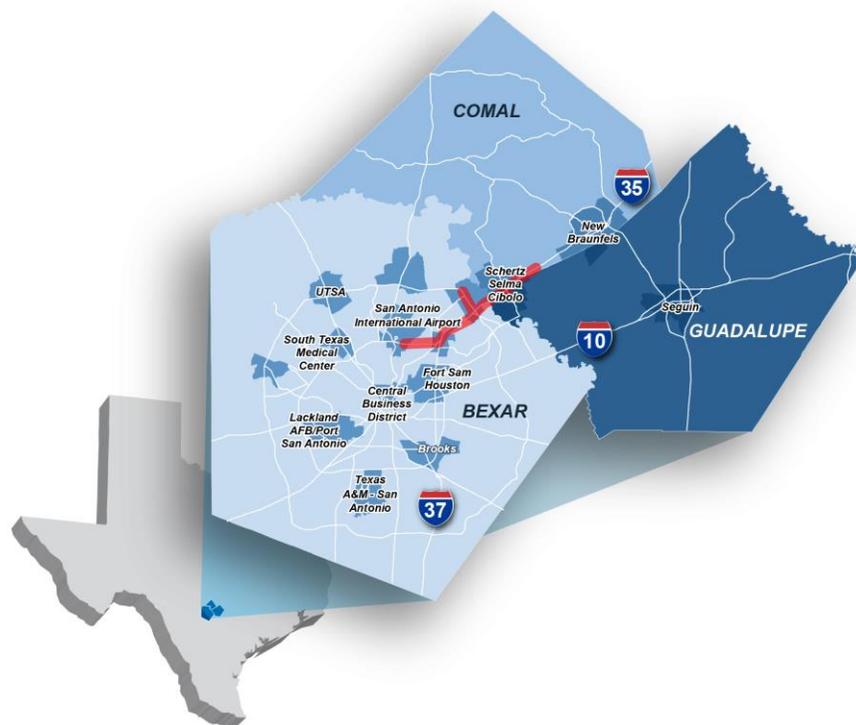
In 2013, TxDOT began identifying transportation needs and potential improvements along the I-35 corridor (between US 281 in downtown San Antonio to FM 1103 in Schertz) as part of the I-35 Planning and Environmental Linkages (PEL) Study.<sup>6</sup> The PEL study included a robust public outreach component that helped steer the technical feasibility aspects of the project. This study determined the project scope should include express lanes within the existing right of way to the extent possible in order to maximize mobility while minimizing corridor impacts. The PEL Study was followed by the preparation of an Environmental Assessment (EA) for the NEPA phase of project development, with a Finding of No Significant Impact (FONSI) issued in July 2015.<sup>7</sup> Several proposed modifications to the previously NEPA-approved project design necessitate the preparation of a Re-Evaluation of the EA, which is anticipated by Fall 2019.<sup>8</sup>

**Figure 4 I-35 NEX Project within the Region**

## 2 Project Location

The I-35 NEX project is located on the northeastern side of the San Antonio Urbanized Area within Comal County, Guadalupe County, and Bexar County, Texas (see Figure 4).

The northern terminus of the project begins at FM 1103 in Schertz and continues south along the I-35 facility for about 10 miles, terminating at the intersection of I-35 and I-410 in San Antonio. In addition, the



<sup>5</sup> <https://www.txdot.gov/inside-txdot/projects/studies/san-antonio/i35-pel.html>

<sup>6</sup> <http://ftp.dot.state.tx.us/pub/txdot-info/sat/projects/i35-pel/final-report.pdf>

<sup>7</sup> <http://ftp.dot.state.tx.us/pub/txdot-info/sat/projects/i35-pel/ea.pdf>

<sup>8</sup> The revised project includes the addition of two general purpose (GP) lanes and one high occupancy vehicle (HOV) lane in each direction on elevated structure. The proposed project would no longer include tolling. The revised project also includes direct connectors at the following major interchanges: I-410 North, I-410 South and Loop 1604 (west and east). The Re-Evaluation project limits extend from AT&T Parkway in San Antonio to FM 1103 in Schertz.

project also includes two direct connectors facilitating travel between the project and existing facilities at Loop 1604 and I-410.

The 15-mile I-35 NEX project encompasses a significant portion of the I-35 corridor within the region. This project provides improved mobility for the San Antonio Census-designated Urbanized Area, an area with a population of over 1.9 million residents.<sup>9</sup> Over the past 30 years, the counties of Bexar, Comal, and Guadalupe have experienced remarkable population growth, adding over 860,000 residents between 1990 and 2017, a 67 percent increase in population. By 2045 the region is expected to grow by another 68 percent.<sup>10</sup> The I-35 NEX project is critical to handle the significant growth in the region.

### 3 Project Parties

The I-35 NEX project grant recipient will be the TxDOT San Antonio District, which is responsible for planning, designing, building, operating and maintaining the state transportation system in a 12-county region of Central Texas. TxDOT's mission is to deliver a safe, reliable, and integrated transportation system that enables the movement of people and goods.

Other agencies (shown in **Figure 5**) have played roles in project development, including FHWA; the Alamo Area Metropolitan Planning Organization (AAMPO); the counties of Bexar, Comal, and Guadalupe; and the cities of Live Oak, Windcrest, Selma, Schertz, Cibolo, San Antonio, and Universal City. Many local, regional and state partners from both the private and public sectors are supportive of the I-35 NEX project. All letters of support can be found in **Appendix C**.

**Figure 5 I-35 NEX Project Parties**



<sup>9</sup> U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

<sup>10</sup> Growth calculated between 2017 population, as determined by the 2013-2017 American Community Survey 5-year estimates, and 2045 population, as forecasted by the AAMPO 2045 Model.

# 4 Grant Funds, Sources and Uses of All Project Funds

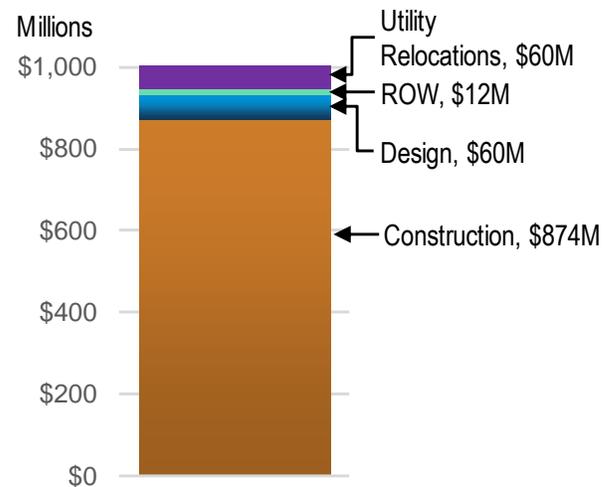
## 4.1 Previously Incurred Expenses

Future eligible project costs are sufficient for the I-35 NEX to qualify as a large project. TxDOT does not request consideration of costs incurred prior to the selection of the project for an INFRA grant.

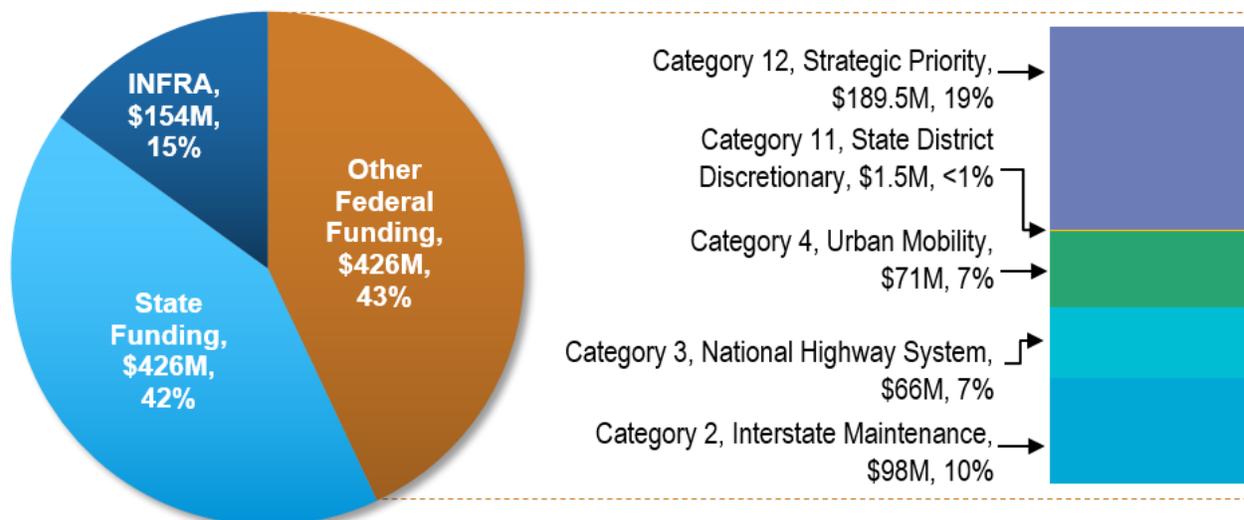
## 4.2 Future Eligible Costs, Sources and Uses, and Budget

The future eligible cost of I-35 NEX, \$1.006 billion, is comprised of design, construction, right of way (ROW), utilities, and ITS components. A budget showing each category of eligible cost and planned funding sources and uses are shown in **Figure 6** and **Figure 7**.

**Figure 6 I-35 NEX Project Budget Uses**



**Figure 7 I-35 NEX Project Budget Sources**





## 4.3 Stable and Reliable Fund Commitments

The State of Texas is a stable and reliable funding partner committed to maintaining the existing system, and building new infrastructure to encourage economic growth. In 1946, language was added to the Texas Constitution requiring three-fourths of all net revenue generated by motor fuels taxes to be used only for acquiring right-of-way (ROW); constructing, maintaining, and policing public roadways; or for the payment of principal and interest on certain road district bonds or warrants. For the FY2018-19 Biennium, TxDOT's sources of funding include:

- \$8.8 billion in State Highway Funds (33 percent of agency budget);
- \$5.4 billion in Proposition 1 and Proposition 7 funds (20 percent of agency budget);
- \$1.9 billion in other funding mechanisms including bond proceeds, concession payments, and Texas Mobility Fund (7 percent of agency budget); and
- Over \$10.5 billion in federal funds to construct, maintain and operate approximately 197,100 miles of state highway system (40 percent of agency budget).

## 4.4 Contingency Reserves

Despite the strong funding plan that is in place, TxDOT recognizes the need for contingency funding and has budgeted sufficient contingency amounts to cover unanticipated cost increases. The possibility of federal or state transportation dollars being unavailable for such project expenditures is remote. Historically, periodic short-term interruptions in federal reimbursements have been successfully handled through cash management practices. In the unlikely event that federal and state dollars are both unavailable, Texas has contingency solutions ranging from short-term cash management techniques to longer-term access to credit and capital markets.

## 4.5 Effect on \$500 Million Maximum

No components of this project are subject to the FAST Act limits on freight, rail, port, and intermodal infrastructure.

# 5 Merit Criteria

## 5.1 National and Regional Economic Vitality

As one of Texas' most heavily traveled freight and passenger corridors, **the I-35 NEX corridor is critical to national and regional long-term economic vitality.** I-35 serves as a critical gateway for the nation's strategic trade relationships with Mexico, Central America, and South America, connecting to the port of entry in Laredo, Texas and the Port San Antonio Foreign Trade Zone. The I-35 NEX project elements position the state to benefit from the continued increase in trade between the United States, Canada and Mexico. Trade with Mexico relies on efficient highway travel along I-35 in Texas, including both freight destined for the state and freight moving through to other markets.<sup>11</sup> The I-35 NEX elevated

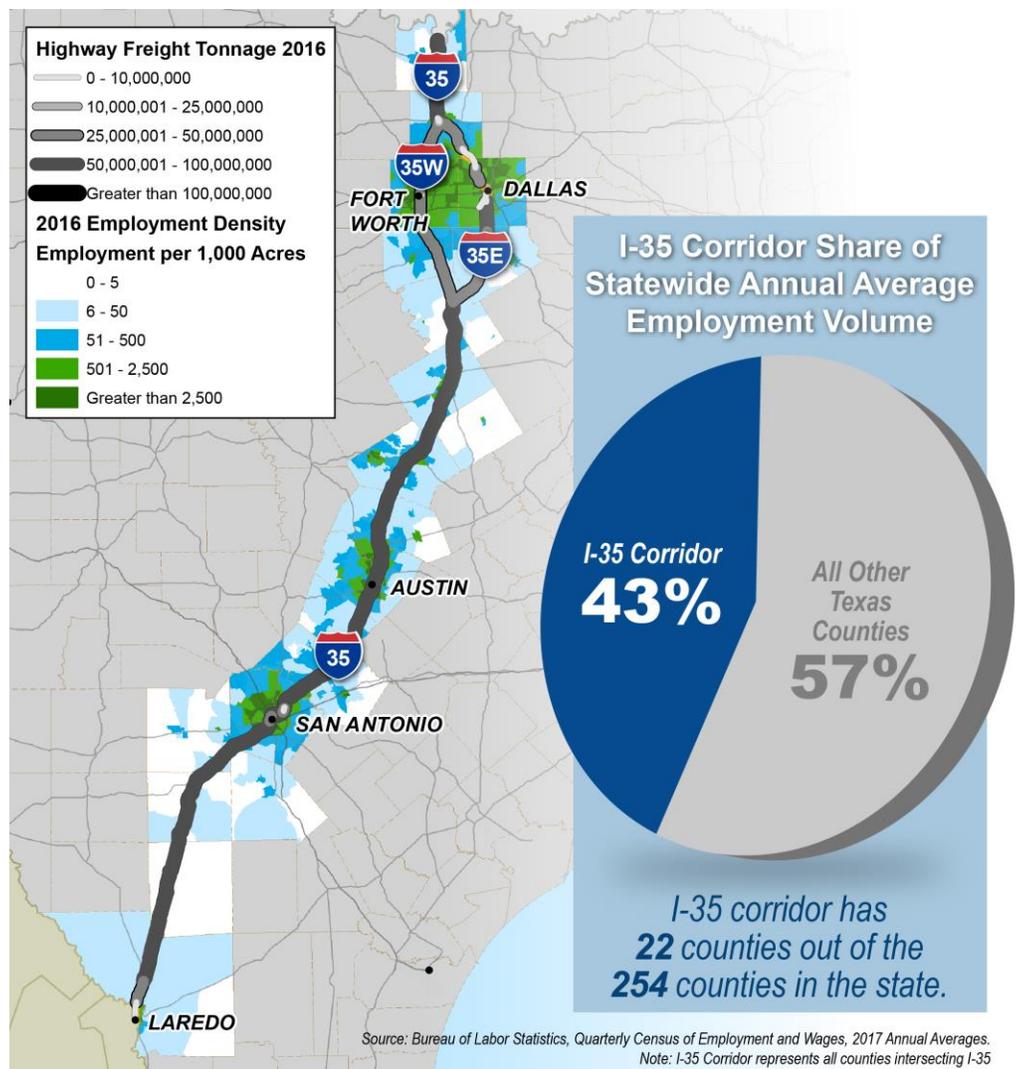
<sup>11</sup> Texas Freight Mobility Plan 2017, <ftp://ftp.dot.state.tx.us/pub/txdot/move-texas-freight/studies/freight-mobility/2017/plan.pdf>

lanes and operational improvements provide an opportunity to keep freight moving reliably through the San Antonio region.

**I-35 is one of Texas' top three statewide corridors for highway freight tonnage, carrying almost 60 million tons in 2016 (shown in Figure 8). Between 2007 and 2017, Gross Regional Product (GRP) for the San Antonio-New Braunfels MSA grew by 63 percent to \$130 billion - nearly twice the growth rate of U.S. GDP.** Given increasing freight demand, particularly from core export industries of agriculture, energy, and consumer electronics, the Texas Freight Mobility Plan (2017) expects that the I-35 corridor will be one of the six most congested statewide corridors by 2045.<sup>12</sup> The expanded capacity and strategic improvements of the I-35 NEX project will enhance U.S. global economic competitiveness by **alleviating supply-chain bottlenecks and enhancing last-mile connectivity** to freight-intensive industries.

The corridor is not only a primary trade route connecting U.S. markets to Mexico and Canada, but serves major U.S. population and goods movement centers, including San Antonio, the Dallas-Fort Worth Metroplex, Kansas City, and Minneapolis. **Along the I-35 NEX project segment of I-35, highway freight tonnage is expected to triple between 2016 and 2045. Population and employment are projected to increase by 68 and 89 percent respectively.**<sup>13</sup> This project is key to supporting future growth and development and enhancing both freight and passenger mobility.

**Figure 8 Highway Freight Tonnage & Employment (2016)**



<sup>12</sup> Idem.

<sup>13</sup> Change calculated between 2017 BLS employment and 2017 ACS population figures and the AAMPO 2045 Model population and employment forecasts for 2045.

The project will also **enhance accessibility to numerous regional activity centers** and economic drivers such as Fort Sam Houston, Brooke Army Medical Center, Union Pacific Railroad Facilities, Randolph Air Force Base, the Forum at Olympia Parkway, AT&T Center, and Amazon Distribution Center.

### Joint Base San Antonio

Joint Base San Antonio is comprised of several military installations including:

- U.S. Army Fort Sam Houston (including Brooke Army Medical Center),
- U.S. Air Force Randolph Air Force Base,
- Lackland Air Force Base and
- Martindale Army Airfield

Providing essential connections for military personnel, civilian employees and students, the I-35 NEX project has a significant impact on the San Antonio region's military installations. Joint Base San Antonio is estimated to contribute over \$30 billion annually to the Texas economy.<sup>14</sup> Joint Base San Antonio houses the largest hospital and the only Level I trauma center of the U.S. Department of Defense, and serves more students than any other installation. While base housing for military personnel and students is available, the communities surrounding the I-35 NEX project within northeastern Bexar County and Comal and Guadalupe counties are also home to many military families, students, retirees and civilian contractors employed or associated with Joint Base San Antonio.

Port San Antonio, a Foreign Trade Zone and major trade hub located southwest of downtown San Antonio near I-35, would also benefit from the proposed mobility improvements by enhancing freight reliability through San Antonio from northern markets.

**Transportation demand management strategies**, such as the HOV lanes proposed in this project, can optimize roadway space by incentivizing higher-occupant vehicles and off-peak travel, thereby alleviating congestion. Innovative technology applications discussed in **Section 5.3** and operational improvements to ramps and frontage roads included in the project are also key to connecting rapidly growing peripheral regions (discussed below) to employment centers.

There are at least 11 major proposed developments totaling more than 5,000 acres in the project area. Future residential and mixed-use developments in New Braunfels, Schertz, and surrounding areas depend on I-35 to **connect residents to jobs, education, and recreation and to ensure that businesses can deliver goods on time**. Improved traffic operations and congestion management will continue to make the area an attractive place for residents and businesses and expand the community tax base for further economic growth. The improvements will also serve the VIA Metropolitan Transit Randolph Park and Ride (I-35 at I-410), which will support existing and future VIA Metropolitan Transit service operating along I-35 between these peripheral residential areas and downtown San Antonio.

In addition to supporting freight and passenger mobility, the project will **boost safety** by improving interactions between roadway users, enhance design standards throughout the corridor and upgrade key safety components of interchanges, intersections, bridges and bike/pedestrian facilities. Improving

<sup>14</sup> <https://www.sanantonio.gov/Portals/0/Files/OMA/2017-economic-report.pdf>

roadway safety has far-reaching economic benefits and supports numerous regional, state, and national transportation goals. The following section quantifies the project's benefits and costs.

### *Benefit-Cost Analysis*

**At a seven percent real discount rate, the project generates \$1.899 billion in total benefits over 20 years, for a benefit-cost ratio of 2.73 (Table 1).** The discounted benefits accrue mostly through a combination of travel time savings (nearly \$1.6 billion), safety benefits (\$714 million) and reduced emissions costs (\$2.4 million). Additional information on the input values and methodology used to develop the results of the benefit-cost analysis can be found in **Appendix A**. **Appendix B** provides a fully interactive Benefit-Cost Analysis Excel worksheet.

**Table 1 Summary of Quantitative Impacts to be Generated by the I-35 NEX Project**

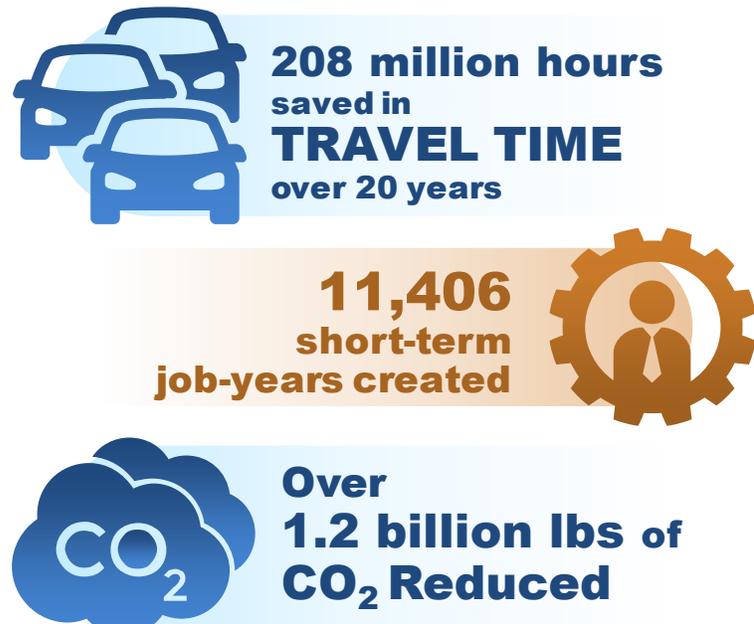
Impact Category	Benefits/ Disbenefits (\$2017)	Benefits/ Disbenefits (7%)
State of Good Repair of the Highway Infrastructure	-\$118,445,643	-\$32,740,001
Travel Time Benefits/Disbenefits	\$5,719,804,133	\$1,598,366,594
Vehicle Operating Costs Benefits/Disbenefits (Non-Fuel Based)	-\$1,010,177,405	-\$286,469,488
Vehicle Operating Costs Benefits/Disbenefits (Fuel Based)	-\$280,495,472	-\$93,754,530
Emission Costs Benefits/Disbenefits	\$9,629,251	\$2,384,522
Traffic Safety Benefits/Disbenefits	\$2,267,139,390	\$713,685,051
Operations & Maintenance Cost Savings	-\$10,538,660	-\$2,554,635
<b>Total Benefits/Disbenefits</b>	<b>\$6,576,915,594</b>	<b>\$1,898,917,512</b>
<b>Total Capital Costs</b>	<b>\$1,006,000,000</b>	<b>\$695,390,799</b>
<b>Benefit-Cost Ratio</b>	<b>6.54</b>	<b>2.73</b>

Source: Cambridge Systematics, Inc. analysis.

Note: (1) Positive monetary values represent savings (benefits) and negative monetary values represent losses (disbenefits)

The I-35 NEX project generates numerous benefits, as shown in **Figure 9**. The project is projected to generate 208 million hours of travel time savings over a 20-year period, amounting to \$1.6 billion in time saved. Additionally, the project's geometric and operational improvements, including facilities for pedestrians and bicyclists along the corridor's frontage roads, intersection improvements, and ramp reversals, are expected to reduce crash costs by \$714 million over 20 years. The project's construction and operations and maintenance (O&M) spending are anticipated to create 11,406 short-term job-years of employment. The benefit of increase in the job-years as a result of development and construction was estimated as a product of the undiscounted project cost and the value on government dollars spent to create a single job-year (i.e., \$44,100 in 2017\$).

**Figure 9 I-35 NEX Project Benefits**

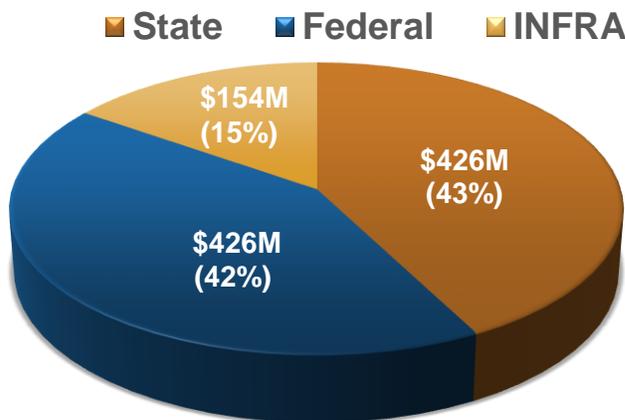


## 5.2 Leveraging of Federal Funding

### *Activities to Maximize Non-Federal Funding*

The estimated cost of the I-35 NEX project is \$1.006 billion. TxDOT is proposing to leverage \$852 million in existing funding with a requested \$154 million in INFRA grant funds. **The I-35 NEX project will utilize \$426 million of Proposition 1 and Proposition 7 funding as the state match.**

**Figure 10 I-35 NEX Project Funding by Source**



The INFRA grant funds would represent 15 percent of the project's cost, well below the limit of 60 percent of total project costs. Of the \$852 million in existing funding, \$426 million in state funds are projected to match \$426 million in other federal funds. As shown in **Figure 10**, total federal funding will account for 57 percent of total project costs, below the limit of 80 percent of federal funding that can be used for eligible project costs. TxDOT is committed to partnering with USDOT on funding the I-35 NEX project. Should

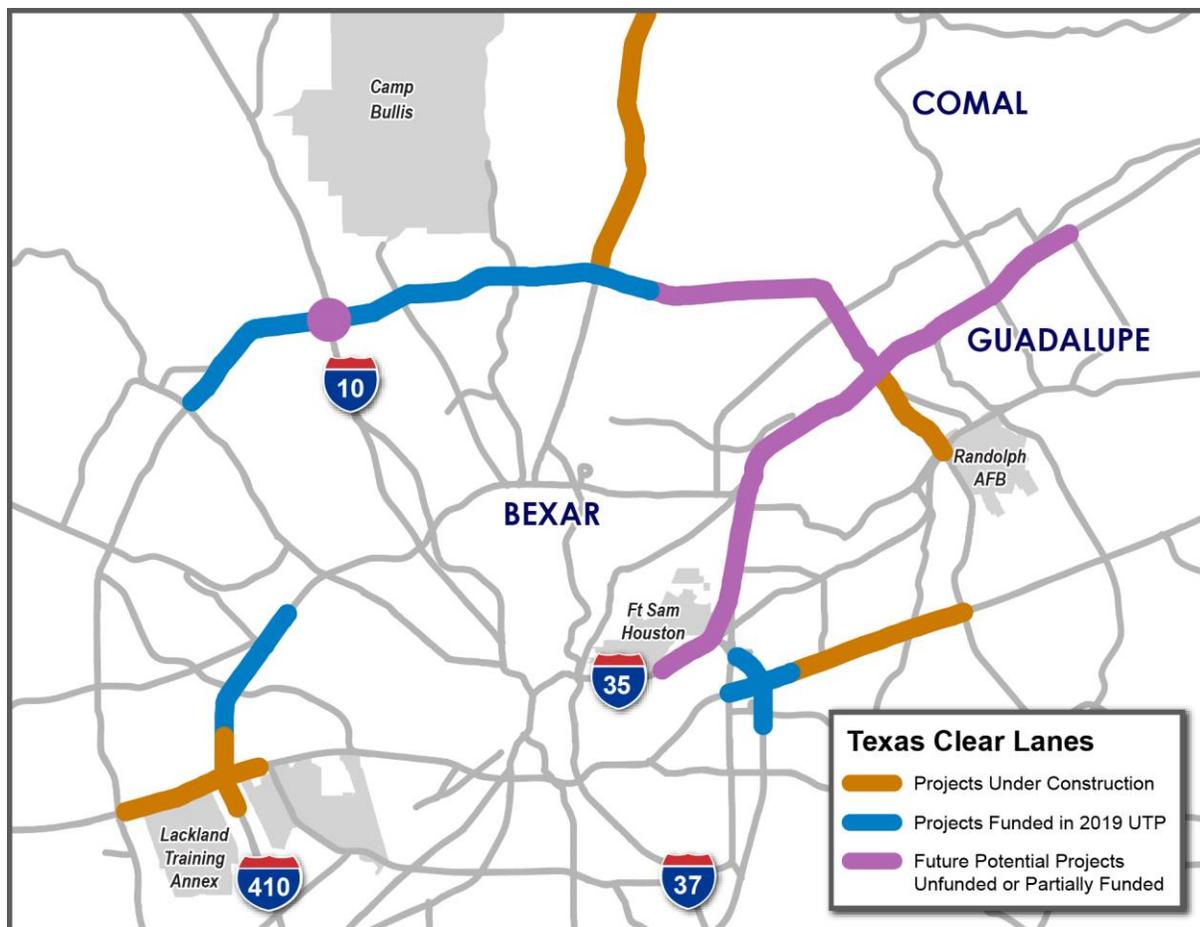
TxDOT be awarded INFRA funds, the TIP, STIP and UTP will be updated to reflect the funding ratios outlined here.

**The I-35 NEX project will maximize non-federal funding through the Texas Clear Lanes initiative**, which began in September 2015. On September 23, 2015, Texas Governor Greg Abbott issued a directive to the Texas Transportation Commission and TxDOT “to create a focused initiative to identify and address the state’s most congested chokepoints and work with transportation planners to get new roads built swiftly and effectively.”



The Texas Clear Lanes program was born out of this directive and is focused on finding the most effective and efficient ways to build critical roadway projects in the most congested metropolitan regions of the state, including the San Antonio region. Clear Lanes projects included in the San Antonio region are depicted in **Figure 11**. **A federal contribution of \$154 million through the INFRA grant program allows USDOT to partner with TxDOT on not just the I-35NEX project, but a system of improvements through the Texas Clear Lanes initiative.**

**Figure 11 Texas Clear Lanes in San Antonio Region**



The revenue for the Texas Clear Lanes initiative is derived from two voter-approved sources, Propositions 1 and 7, and action taken by the Texas Legislature to end diversions from the State Highway Fund (SHF). Combined, Proposition 1, Proposition 7, and the end of diversions from the SHF provide stable, dependable sources of state funding to contribute to the construction, maintenance and operation of the I-35 NEX project.

### *Private Funding*

No private funding has been identified for use on this project.

### *Any Fiscal Constraints Limiting Use Non-Federal Contributions*

There are no fiscal constraints limiting the use of non-federal contributions.

## 5.3 Potential for Innovation

### *Innovation Area 1: Technology*

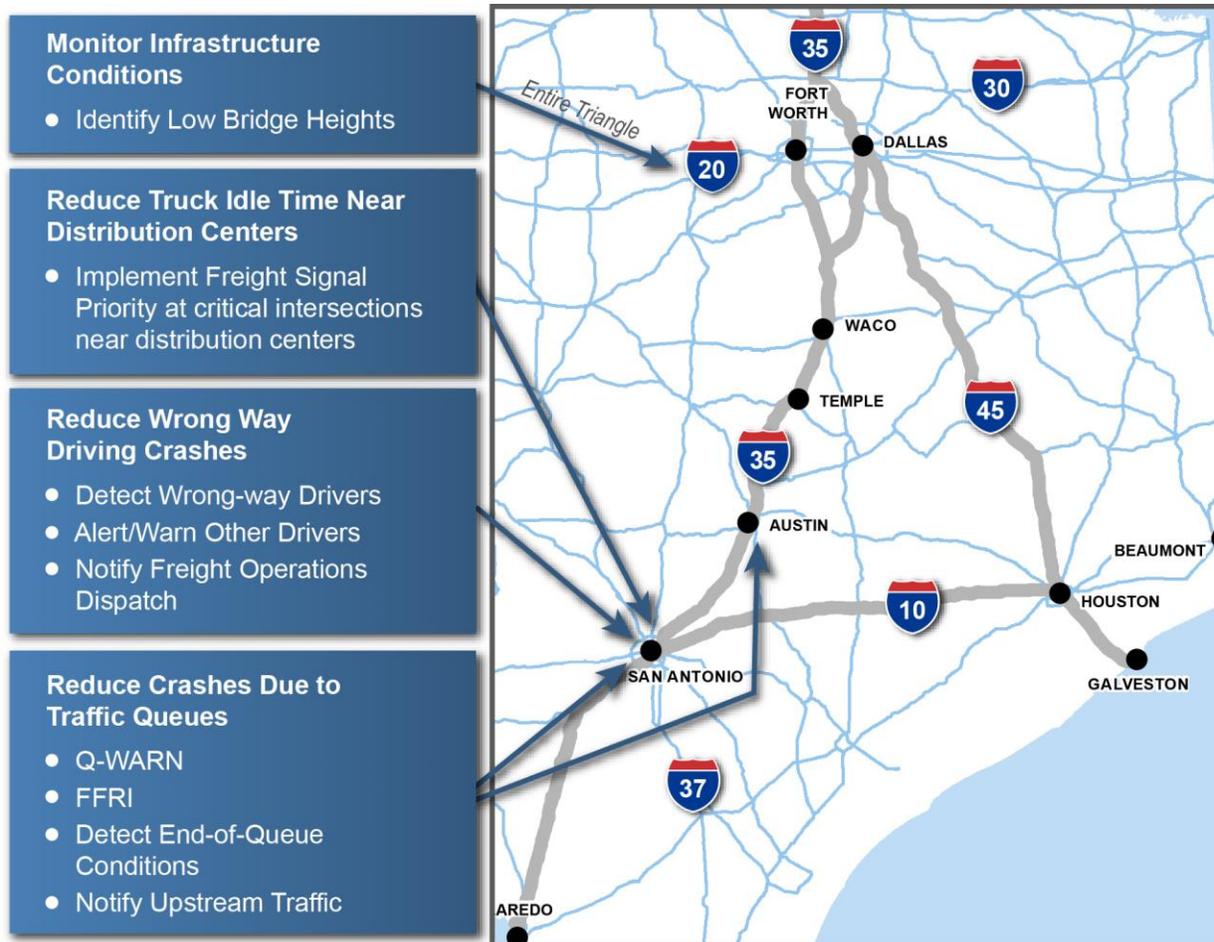
**The design of the I-35 NEX project will preserve the option for future broadband deployment in the right of way.** Broadband deployment in the right of way would help meet the goals set forth in the National Broadband Plan and would assist with the deployment of connected and autonomous vehicle (CAV) technology, an area of current research and application in the San Antonio region and Texas more broadly.

The State of Texas is committed to using innovative technology solutions to address transportation challenges. The Texas Innovation Alliance is a collective of local, regional and state agencies whose mission is to “empower public agencies, research institutions and industry partners to leverage collective resources, co-create solutions, and share results to improve mobility for all Texas communities.” One of the Texas Innovation Alliance members is Southwest Research Institute, an internationally recognized research institute working to provide innovative solutions across industries to clients around the world. **Located in San Antonio, Southwest Research Institute is a leader in CAV research and technologies and has worked with USDOT and Texas universities to provide a full-service test track for these technologies. Southwest Research Institute is working with other academic partners in Texas to collaborate with a new CAV Task Force formed by TxDOT.** The task force will serve as a repository for information on all on-going CAV projects in Texas and will facilitate progress in advancing CAV technology through hosting industry forums and reporting lessons learned in public and private entity efforts to implement CAV technology.

**The I-35 NEX project is aligned with current FHWA investments in cutting-edge technologies deployed to enhance traffic capacity for commuters and businesses.** The 2017 Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) grant awarded to TxDOT and its partner, the Southwest Research Institute, for the Texas Connected Freight Corridors Project aims to deploy connected vehicle technologies to more than 1,000 commercial vehicles to improve traveler information, asset condition management and system performance. It will deploy vehicle-to-infrastructure (V2I) and vehicle-to-vehicle (V2V) technologies with commercial vehicles to increase safety, improve real-time traffic information, and reduce the time trucks spend in congestion. Anticipating completion within four years, the project components are within the Texas Triangle, which

includes I-35 from San Antonio to Dallas, via Austin, and encompasses the site of the I-35 NEX project, as shown in Figure 12.

**Figure 12 Connected Freight Corridors Deployment in the San Antonio Region**



The I-35 NEX project also benefits regional innovative transportation solutions. Recognizing the importance of the I-35 corridor and the potential of autonomous vehicle technology to reduce congestion and crashes and improve levels of service, the AAMPO has enacted a resolution to support the implementation of autonomous vehicle technology in the I-35 North Corridor.<sup>15</sup>

### *Innovation Area 2: Project Delivery*

**Contracting/Procurement and Every Day Counts Initiative.** The I-35 NEX project will use a design-build (D-B) project delivery method. A D-B project delivery method is one of the Every Day Counts innovations recognized by FHWA to shorten and enhance project delivery. In a D-B process, a state DOT selects a D-B team to assume the risk for both the design and construction of the project. Unlike in a traditional design-bid-build process, the DOT generally has the option to select a D-B team based on best overall value instead of just the lowest price, often resulting in improved project

<sup>15</sup> Alamo Area Metropolitan Planning Organization, "Resolution of Support for Implementation of Autonomous Vehicle Technology in the I-35 North Corridor," March 26, 2018.

quality. A D-B process has several benefits in terms of project duration and cost reduction. In a D-B process, design and construction phases can overlap, and there is only one selection phase instead of two phases separated by a bidding phase, often resulting in shorter project durations. In addition to the shorter project duration, a D-B delivery can result in added value and lower costs because the contractor and designer work closely together in the development of the project. This collaboration allows for a reduction in the risk of design error and the need for redesigns as well as an increase in the potential for project design innovations.

In addition to streamlining the process through a D-B delivery method, one of the benefits of the Texas Clear Lanes initiative is the provision of **funds for right of way purchases and engineering and project development, with the goal of accelerating project delivery.**

**Environmental Requirements (Programmatic Agreements).** In 2014, TxDOT became the second state to assume full NEPA assignment authority, and it has become a best practice in streamlining the environmental review process. TxDOT has averaged a start-to-completion time of 18 months for Environmental Assessment projects. Prior to NEPA assignment, Environmental Assessments took an average of 30 months to complete. NEPA assignment allows TxDOT to have greater control over project planning and scheduling and allows local governments and stakeholders better access to decision makers. While the original Environmental Assessment for the I-35 NEX project was performed in consultation with FHWA, the required Re-Evaluation will be performed entirely by TxDOT staff. See **Section 6.3** for additional information on Environmental Permits and Reviews.

**Environmental Requirements (Use of Permitting/Authorization Agency Liaisons).** To streamline the environmental process for transportation projects, TxDOT has established a cooperative agreement with U.S. Fish and Wildlife Service (USFWS) to provide a dedicated transportation liaison.<sup>16</sup> When consultation is needed, early coordination with USFWS helps TxDOT plan and design transportation projects to effectively avoid, minimize and offset potential environmental impacts to natural resources, thereby reducing the time for environmental clearance. This streamlined process has benefited the I-35 NEX project with the expedited delivery of a karst survey. Consultation, either formal or informal, will continue throughout the project.

The USFWS liaison continues to provide significant benefit to TxDOT in the timely delivery of reviews of consultation documents. Informal consultations have been reviewed and concurred in under 30 days, and formal consultations with a completed Biological Opinion under 80 days, well under the 135-day statutory requirement. This process also ensures reduced review times as the liaison supports TxDOT District staff and consultants in improving consultation documents.

### *Innovation Area 3: Innovative Funding*

As noted in **Section 5.2** (Leveraging of Federal Funding), TxDOT will be utilizing new state revenue comprised of funds raised from Proposition 1 and Proposition 7. Propositions 1 and 7 represent recent efforts by the State of Texas to raise significant revenue for transportation investment across the state drawing from new transportation revenue sources that include oil and gas severance taxes.

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<sup>16</sup> <http://ftp.dot.state.tx.us/pub/txdot-info/env/nepa-assignment/txdot-fhwa-nepa-assignment-mou.pdf>

## 5.4 Performance and Accountability

### *Plan to Address the Full Lifecycle Costs*

The estimated lifecycle costs of the I-35 NEX project total \$695.4 million.<sup>17</sup> TxDOT is prepared to ensure the continued operation and maintenance of the project through its useful life and has a history of fully funding maintenance on the Texas road system. TxDOT appropriates funds on a biennial basis. TxDOT's FY 2020 to 2021 Legislative Appropriations Request dedicates approximately 25 percent of its funding to the maintenance and replacement of state highway projects. The primary funding sources include gas tax revenues, vehicle registration fees, federal reimbursements, and local funding sources.

TxDOT submitted to FHWA in April 2018 the Texas Transportation Asset Management Plan (TAMP). The TAMP details the processes by which the state utilizes life-cycle planning to forecast network-level funding needs to sustain performance of the existing assets and recommend the most cost-effective way to optimize its long-term condition. These methods include using semi-automated procedures for obtaining pavement condition information; forecasting future pavement conditions to recommend optimized pavement work plans; implementing four-year pavement management plans; and standardized and regularly-scheduled bridge inspections to assist in prioritization of structure rehabilitation and replacement.

### *Accountability Measure*

Travel time savings will serve as a project success indicator, representing a key performance objective which supports economic vitality within the region and on the National Freight Highway Network. Should TxDOT be awarded INFRA funds, TxDOT will condition \$10 million of INFRA funding based on the ability of the completed I-35 NEX project to generate 306 million minutes of travel time savings within 12 months of project completion.

Additional accountability measures focused on ensuring project success will be included in TxDOT's design-build contract, such as liquidated damages clauses to protect against delays in completion by the contractor, monthly reporting of schedule progress to include issuing non-compliance points, and recovery schedules if schedule problems arise.

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<sup>17</sup> Assuming a discount rate of 7 percent

# 6 Project Readiness

## 6.1 Technical Feasibility

TxDOT has completed the I-35 NEX project geometric design schematics (found on the [Project Website](#)) with final design to be completed through the design-build contract awarded in Spring 2020. FHWA environmentally cleared the project in July 2015. Several proposed modifications to the previously NEPA-approved project design necessitate the preparation of a Re-Evaluation of the EA, which is anticipated by Fall 2019.

The project design criteria adheres to the TxDOT Roadway Design Manual, TxDOT Bridge Design Manual, Texas Manual on Uniform Traffic Control Devices (TMUTCD), and other state- and federally-approved design standards.

The cost estimate, which includes agency, financial, design and construction costs and contingency, is based on a detailed review of the preliminary design drawings. TxDOT has an FHWA approved Cost Estimate Review (CER) which demonstrates that project risks have been carefully considered and project delivery has been carefully planned. A 20-percent project contingency is included in the cost estimate in order to account for unknowns and detailed items that are difficult to estimate specifically at the current stage of project development.

## 6.2 Project Schedule

The I-35 NEX project D-B contract is anticipated to be awarded in Spring 2020, providing sufficient time to complete final design and begin construction within 18 months of the funding obligation. The request for proposals (RFP) for the D-B contract will be released in Fall 2019 as shown in **Figure 13**.

**Figure 13 Project Schedule**



## 6.3 Required Approvals

### *Environmental Permits and Reviews*

#### **NEPA Status**

An EA was completed in February 2015 for I-35 proposed improvements from I-410 South in San Antonio to FM 1103 in Schertz and included the addition of two managed lanes in each direction on an elevated structure and direct connector improvements at I-410 North, I-410 South and Loop 1604 (west only).<sup>18</sup>

FHWA issued a Finding of No Significant Impact (FONSI) for the entire project in July 2015.<sup>19</sup> Several proposed modifications to the previously NEPA-approved project design necessitate the preparation of a Re-Evaluation of the EA, which is anticipated by Fall 2019. The revised project includes the addition of two general purpose (GP) lanes and one high occupancy vehicle (HOV) lane in each direction on an elevated structure. The revised project also includes direct connectors at the following major interchanges: I-410 North, I-410 South and Loop 1604 (west and east). The Re-Evaluation project limits extend from I-410 South in San Antonio to FM 1103 in Schertz.

#### **Reviews, Approvals, and Permits by Other Agencies**

The EA determined the need for coordination with the following agencies:

**TxDOT Right of Way Acquisition and Relocation Assistance Program.** The EA found 21.6 acres of proposed right of way would be required, resulting in 19 displacements. Acquisition and relocation assistance would be coordinated in accordance with the TxDOT Right of Way Acquisition and Relocation Assistance Program.

**U.S. Army Corps of Engineers.** The EA identified 22 Waters of the U.S. potentially impacted by the reconfiguration of existing mainlanes and frontage roads of the I-35 NEX project. The impact to the Waters of the U.S. would require various permits from the U.S. Army Corps of Engineers, including Nationwide Permit 14 – Linear Transportation Projects; Pre-Construction Notifications; Individual Permit; or a Section 404 Permit.

**Local Floodplain Managers.** The project crosses 46 acres of 100-year floodplain. Although the EA found that no changes to the base flood evaluation would occur as a result of the project, coordination with local floodplain managers is required during design and construction phases to ensure local regulations are followed.

**Utilities.** Coordination with utility companies concerning potential contamination during underground utility adjustments may be required.

**Federal Aviation Administration.** Located approximately 200 feet from the I-35 NEX project, the heliport at the Brooke Army Medical Center is within the FAA coordinated 'buffer' and has the potential for obstruction of air navigation. The Notice of Proposed Construction or Alteration (Form 7460-1) will be completed and submitted during the design phase of the project.

#### **Environmental Studies or Other Documents**

Resources reviewed as part of the EA consisted of community impacts (regional and community growth; community cohesion; limited English proficiency populations; environmental justice communities; public

<sup>18</sup> <http://ftp.dot.state.tx.us/pub/txdot-info/sat/projects/i35-pel/ea.pdf>

<sup>19</sup> <http://ftp.dot.state.tx.us/pub/txdot-info/sat/projects/i35-pel/fonsi.pdf>

facilities and services; rights of way acquisition; easements; displacements and relocations; and Section 4(f) and 6(f) properties; aesthetic considerations; cultural resources air quality; biological resources; water resources; traffic noise; hazardous materials; construction impacts; and airway-highway clearance. The EA document provides detailed information on the analysis, potential impacts, and proposed mitigation of the identified resources.<sup>20</sup>

### **Discussions with Federal Highway Administration**

To ensure proper review and compliance with federal, state, and local regulations, TxDOT coordinated with FHWA throughout the development of the EA. At the conclusion of the EA, FHWA accepted the findings from the study and issued a FONSI on July 2, 2015.

The project will include continued discussions and coordination with FHWA as part of the design-build procurement, conduct of major project requirements (projects with total costs that are greater than \$500 million) as well as approval of the project's Interstate Access Justification report (IAJR). Early coordination on these elements has been conducted with FHWA.

### **Public Involvement**

TxDOT held five public engagement opportunities over the course of the EA. Outreach for the EA built off the public, agency and stakeholder involvement programs administered during the I-35 PEL Study. The first public meetings were held in Schertz on October 28, 2013, in Windcrest on October 29, 2013, and online for the month of October 2013. The meetings allowed attendees to provide input on preliminary design options and potential impacts of the proposed improvements. Meetings of affected property owners were held on October 28, 2014 and October 30, 2014. Invitation letters were mailed to all affected property owners, including the project description, location map, and a personalized map showing the proposed right of way needs specific to each owner's property. The last opportunity for public engagement was a public hearing held in San Antonio on February 26, 2015. This hearing provided an opportunity for community members to provide input on the Draft EA. The majority of the comments from the public involved issues or questions related to the location of entry and exit points, general support for the project and its capacity to provide options for travel and its ability to have a positive impact on the economy. Other comments focused on utilizing current funding for non-tolled roads and concerns over the right of way acquisition. Overall, commenters generally supported the proposed expansion of I-35 in Northeast San Antonio.

Additional public involvement efforts as part of the Re-Evaluation of the project will include meetings of affected property owners and a public hearing with formal presentation and comment session. Public involvement activities have occurred throughout the duration of the project and will continue to follow TxDOT and FHWA policies and procedures.

### **State and Local Approvals and Planning**

The I-35 NEX project has received the necessary state and local approvals to advance into the next phase of project development. The AAMPO included the I-35 NEX project in the Mobility 2040 transportation plan.<sup>21</sup> Funds for the I-35 NEX project are identified in Mobility 2040 and AAMPO's 2019-

<sup>20</sup> <http://ftp.dot.state.tx.us/pub/txdot-info/sat/projects/i35-pel/ea.pdf>

<sup>21</sup> The I-35 corridor is included in both 2035 and 2040 Alamo Metropolitan Planning Organization (MPO) Metropolitan Transportation Plans. AAMPO Mobility 2035, [http://www.alamoareampo.org/Plans/MTP/docs/Mobility2035/Mobility2035\\_FULL.pdf](http://www.alamoareampo.org/Plans/MTP/docs/Mobility2035/Mobility2035_FULL.pdf) AAMPO Mobility 2040, <http://www.alamoareampo.org/Plans/MTP/docs/Mobility2040/Final%20MTP%20Revised%20March%2010%202015.pdf>

2022 Transportation Improvement Program (TIP), adopted on April 23, 2018. The TIP has been incorporated into the Statewide Transportation Improvement Program (STIP). The I-35 NEX project is identified in TxDOT's 2017 Freight Mobility Plan, which identified freight needs, challenges, goals, policies, and investments across the state.<sup>22</sup> The project is also identified in TxDOT's 2019 Unified Transportation Program (UTP), which serves as the 10-year planning guide and identifies projects and programs that are planned to be constructed and/or developed within the first 10 years of the 24-year Statewide Long Range Transportation Plan.

## 6.4 Assessment of Project Risks and Mitigation Strategies

TxDOT has completed an assessment of project risks. Mitigation strategies to address those risks will continue throughout the project development process. Due to the innovative project delivery method, some of the identified risks will be mitigated through the D-B project delivery process. The most significant risks and mitigation strategies are summarized in **Table 2**.

**Table 2 Project Risks and Mitigation Strategies**

Project Risk	Mitigation Strategy
<b>Project Funding</b>	TxDOT has built a 20 percent contingency into the project. If additional funds are needed, TxDOT will work to secure additional funding through Proposition 1 and 7 funding sources and/or segment the project in phases.
<b>Construction Sequencing - Complexity of constructing project under traffic</b>	Risk is dependent on proposed design developed through the D-B project development process. TxDOT will include construction sequencing requirements as part of the D-B request for proposals.
<b>Traffic Control – Complexity of maintaining traffic flow with constructing structures over traffic</b>	Risk is dependent on proposed design developed through the D-B project development process. TxDOT will include traffic control requirements as part of the D-B request for proposals.
<b>Utilities – Conflicts (new and/or unidentified)</b>	The schematic design avoids as many utility conflicts as possible and D-B teams will be charged with minimizing utility conflicts in further project development. All unavoidable conflicts will be addressed early in the project development to minimize the risk to the schedule.
<b>Railroad Coordination</b>	Project design will span the entire railroad right of way to avoid delays in coordination.
<b>Environmental Review</b>	Limited environmental concerns affected by the project. Environmental clearance was received in 2015, however additional mitigation strategies may be needed based on the Re-Evaluation.

<sup>22</sup> <http://ftp.dot.state.tx.us/pub/txdot/move-texas-freight/studies/freight-mobility/2017/plan.pdf>

# 7 Large Project Requirements

The I-35 NEX project is considered a Large Project under the INFRA Grant program requirements. As such, this project meets the criteria list in the Notice of Funding Opportunity as follows.

## 7.1 The Project is Cost Effective

The I-35 NEX project will generate an estimated \$2.73 in public benefits for every \$1 spent, based on a 7 percent discount rate. **Section 5.1** provides an in-depth discussion of the benefit-cost analysis.

## 7.2 The Project Generates National and Regional Economic, Mobility, and Safety Benefits

As described in Section 5.1 this project will generate a multitude of economic, mobility, and safety benefits by alleviating congestion, enhancing freight efficiency and reliability, and connecting communities (**Figure 14**).

**Figure 14** The I-35 NEX Project Generates National and Regional Economic, Mobility, and Safety Benefits



### I-35 NEX alleviates congestion on some of Texas' most congested highways

- Cumulatively, drivers will benefit from 208 million hours in travel time savings over a 20-year period as a result of the project, yielding \$1.6 billion in savings.

### I-35 NEX enhances freight efficiency and reliability

- I-35 is one of Texas' top three statewide corridors for highway freight tonnage, carrying almost 60 million tons in 2016.



### I-35 NEX connects communities

- Population and employment is projected to increase by 68 and 89 percent respectively.

### I-35 NEX enhances accessibility to numerous regional activity centers and economic drivers

- Joint Base San Antonio alone is estimated to contribute over \$30 billion annually to the Texas economy.



## 7.3 The Project Contributes to One or More 23 U.S.C. 150 Goals

**Safety** – The project will improve interactions between roadway users by improving design standards that include upgrading the existing ramp, frontage road, overpass and intersection facilities resulting in safer roadway configurations, improved sight distances and reduced congestion, all resulting in fewer traffic conflicts. Pedestrian and bicycle facilities are enhanced and expanded in the project. See the project components in **Figure 3** for more details on reducing traffic conflicts.

**Infrastructure Condition** – Upgrades to the existing system will ensure that Texas’ highway infrastructure assets remain in a state of good repair. The Texas Transportation Asset Management Plan supports TxDOT’s goal of preserving the state’s transportation assets. Plans to address lifecycle costs are discussed in **Section 5.4**.

**Congestion Reduction** - As part of the Texas Clear Lanes program of projects, the I-35 NEX project has already demonstrated vast potential for congestion relief along one of the state’s most constrained corridors. Impacts on VMT and congestion are discussed in **Section 5.1**.

**System Reliability** – The project’s added capacity and operational improvements will increase efficiency and reliability by accommodating growing demand and alleviating bottlenecks that affect both freight and passenger travel. Travel time savings benefits are discussed in **Section 5.1**.

**Freight Movement and Economic Vitality** – As part of the National Highway Freight Network, the project will strengthen access to national and international trade markets, including the Laredo international port of entry and Port San Antonio, and improve supply-chain connections. The I-35 NEX project will support regional economic growth by improving access to employment centers, new and existing residential areas, and critical services such as education, health care and recreational facilities. National and Regional Economic Vitality are discussed in **Section 5.1**.

**Reduced Project Delivery Delays** – The project will be delivered as D-B, which will minimize delays in the project development and delivery process. Performing environmental reviews in-house through the NEPA assignment agreement and utilizing TxDOT’s USFWS liaison to oversee any needed endangered species consultations will also reduce project delivery delays. See **Section 5.3** for more information.

## 7.4 The Project is Based on the Results of Preliminary Engineering

TxDOT has completed geometric design schematics (found on the [Project Website](#)), with final design to be completed through the D-B contract awarded in Spring 2020. The project design criteria adheres to the TxDOT Roadway Design Manual, TxDOT Bridge Design Manual, Texas Manual on Uniform Traffic Control Devices (TMUTCD), and other state- and federally-approved design standards.

## 7.5 The Project has One or More Stable and Dependable Funding or Financing Sources

The I-35 NEX project has \$852 million in committed funds, which is 85 percent of the total project cost. Of the committed funding, \$132 million for engineering, right of way, and utilities have already been approved as part of the Legislative Appropriations Request (LAR), with \$120 million to be included in the 2020 UTP as Category 3 funds that will support design-build costs. The remaining \$12 million will be used to pay for right of way parcels. The project funding breakdown is shown in **Section 4.2**.

## 7.6 The Project Cannot be Completed Easily or Efficiently without Federal Funding

Although the 10-year revenue for the Texas Clear Lanes initiative is estimated at \$35.4 billion, to adequately address the immediate needs on the top 100 most congested segments in Texas, an estimated \$47.8 billion is required.<sup>23</sup> **Federal funds are critical to leveraging the state funds made available through overwhelming voter support. Inability to fill the \$154 million funding need would significantly impact project scope and delivery.** TxDOT would be required to scale back the project, which would limit direct connectors on I-35 at Loop 1604 and bypass many of the proposed operational improvements needed to achieve the full spectrum of economic benefits.

## 7.7 The Project is Reasonably Expected to Begin Construction within 18 Months from Obligation

The project schedule and committed funding of \$852 million ensures the project is reasonably expected to begin construction within 18 months after the date of obligation of funds. The request for proposals for the project is scheduled for release in Fall 2019, and the D-B contract is anticipated to be executed in Summer 2020 (as referenced in **Section 6.2**).

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<sup>23</sup> Texas Department of Transportation, *Texas Transportation Funding, Including Texas Clear Lanes and Congestion Relief Update: Presentation for Texas Transportation Commission*, March 28, 2018, <http://ftp.dot.state.tx.us/pub/txdot/commission/2018/0328/2a-presentation.pdf>.