# International Bridge Trade Corridor (IBTC) 

## MPDG Application in partnership with HCRMA

Hidalgo County, Texas

# Project Description 



## PROJECT SUMMARY

The International Bridge Trade Corridor (IBTC) is a proposed new roadway in Hidalgo County, Texas. The project is in a USDOT designated rural area and an Area of Persistent Poverty/Historically Disadvantaged Community outside of the McAllen Urbanized Area (UZA), near the cities of Pharr, San Juan, Alamo, and Donna. The roadway will connect Interstate-2 (IH-2) with the 365 Tollway (currently under construction) and Farm to Market 493 (FM 493), major roadways that facilitate truck traffic in Hidalgo County and the Rio Grande Valley.
The Texas Department of Transportation (TxDOT) is the lead applicant for this MPDG application, in partnership with the Hidalgo County Regional Mobility Authority (HCRMA). TxDOT is requesting $\$ 130,515,973$ in MPDG funding for construction of the IBTC.
As the American economy continues to grow and recover from supply chain disruptions, construction of the IBTC will provide significant benefits to the economies of the Rio Grande Valley, the state of Texas, and the entire United States. The IBTC will improve freight flow from truck traffic crossing the U.S. - Mexico border and will enable goods to reach destinations throughout Texas and across the country quicker, more efficiently, and at a lower cost. Construction of the IBTC is an investment in the trade and transportation industry that enhances the economy of the Rio Grande Valley and supports the creation of new jobs in freight and logistics in Hidalgo County.
There is strong local and state support for construction of the IBTC, as evidenced by the significant investment of local funding in the project. To date, the HCRMA has spent over $\$ 14$ million dollars in local funds for advanced planning and ROW acquisition in support of the IBTC. The strong partnership between TxDOT and the HCRMA has helped advance the planning and pre-construction activities of this nationally significant project. The project is nearly complete with the NEPA process, with a final draft of the project's Environmental Assessment (EA) currently in the public comment period. The project is anticipated to receive a NEPA clearance/Finding of No Significant Impact (FONSI) by September 2023.

The purpose of the IBTC project is to provide local and regional mobility for transporting persons and goods from international ports of entry in the area north to IH-2 and between US 281 and FM 493. Needs for the project include:

- Improving the efficiency of cross-border travel at the U.S.- Mexico border to strengthen supply chains and promote the accessible flow of goods in both directions
- Strengthening the Rio Grande Valley's transportation network to account for regional population and employment growth
- Promoting equitable economic development through targeted transportation investments in a rural area and an Area of Persistent Poverty/Historically Disadvantaged Community
Construction of the IBTC will meet these needs while improving mobility and quality of life for residents of Hidalgo County and the Rio Grande Valley. A more detailed description of the project can be found in the Project Description/Statement of Work section below.


## PROJECT DESCRIPTION/STATEMENT OF WORK

The IBTC includes the construction of three "legs" (east, west, and north) that connect at the future Valley View convergence point. Descriptions of the three roadway legs can be found below.

- East Leg: The East Leg of the project is 3.44 miles long and consists of a road with one 12 -foot-wide lane in each direction (two lanes total), 10 -foot-wide shoulders, and ditches on each side of the roadway.
- West Leg: The West Leg is 6.17 miles long and includes two roads, one in each direction, with two 12 -foot-wide lanes (four lanes total), 10 -foot-wide outside shoulders, and 4 -footwide inside shoulders separated by a variable width grassy median. Also included is a 20 -foot-wide outside ditch and variable width inside ditch. This Leg will have a bridge over the International Boundary and Water Commission Main Floodway Channel.
- North Leg: The North Leg of the project is 2.74 miles long and includes two 12 -foot-wide lanes in each direction (four lanes total), 10 -foot-wide outside shoulders, and a 4 -foot-wide inside shoulder separated by a concrete barrier. The North Leg will be grade-separated from Business US 83 and the Union Pacific Railroad (UPRR) tracks.

Typical sections of the three legs can be found at the link below. While the typical sections show the full set of IBTC improvements (including the potential Phase II build-out), the benefits and costs associated with this MPDG application are only for the Phase I (interim) section.
Summary of Improvements - IBTC
In total, the proposed new roadway would run for 12.35 miles between the northern, western, and eastern termini. It would connect the corridors of IH-2, FM 493, and 365 Tollway with a new roadway, consisting of four-lanes throughout much of the route. Once the IBTC is constructed, it will be added to the National Highway Freight Network and/or National Multimodal Freight Network and the National Highway System (NHS).

## PROJECT HISTORY/CURRENT DESIGN STATUS

Previous studies of the project area had proposed a single project called the Hidalgo Loop, which would have resulted in the creation of a roadway loop around the cities of McAllen, Mission, Pharr, and Edinburg. After additional analysis was undertaken, the HCRMA decided to create two projects, State Highway (SH) 365, a new roadway from FM 1016 to US 281, and the IBTC. SH 365 is now known as 365 Tollway and is currently under construction, with an anticipated completion date of 2025.

Numerous technical reports have been prepared as part of the Environmental Assessment (EA) for the project, including a Community Impacts Technical Report, Biological Evaluation, Air

Quality Technical Report, and Traffic Noise Analysis Technical Report.
A summary of these documents and other documents that have been prepared in support of the project can be found in the final draft of the EA, which is posted on the HCRMA website: Final Environmental Assessment

Since 2014, HCRMA has made significant progress in advancing the IBTC towards construction. This is demonstrated in the following listing of the major milestones:

- 2015 - 33 percent of ROW acquisition of the necessary parcels was completed
- 2021 - A draft of the project's EA was completed in December
- 2022 - A Virtual Public Hearing for the project was held on March 17
- 2022 - A risk workshop to develop a list of initial project risks was held in April
- 2023 - HCRMA published a final draft of the project's EA in May

Future milestones are listed below:

- In September 2023, the HCRMA anticipates receiving a NEPA clearance and a Finding of No Significant Impact and would look to begin design engineering shortly thereafter.
- Pending securing additional funding for the IBTC and the acquisition of additional parcels during the ROW phase, construction on the IBTC is anticipated to begin by September 2026 and could be accelerated with the awarding of an MPDG grant.


## PROJECT LOCATION

The IBTC will be constructed in Hidalgo County, Texas. The southernmost point of the roadway where it connects with FM 493 is located approximately 3 miles from the Rio Grande River and the U.S. - Mexico border. The IBTC is located near the cities of Pharr, San Juan, Alamo, and Donna.

There is no existing roadway in the location where the IBTC will be constructed. The west leg of the new roadway begins at the intersection of the under construction 365 Tollway and Dicker Road, then run east to Tower Road where it heads northeast until it reaches the future Valley View convergence point. From here, the east leg would run southeast until it reaches FM 493, approximately 1.5 miles north of US 281/Military Highway. The north leg of the IBTC runs from the Valley View convergence point north until it intersects with IH-2, approximately .25 miles east of FM 1423. A map of the IBTC location can be found in Figure 1.


Figure 1: Map of the IBTC Location

The IBTC is in a USDOT designated rural area, and an Area of Persistent Poverty. Hidalgo County, Texas is classified as a "Persistent Poverty County," and all six of the Census Tracts that the new roadway will run through are identified as "Persistent Poverty Census Tracts." The project is in the following six Census Tracts (2020 Census): 221.07, 221.13, 221.12, 228.02, 213.13, 213.06. Of those, five Tracts (221.07, 213.13, 221.12, 213.06, and 213.13) are classified by USDOT as "Historically Disadvantaged."

## TRANSPORTATION CHALLENGES ADDRESSED BY THE PROJECT

The IBTC project has been developed to meet several transportation challenges that exist in the project area.

CHALLENGE \#1
Freight movement in the corridor and increased truck traffic across the U.S. - Mexico border:
The IBTC facility will provide enhanced connections to two international bridges, the PharrReynosa International Bridge and the Donna-Rio Bravo International Bridge. According to Census data, trade between the U.S. and Mexico totaled \$779.3 billion dollars in 2022, with $\$ 324.4$ billion dollars'-worth of exports to Mexico and $\$ 454.9$ billion dollars'-worth of imports to the U.S. In 2022, $\$ 46.44$ billion dollars'-worth of trade crossed over the Pharr-Reynosa Bridge, a substantial increase compared to the $\$ 41.7$ billion dollars' -worth of trade that crossed the Bridge in 2021 . The Donna-Rio Bravo International Bridge, while not seeing the large number of crossings at Pharr-Reynosa, has also grown since its opening in 2010. When the Donna-Rio was first opened, it only serviced passenger vehicles. In 2019, the Bridge underwent a $\$ 60$ million dollar expansion which allowed for the crossing of approximately 100 trucks per hour. In May 2023, City of Donna officials announced a planned $\$ 100$ million dollar expansion of the bridge to build two additional northbound commercial lanes. ${ }^{2}$ Construction of the IBTC will address increasing truck traffic in the area and help ensure resilient supply chain logistics by providing a new roadway for trucks crossing the border to deliver goods across the U.S.

## CHALLENGE \#2

Regional population growth and economic development leading to additional traffic and placing additional pressure on Hidalgo County's transportation infrastructure:

2020 Census results show that the population of Hidalgo County grew from 774,769 people in 2010 to 870,781 people in 2020, an increase of over 12 percent. This population growth has led to increased congestion on roadways in the project area. 2019 traffic counts showed IH-2 with Annual Average Daily Traffic (AADT) counts between 123,000 and more than 154,000 vehicles per day at segments near the IBTC, with segments along US 281 ranging from 7,000 to more than 22,000 vehicles per day in the project area, and with segments along FM 493 ranging from more than 4,000 to more than 17,000 vehicles per day in the project area. Traffic volumes on these roadways unduly stress the current system and cause delays for car and truck traffic in the area. Future AADT on roadways in the project area is expected to increase. TxDOT traffic projections show an expected 2040 AADT on segments of IH-2 in the project area ranging from 165,000 to 228,000 , an expected 2040 AADT on segments of US 281 in the project area ranging from 9,500 to 27,000, and an expected AADT on segments of FM 493 in the project area between 6,000 and 23,000 vehicles per day.
The continued economic development and growth of Hidalgo County will bring challenges to the area's transportation system. Future development increases the need to construct additional facilities to meet the increased car and truck travel demand that this development will bring; the IBTC helps meet that demand with the construction of a new roadway that will provide an additional travel option for cars and trucks in the region.

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## CHALLENGE \#3

The lack of existing roadway connectivity in the area, especially for trucks accessing the border:

In its current condition, the project area presents challenges for truck traffic to safely and quickly access the two international bridges discussed above. While US 281 and FM 493 provide access to the Pharr-Reynosa and Donna-Rio Bravo Bridges respectively, there is a lack of connectivity within the project area to access these roadways. The only roads providing a direct connection between US 281 and FM 493 in the project area are IH-2, Business Highway 83, and US 281 (EastWest)/Military Highway. It is nearly 7 miles between US 281/Military Highway and Business Highway 83 and nearly 9 miles between US 281 (North-South) and FM 493, which forces truck traffic to travel long distances to make these connections. The lack of roadway connectivity in the area, particularly north-south connections, hampers economic development and forces trucks to take longer routes through more congested areas to their destination, resulting in increased roadway congestion and lost productivity, creating a delay in the supply chain for goods headed to destinations across the U.S.
The IBTC will address these challenges and will provide a major new roadway for Hidalgo County that will provide important connections to the U.S - Mexico border. Construction of the IBTC East and West leg roads will provide new access in an area with no existing roadways, and the north leg roadway will provide an important new facility as an alternative to US 281 or FM 493. The IBTC provides an important connection to the international bridges in and around the project area. Vehicles crossing the Pharr-Reynosa Bridge will have a connection to the IBTC via US 281 to Dicker Road and via E Military Highway to 365 Tollway, and vehicles crossing the Donna-Rio Bravo Bridge will have a direct connection to the IBTC where it meets FM 493. The Valley View convergence point will allow IBTC users to directly connect to IH-2 to the north, FM 493 to the east, and US 281 via 365 Tollway or Dicker Road to the west. Trucks traveling north to access IH-2 currently only have two north-south roadways from the border, and only two roads (south of IH-2) that provide a connection between US 281 and FM 493. The IBTC will give trucks accessing the two international bridges new connections to access crucial roadways in the project area and will create a quick and efficient truck route to IH-2. As the IBTC will be grade-separated from Business US 83 and the UPRR tracks and less congested than existing roadways, it will offer more efficient and reliable routing to and from $\mathrm{IH}-2$ for both commercial trucks and passenger vehicles.

## Project Budget, Sources and Uses of Funding

## SUMMARY BUDGET

The project budget and MPDG funding request can be found in the table below. This budget is based on conceptual engineering and preliminary design work to determine that the project is feasible and to develop a reliable budget estimate. The budget is based on previously completed project activities including TxDOT's approval of the schematic design in April 2022 as well as publication of the final Environmental Assessment (EA) in June 2023. The MPDG Grant request is for all three programs contained within the MPDG Notice of Funding Opportunity: Mega, INFRA, and Rural. TxDOT is requesting $\$ 130,515,973$ in MPDG funding.
The source of the other federal funds for the project is the Surface Transportation Block Grant (STBG) Program funds suballocated to TxDOT. The Non-Federal - Local Share funds are provided by the HCRMA. This grant application is for $60 \%$ of future construction costs.

| TOTAL PROJECT COST | \$288,328,902 | PERCENTAGE OF TOTAL |
| :--- | ---: | ---: |
| MPDG REQUEST | $\$ 130,515,973$ | $45.3 \%$ |
| Other Federal (STPBD - Tx- <br> DOT Sub Allocation) | $\$ 26,335,120$ | $9.1 \%$ |
| Non-Federal - TxDOT State <br> Funds | $\$ 45,416,736$ | $16.1 \%$ |
| Non-Federal - Local Share <br> (HCRMA) | $\$ 85,061,073$ | $29.5 \%$ |


| PREVIOUSLY INCURRED COSTS | TOTAL |
| :--- | ---: |
| Advance Planning | $\$ 7,329,180$ |
| Mitigation/Utilities/Outfalls | $\$ 71,844$ |
| Right-of-Way | $\$ 6,338,073$ |
| Subtotal of Incurred Costs | $\$ \mathbf{1 3 , 7 3 9 , 0 9 7}$ |

Previously incurred costs include preliminary design and environmental activities completed since 2010 including preparation of the draft and final EA, topographic and metes and bound surveys, traffic studies, subsurface utility engineering, hydrologic studies, geotechnical investigations, development of a construction cost estimate, and the preparation of a final engineering schematic. HCRMA has also purchased some right-of-way for the corridor and relocated some utilities.
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| FUTURE <br> ELIGIBLE <br> COSTS | MPDG <br> REQUEST | OTHER <br> FEDERAL <br> (STPBG) | NON- <br> FEDERAL <br> (TxDOT) | NON- <br> FEDERAL <br> (HCRMA) | PHASE |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Advance <br> Planning | $\$ 0$ | $\$ 0$ | $\$ 0$ | $\$ 2,793,600$ | $\$ 2,793,600$ |
| Design | $\$ 0$ | $\$ 0$ | $\$ 5,844,602$ | $\$ 2,480,070$ | $\$ 8,324,672$ |
| Right-of-Way | $\$ 0$ | $\$ 0$ | $\$ 0$ | $\$ 35,292,342$ | $\$ 35,292,342$ |
| Construction | $\$ 130,515,973$ | $\$ 26,335,120$ | $\$ 40,572,133$ | $\$ 20,103,396$ | $\$ 217,526,622$ |
| Management | $\$ 0$ | $\$ 0$ |  | $\$ 0$ | $\$ 10,652,568$ |

## DETAILED PROJECT BUDGET

Further breakdown of the future project budget by phase, including advanced planning, design, right-of-way, construction, and project management can be found below.

| FUTURE ELIGIBLE COSTS | TOTAL COST |
| :--- | :---: |
| Advanced Planning | $\$ 2,793,600$ |
| Post NEPA Clearance (Permits) | $\$ 500,000$ |
| Post NEPA Clearance (Archaeology) | $\$ 1,750,000$ |
| Future Survey (aerial + control + topo + corners) | $\$ 150,000$ |
| Future Survey (ROW strip + parcel maps) | $\$ 393,600$ |
| Design | $\$ 8,324,672$ |
| Final Design Plans | $\$ 8,324,672$ |

## DETAILED PROJECT BUDGEI

continued

| FUTURE ELIGIBLE COSTS | TOTAL COST |
| :---: | :---: |
| Right-of-Way | \$35,292,342 |
| Wetland Mitigation Site (Construction) | \$962,500 |
| Complete Utilities and Drainage Outfalls | \$11,539,413 |
| Outfalls | \$3,465,000 |
| ROW Acquisition Services | \$1,634,679 |
| Purchase ROW | \$17,690,750 |
| Construction | \$217,526,623 |
| Roadway Construction (Including Contingency) | \$142,451,063 |
| Bridge Construction (Including Contingency) | \$50,050,373 |
| Escalation | \$25,025,187 |
| Management | \$10,652,568 |
| PMC/GEC (Advance Planning/Design/ROW through Bid Phase) | \$750,000 |
| PMC/GEC (Construction to Closeout) | \$1,000,000 |
| Construction Management (HCRMA CM Staff + Inspection) | \$5,516,600 |
| Miscellaneous Inspection (By Others) | \$500,000 |
| Construction Materials Testing (By Others) | \$2,885,908 |
| Future Costs Total | \$274,589,805 |

A contingency of $15 \%$ for construction costs is included in the project budget and as well as a $13 \%$ escalation per TxDOT guidelines. Right-of-way costs include a 12\% contingency for potential damages to remainders (i.e., legal obligation to purchase more property than is required by the project). In the aggregate, the contingency sum for the project is approximately $\$ 51$ million.

## FUTURE COSTS BY LOCATION

The following table details future costs broken down by Census Tract, and whether that Census Tract is designated by USDOT as rural, an Area of Persistent Poverty (APP), and/or a Historically Disadvantaged Community (HDC). While most Census Tracts that the proposed IBTC runs through contain both urban and USDOT designated rural areas, most of the project location is defined as rural. The costs per Census Tracts are estimates based on the type of work planned for that area and the percentage of the project route that runs through the Census Tract and does not represent an exact breakdown.

| CENSUS TRACT | ESTIMATED COST IN <br> CENSUS TRACT | URBAN/RURAL | APP | HDC |
| ---: | ---: | ---: | ---: | ---: |
| 221.07 | $\$ 37,898,885$ | Urban | Yes | Yes |
| 221.13 | $\$ 25,805,950$ | Both | Yes | Yes |
| 221.12 | $\$ 66,022,373$ | Both | Yes | Yes |
| 228.02 | $\$ 106,661,664$ | Rural | Yes | No |
| 213.13 | $\$ 19,100,467$ | Both | Yes | Yes |
| 213.06 | $\$ 19,100,466$ | Both | Yes | Yes |

## Outcome Criteria Narrative

This document details how the International Bridge Trade Corridor (IBTC) project aligns with the six Project Outcome Criteria described in the Notice of Funding Opportunity. For reference, project location maps can be found below. For additional details on the IBTC project location, please see the Project Location section of the Project Description document or the Project Location File.


Figure 1: IBTC Project Location Maps

## SAFETY

Construction of the IBTC aligns with TxDOT’s 2022-2027 Strategic Highway Safety Plan, whose vision is a future with zero traffic facilities and serious injuries. Construction of the IBTC will improve safety in the project area and in Hidalgo County. As there is no existing roadway where the IBTC will be constructed, crash data for nearby roadways was pulled from TxDOT's Crash Records Information System (CRIS), encompassing five years (2017-2021. On US 281 from IH-2 to US 281 (Military Highway), a total of 1,206 crashes occurred between January 2017 and December 2021. Of these crashes, 10 were Type A (Suspected Serious Injury) and four were Type K (Fatal) crashes. On FM 493 from IH-2 to US 281 (Military Highway), a total of 333 crashes occurred between January 2017 and December 2021. Of these, two were Type A crashes and one was a Type K crash. Additional crash data for roadways in the project area from which traffic will be diverted to the IBTC can be found in the Accidents section of the Benefit-Cost Analysis (BCA).

## SAFETY

continued
Results from the BCA show that construction of the IBTC would result in 31 fewer crashes over a 30-year period. That includes 16 fewer fatal crashes (Type K). Assuming an average of 1.09 fatalities per Type K crash, construction of the IBTC would save 17 lives over a 30-year period compared to the No Build alternative. Similarly, the BCA predicts a total of 100 fewer injury-crashes (Types A, B, C , and U) with construction of the IBTC compared to the No-Build scenario. In the Build scenario, fatal and injury accidents are expected to be largely replaced with minor fender-benders.
The BCA calculates a total monetary cost savings of approximately over $\$ 213$ million over 30 years related to fewer and less severe crashes due to construction of the IBTC.

## STATE OF GOOD REPAIR

As the IBTC is a proposed new roadway, there is no existing condition of the roadway. Once the project is constructed, the HCRMA will commit to the operations and maintenance of the IBTC and ensure the roadway is well maintained. Construction of the IBTC will contribute to an overall state of good repair in Hidalgo County by diverting vehicles, particularly commercial trucks, from existing area roadways that were not designed for heavy loads. This will reduce the wear and tear those roadways incur and will reduce the long-term maintenance costs of those roadways. The IBTC will utilize continuously reinforced concrete paving (CRCP), which allows for the construction of a more durable pavement section. Costs to pay for the CRCP will be partially offset by overweight permit fees that the HCRMA collects from commercial vehicle users in Hidalgo County. The HCRMA overweight permit system allows commercial vehicles to order specialized overweight permits online for transporting between 80,000 to 125,000 pounds for a one-way trip along the overweight corridor. A one-way trip permit costs $\$ 200$ (HCRMA keeps $\$ 27$ of these funds), and the revenue collected can help keep the future IBTC well-maintained in addition to paying for important IBTC project elements such as CRCP.

Results from a traffic model used in calculating the BCA shows that in 2030, five roadways combined (FM 493, US 281 (North-South), US 281 (Military Road), IH-2, and State Highway 336) will divert an estimated 4,160 vehicles to the IBTC each weekday. TxDOT and Hidalgo County maintains these roadways, and they undertake paving, striping, barrier control, and mowing and weeding to keep roads in good condition. This maintenance is costly, as TxDOT estimates annual roadway maintenance for four-lane state highways at $\$ 25,000$ per mile.

Diversion of vehicles to the IBTC will reduce the stress and wear and tear on existing roadways, which will help reduce operations and maintenance costs. As the IBTC will be a newly constructed roadway opening to traffic in late 2029, upkeep and maintenance of the new road will be limited for several years. In addition, maintenance of the new structures on the IBTC will be minimal for the first 30 years, only requiring repairs as identified by inspections.
The IBTC is one of several planned projects in Hidalgo County to ensure that the transportation network in the County remains in a state of good repair. Construction of the IBTC will tie into several planned projects including the under construction 365 Tollway. Figure 2 below is a map of planned major roadway improvement projects in Hidalgo County.


Figure 2: Other Planned Roadway Projects in Hidalgo County

## ECONOMIC IMPACTS, FREIGHT MOVEMENT, AND JOB CREATION

Hidalgo County and the Rio Grande Valley play a significant role in the economies of Texas and the U.S. TxDOT's 2020 Rio Grande Valley Freight and Trade Transportation Plan (Plan) provides an overview of the economic impact of freight and trade in Hidalgo County and the Rio Grande Valley.
Data from the Plan indicates that the freight transportation sector supports over 98,000 jobs annually in the Rio Grande Valley and results in approximately $\$ 19$ billion dollars in economic output. Of these 98,000 jobs, approximately 40,000 are direct jobs from firms and industries that provide freight transportation services while the remainder are indirect and induced jobs. The economic impact of freight jobs has a ripple effect on employment in the region. For every 100 freight jobs in the Rio Grande Valley, another 147 jobs are created in the state of Texas, and for every dollar of value added in freight transportation an additional $\$ 1.13$ of value is added to the economy. ${ }^{1}$ As this project is located next to the border with Mexico, the jobs created by this project and the enhanced trade present a unique opportunity for this grant to improve not only Texas' economy, but the economy of the entire U.S. Only projects that are located near the border can make this claim, as it will not draw jobs from other areas in the U.S, and thus represents a net positive for the country.

## ECONOMIC IMPACTS, FREIGHT MOVEMENT, AND JOB CREATION

continued
The state of Texas has 28 roadway border crossings, six freight rail crossings, and eight Foreign Trade Zones (FTZ's), which help contribute to the nearly $\$ 350$ billion dollars in GDP generated in 2019. Data from TxDOT's 2021 Texas-Mexico Border Transportation Master Plan indicates that by 2050, the economic impact of cross-border trade is expected to total nearly $\$ 1.2$ trillion dollars in GDP. The overall movement of goods generated 1.6 million jobs in the U.S. in 2019, and that number is expected to grow to 6.5 million jobs by $2050^{2}$.

It is also important to note the growing population on both sides of the border. The Texas-Mexico border region's population increased 70 percent between 1990 and 2019 to nearly 7.45 million people. The Rio Grande Valley and the Mexican State of Tamaulipas' combined population increased 83 percent between 1990 and 2019 to over three million and is forecast to grow another 15 percent by 2050. This population increase has brought significant employment growth on both sides of the border, with employment in the Texas-Mexico border region totaling nearly three million jobs in 2019, a 97percent increase from 1990. In the Rio Grande Valley, employment grew by 111 percent between 1990 and 2019, and is forecast to increase by 100 percent by 2050, which would result in over one million total jobs in the Rio Grande Valley.

Growth in population and employment in the region has brought a significant increase in border crossings. The McAllen-Hidalgo crossing, just west of the IBTC, saw over 650,000 combined truck and commercial vehicle crossings in 2019, a 217 percent increase compared to the 205,000 crossings in 1996. The Pharr-Reynosa crossing is also experiencing significant growth and is expected to see nearly two million truck crossings by 2050.

The impact to GDP of trade through the Texas-Mexico border can be shown in Figure 3 below (figure sourced from Texas-Mexico Border Transportation Master Plan). According to data from Mexico's Exterior Relations Office (SRE), total trade between Texas and Mexico totaled \$231.1 billion dollars in 2021, greater than trade between the entire U.S and the United Kingdom, Spain, and Brazil combined.

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[^1]
## ECONOMIC IMPACTS, FREIGHT MOVEMENT, AND JOB CREATION

continued
CONTRIBUTION OF TRADE THROUGH THE TEXAS-MEXICO BORDER TO STATE GDP - 2019


Figure 3: A Map of Trade Impact that Flows Through the Texas - Mexico Border
Continued investment in the transportation network in Hidalgo County, the Rio Grande Valley, and the state of Texas is critical for continuing regional and national economic development and growth. Lack of investment in the transportation system will hinder freight movement and increase the cost of goods crossing the border as has been made evident during the recent supply chain disruptions of 2020 and 2021. In 2018, Hidalgo County experienced the largest highway delays of all counties within the Rio Grande Valley, seeing more than 13 million hours of delay across all vehicles, and nearly 578,000 truck-hours of delay. Truck delays in Hidalgo County alone accounted for approximately 57 percent of total truck delay in counties in the Rio Grande Valley in $2018^{4}$. A lack of future investment in the transportation network in the Rio Grande Valley and near the Texas-Mexico border has the potential to significantly hinder future growth in the region.
It is in this context that the IBTC has been proposed. Construction of the IBTC will provide significant economic benefits for Hidalgo County, the Rio Grande Valley, and the state of Texas. The new roadway will provide an alternative to congested roads in the project area and will allow for improved efficiency of truck movement to access the international crossings in the area. The new roadway connects with important regional and interstate corridors and will allow truck traffic to more quickly access multiple border crossings. Construction of the IBTC will improve travel time reliability (especially for freight movement), enhance connectivity to the regional freight network, help decrease the cost of traded goods associated with travel delay, and promote economic

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## ECONOMIC IMPACTS, FREIGHT MOVEMENT, AND JOB CREATION

continued
development in a rural area and a USDOT designated Area of Persistent Poverty and Historically Disadvantaged Community. Given the monetary costs associated with travel delay in accessing the US-Mexico border, the IBTC is a vital project in continuing the economic growth of the Rio Grande Valley.
Results from the BCA show that over a 30-year period, construction of the IBTC will lead to 19,996,050 man-hours of time travel savings those traveling by car and 594,516 man-hours of travel time savings for truck drivers in the area. This results in an expected monetary savings of nearly $\$ 376$ million for those traveling by car and over $\$ 19$ million for truck drivers due to reduced vehicle delay. Construction of the IBTC and the reduction in truck travel time will also result in reduced shippers' delays, resulting in an additional expected monetary savings of approximately $\$ 40$ million.

Reduced travel delay will help continue economic growth in Hidalgo County and the Rio Grande Valley and its impacts will be felt by consumers across the U.S. Given the volume of goods that crosses through the international crossings in the project area, a decrease in travel delay and shipping costs can help reduce the cost of goods for consumers nationwide. Figure 4 below is a photo of trucks waiting to cross the border.


Figure 4: Trucks Waiting to Cross the Border

## CLIMATE CHANGE, RESILIENCY, AND THE ENVIRONMENT

In May 2023, TxDOT published the final draft of the Environmental Assessment (EA) for the IBTC. The final EA concluded that the proposed project would not result in a significant impact on the human and natural environment and recommended a Finding of No Significant Impact (FONSI). A NEPA clearance and concurrence on the recommended FONSI is expected in September 2023. The project's anticipated impact on the select environmental resource areas as identified in the EA is summarized below:

## WATER RESOURCES

Construction of the IBTC will involve activity in jurisdictional waters and will require authorization under Section 404 of the Clean Water Act. HCRMA has met with the US Army Corps of Engineers

## CLIMATE CHANGE, RESILIENCY, AND THE ENVIRONMENT

continued
to discuss the project and potential mitigation measures. HCRMA is assessing the need for compensatory mitigation and will propose appropriate mitigation measures to offset impacts to water resources.

## FLOODPLAINS

Portions of the project limits are located within a FEMA designated 100-year floodplain. The hydraulic design for the project would be in accordance with FHWA design policies. The IBTC will cross the International Boundary and Water Commission's (IBWC) Main Floodway Channel, with a planned bridge. The proposed IBTC bridge will be designed to current standards for 100-year flooding events, helping to ensure resiliency in the event of a catastrophic flood in the project area.

## BIOLOGICAL RESOURCES

Construction of the IBTC is anticipated to have some impacts on vegetation in the project area. Permanent impacts would exceed thresholds defined by the Texas Parks and Wildlife Department (TPWD); coordination with TPWD occurred during preparation of the EA. Additionally, possible impacts to wildlife, migratory birds, and other threatened, endangered, and rare species were identified in the EA.

## AIR QUALITY

No significant impacts to air quality in the project area during construction of the project were identified. Results from the BCA indicate a slight increase in emissions in the project area after construction of the IBTC due to increased miles traveled on the roadway network after the IBTC is placed into service. However, as electric and alternate fuel vehicles become more prevalent, it is possible that adoption of these lower emission vehicles will offset the projected growth in emissions due to construction of the IBTC.

## EQUITY, MULTIMODAL OPTIONS, AND QUALITY OF LIFE

The project is located in a USDOT designated Area of Persistent Poverty and Historically Disadvantaged Community. 2020 Census data shows Hidalgo County's median household income was $\$ 41,846$, significantly lower than the U.S. average of $\$ 67,521$. 2020 Census data also shows that nearly 24 percent of people in Hidalgo County live in poverty, over double the national rate of 11.4 percent. Hidalgo County is 92.5 percent Hispanic/Latino, and 82.7 percent of residents reported speaking a language other than English at home, primarily Spanish. Census Tracts ${ }^{5}$ encompassing the route of the future IBTC range between the 72nd and 94th percentiles of low incomes households, between the 95th and 98th percentiles of households with "linguistic isolation," and in the 92nd percentile for the level of PM2.5 particles in the air.

As the IBTC is in an Area of Persistent Poverty, improvements associated with the project will benefit Texas residents most in need of new economic opportunities. The benefits of constructing the IBTC include job creation, enhanced mobility, and economic growth, all of which will benefit underserved households in the project area.

Construction of the IBTC project, located in a low-income and USDOT designated rural area, will help improve economic opportunity in Hidalgo County and the greater Rio Grande Valley. It will promote growth and development in the area and will add additional high paying jobs in

[^3]
## EQUITY, MULTIMODAL OPTIONS, AND QUALITY OF LIFE

the freight trade and transportation sector. The most recent official estimate of the impacts of infrastructure investment on employment was generated by the Council of Economic Advisers (CEA). It estimated that every $\$ 76,923$ in transportation infrastructure spending creates one job for one year. ${ }^{6}$ Based on this research and a construction cost of $\$ 217,526,622$, it can be estimated that construction of the IBTC will result in 2,828 total jobs, which includes direct, indirect, and induced jobs. While many of these jobs may be temporary, it is anticipated that others will be permanent and lead to long-term economic development in Hidalgo County.
TxDOT and the HCRMA have engaged in extensive public involvement throughout project development. On January 10, 2019, the HCRMA conducted a Town Hall Meeting with affected property owners within the Val Verde community. A total of 87 affected property owners and/or their representatives signed in at the meeting. The HCRMA subsequently held a Public Meeting on March 19, 2019. Notices for the meeting were published in English and Spanish, handouts at the meeting were available in both English and Spanish, and interpreters were present at the meeting. 89 members of the public and three public officials signed in at the meeting.
A virtual public hearing to solicit public comments on the Draft Environmental Assessment was held on March 17, 2022. Presentations were given in both English and Spanish, and materials made available on the HCRMA's website were in both English and Spanish. An in-person option was available for residents as well. A total of 350 people visited the HCRMA website during the hearing and 57 people attended the hearing in-person. The HCRMA will continue to solicit public input on the project. As Design Engineering on the project gets underway, the HCRMA will continue to provide project updates to the public with notices in both English and Spanish.

Construction of the IBTC includes a 10' shoulder that could accommodate cyclists wishing to travel the roadway. The project also includes the construction of pedestrian amenities such as pedestrian push buttons to ensure a safe crossing across the IBTC. The project does not include the construction of a dedicated sidewalk facility along the IBTC; however, current plans call for the addition of sidewalks if future demand warrants an expansion of the IBTC facility. All cross-street roadways will be designed to accommodate future pedestrian and bicycle facilities to keep the project from prohibiting these modes from crossing the facility safely.
Congestion and noise from traffic are two additional factors influencing quality of life. The diversion of traffic from city streets to the largely rural IBTC will also relocate congestion and noise impacts from areas with more people to areas where fewer people will experience these impacts. The BCA calculates combined congestion and noise savings (monetized) of nearly $\$ 7$ million dollars, over 30 years.
The project area is home to several elementary, middle, and high schools, and one community college. Schools along or adjacent to US 281 in the project area include Jaime Escalante Middle School, PSJA Southwest Early College High School, South Texas College - Regional Center for Public Safety Excellence, and Picasso Elementary - Vanguard Academy. Schools along or adjacent to FM 493 in the project area include BG Guzman Elementary School, WA Todd Middle School, and Donna High School. Area students walking to school must sometimes walk just feet from cars traveling at high speeds. Construction of the IBTC will divert car and truck traffic from both US 281 and FM 493, which will result in fewer vehicles using these roads, enhancing safety for students and staff going to these schools.

[^4]
## INNOVATION AREAS: TECHNOLOGY, PROJECT DELIVERY, AND FINANCINGO

## INNOVATIVE FINANCING

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. Texas has undertaken recent efforts to raise significant amounts of state funding for transportation through funding sources dedicated to transportation investments. These efforts have been solidified by two voterapproved sources, Propositions 1 and 7, as well as action taken by the Texas Legislature to end diversions from the State Highway Fund (SHF) ${ }^{7}$. 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 IBTC.

Proposition 1 was approved by 80 percent of Texas voters in 2014. Under the amendment, a portion of oil and natural gas production excise taxes is divided evenly between the Economic Stabilization Fund and the SHF. Since 2015, a total of $\$ 13.3$ billion dollars of Proposition 1 funding has been deposited into the SHF.

Proposition 7 was approved by 83 percent of Texas voters in 2015. It increased funding for the state highway system by requiring the Texas Comptroller to deposit into the SHF up to $\$ 2.5$ billion dollars of the net revenue from state sales and use tax that exceeds the first $\$ 28$ billion of revenue each fiscal year. Since 2015, a total of $\$ 15.7$ billion dollars of Proposition 7 funding has been deposited into the SHF.

Federal funding to be used for future eligible project costs will require a non-federal funding match. State funding sources such as the motor vehicle fuels tax, state vehicle registration fees, and Propositions 1 and 7 will be leveraged as the match for federal funds associated with the IBTC project.

The HCRMA has two innovative programs to raise local transportation revenues. HCRMA operations are primarily funded through vehicle registration fees in Hidalgo County. A \$10 fee per vehicle is collected by Hidalgo County and transferred to the HCRMA. In addition, the HCRMA receives a portion of funds generated through overweight permits granted to trucks in Hidalgo County. The permit costs $\$ 200$, and $\$ 27$ of this funding is distributed to the HCRMA and represents a nontraditional source of transportation funding used to leverage federal revenue to expand the overall investment in transportation infrastructure. Figure 5 below is a map of HCRMA's Overweight/Oversize Corridors, where permit fees from trucks traveling on select corridors are collected.

[^5]
## INNOVATION AREAS: TECHNOLOGY, PROJECT DELIVERY, AND FINANCINGO



Figure 5: A Map of HCRMA's Overweight/Oversized Corridors

## INNOVATIVE TECHNOLOGY

Construction of the two structures as part of the IBTC are planned to utilize an innovative technology called Accelerated Bridge Construction (ABC). ABC is a bridge construction technique designed to improve constructability, reduce total project delivery time, reduce traffic impacts, promote work-zone safety, and minimize weather related time delays. Construction of the structures along the IBTC will include prefabricated bridge elements that are constructed off-site, then brought to the construction area, which will promote work zone safety.

## INNOVATIVE PROJECT DELIVERY

The traditional design-bid-build model is anticipated for project delivery of the IBTC.

## Project Requirements

This document describes how the IBTC project meets the statutory project requirements as detailed in the MPDG Notice of Funding Opportunity.

## STATUTORY SELECTION REQUIREMENT \#1:

## PROJECT WILL GENERATE NATIONAL, OR REGIONAL ECONOMIC, MOBILITY OR SAFETY BENEFITS:

Given the project's location near multiple U.S. - Mexico international border crossings, the volume of goods that flow through those crossings, and the project's impact on improving the truck mobility in Hidalgo County and the Rio Grande Valley, the IBTC is expected to generate significant regional and national economic benefits. A map of the project's location in the context of trade flow from the U.S. - Mexico border can be found in Figure 1, below.


Figure 1: A Map of Trade Flow Between the U.S. and Mexico and the IBTC Location

Construction of the IBTC will provide significant economic benefits for Hidalgo County, the Rio Grande Valley, Texas, and the nation. The new roadway will provide an alternative to congested roads in the project area and improve the efficiency of truck movement to access the international crossings in the area. The new roadway connects with important regional corridors and will allow truck traffic to quickly access multiple border crossings. Construction of the IBTC will increase travel time reliability (especially for freight movement), enhance connectivity to the regional freight network, help decrease truck travel delays that generate added costs for shippers, and promote economic development in a USDOT designated Area of Persistent Poverty. Results from the BCA show that over a 30-year period, construction of the IBTC will lead to nearly 20 million

## STATUTORY SELECTION REQUIREMENT \#1:

## continued

man-hours of travel time savings for people driving and riding in cars and over 594,000 man-hours of time travel savings for truck drivers in the area. These man-hour savings equate to an expected monetary savings of $\$ 376$ million for people traveling in personal vehicles and over $\$ 19$ million for truck drivers due to reduced vehicle delay. Construction of the IBTC and the reduction in truck travel time will also result in reduced shipping delays, resulting in an expected monetary savings of over $\$ 40$ million.

## STATUTORY SELECTION REQUIREMENT \#2:

## PROJECT WILL BE COST EFFECTIVE:

Results from the Benefit-Cost Analysis show that this project will have a Benefit-Cost Ratio of 1.04, indicating a project whose benefits will exceed its costs. The net benefits of the project are estimated to be $\$ 604$ million dollars over 30 years, or $\$ 116$ million dollars when discounted at $7 \%$. Costs of the project (2021 dollars) are estimated to be $\$ 161$ million, or $\$ 111$ million when discounted. The greatest benefit calculated in the BCA for the IBTC is the reduced travel time for traffic in the vicinity due to the increased capacity the project will bring, resulting in more free-flowing traffic, and shorter travel distances for some vehicle trips. The second largest benefit calculated in the BCA is the accident reduction drivers and passengers of vehicles within the Project's area of influence will enjoy. The addition of a new roadway alignment that avoids most city traffic, provides a median or barrier to separate lanes from oncoming traffic, and meets today's design standards will manifest in less severe crashes and lower crash rates. A third major benefit is the reduction in shipping delays, which reduces the cost of doing business and will help lower the costs of doing business across Texas and throughout the United States.

## STATUTORY SELECTION REQUIREMENT \#3:

## PROJECT WILL CONTRIBUTE TO 1 OR MORE GOALS OF THE NATIONAL GOALS DESCRIBED UNDER SECTION 150:

The project will contribute to multiple national goals detailed in U.S. Code Section 150. The project contributes most significantly to Goal 5 (Freight Movement and Economic Vitality), as it will strengthen the ability of rural communities to access national and international trade markets and support regional economic development. The project also contributes to Goal 4 (System Reliability), as it will help to improve the efficiency of the surface transportation system by constructing a new roadway in an area of existing congestion and high volumes of truck traffic and constructs an improvement that is grade-separated from Business US 83 and the Union Pacific Railroad (UPRR) tracks. As the IBTC is a new roadway, it will help make the roadway network more reliable. For instance, when an existing roadway is blocked due to an accident or maintenance, in many cases, the IBTC will offer an alternative. Finally, the project contributes to Goal 1 (Safety) by constructing a new roadway that will result in 31 fewer and less severe crashes over a 30-year period. That includes 16 fewer fatal crashes (Type K) and 100 fewer injury crashes (Types A, B, C, and U).

## STATUTORY SELECTION REQUIREMENT \#4:

## PROJECT IS BASED ON THE RESULTS OF PRELIMINARY ENGINEERING:

The preliminary engineering and design phase for the IBTC began in 2010 and culminated with TxDOT's approval of the schematic design in April 2022 and publication of the final Environmental Assessment in May 2023. The following project activities have been completed for the IBTC and are shown and documented on the final schematics:

1. Topographic surveys and low-level flight surveys were completed to develop vertical and horizontal roadway profiles, drainage features, detention pond geometry, locations of utilities, and other engineering features.
2. Metes and Bounds surveys were completed to determine right-of-way limits, property lines, and the ownership of impacted properties.
3. Traffic studies were completed including average daily traffic volumes, design speeds, and determination of lane configurations.
4. Subsurface utility engineering (SUE) activities were completed to determine the location of underground utility lines.
5. Hydrologic studies were completed to determine proposed hydrologic features such as drainage channels, cross drainage culvert sizes, outfall locations, detention ponds, and other necessary drainage features.
6. Geotechnical investigations were completed to develop draft geotechnical reports to assist in preparation of design for bridge, retaining wall, pavement, and drainage structures.
7. Opinion of Probable Construction Costs have been developed based on construction materials and estimated quantities for the project and periodically updated over the years for reporting to the HCRMA Board of Directors, TxDOT, and Rio Grande Valley Metropolitan Planning Organization (RGVMPO).

Links below provide the location of the final engineering schematic plans, which were completed and signed/sealed by a Texas Professional Engineer on April 8, 2022. Information included in the final schematics provide documentation of the activities that are listed above. While the schematics show the full set of IBTC improvements (including the potential Phase II build-out), the benefits and costs associated with this MPDG application are only for the Phase I (interim) section.

## Schematic 1

Schematic 2
Schematic 3
Schematic 4
Schematic 5
Schematic 6

## A draft of the final Environmental Assessment can be found at the following link: Final Environmental Assessment

## STATUTORY SELECTION REQUIREMENT \#5:

WITH RESPECT TO RELATED NON-FEDERAL FINANCIAL COMMITMENTS, 1 OR MORE STABLE AND DEPENDABLE SOURCES OF FUNDING AND FINANCING ARE AVAILABLE TO CONSTRUCT, MAINTAIN, AND OPERATE THE PROJECT, AND TO COVER COST INCREASES:

As detailed in the Project Budget document, TxDOT has several dependable funding sources for providing the local match required for the grant award. TxDOT's share of the local match is $\$ 45,416,736$ and an additional $\$ 85,061,073$ in local funds from the Hidalgo County Regional Mobility authority (HCRMA) have been spent or are committed in the future to the project. This project's strong local funding commitment is demonstrated with both the state and local share representing approximately $45.6 \%$ of the total project cost.

## STATUTORY SELECTION REQUIREMENT \#6:

## PROJECT CANNOT BE EASILY AND EFFICIENTLY COMPLETED WITHOUT OTHER FEDERAL FUNDING OR FINANCING AVAILABLE TO THE PROJECT SPONSOR:

Federal funding through the MPDG would eliminate any potential delay due to project funding availability. While the HCRMA, the Rio Grande Valley MPO, and TxDOT have done everything possible to partner, fund, and expedite the project-the region's needs outweigh available funding. Without a MPDG award, the project would continue development on a long-range schedule that may take upwards of 10 years (or greater) to identify interim funding sources from regional stakeholders and/ or the State. These would provide challenges not only to project viability due to cost escalation, but also exacerbate the degradation of quality of life, driver safety from mixing of freight traffic and passenger traffic on local surface streets, and the loss of economic development opportunities.

## STATUTORY SELECTION REQUIREMENT \#7:

## PROJECT CAN BE EXPECTED TO BEGIN NOT LATER THAN 18 MONTHS AFTER THE DATE OF OBLIGATION OF FUNDS:

As detailed in the project schedule, work on the IBTC project is ongoing, and would accelerate with an MPDG award. The project schedule calls for issuance of a FONSI in September 2023, the completion of PS\&E in February 2026, the completion of ROW acquisition in March 2026, and the start of construction in September 2026. Assuming a MPDG award announcement in Spring 2024 and the execution of a grant agreement with USDOT in Summer 2025, construction would begin not later than 18 months after the obligation of funds.

## STATUTORY SELECTION REQUIREMENT \#8: (MEGA ONLY)

THE APPLICANT HAS, OR WILL HAVE, SUFFICIENT LEGAL, FINANCIAL, AND TECHNICAL CAPACITY TO CARRY OUT THE PROJECT:

TxDOT has a long history of delivering transformational transportation projects for the benefit of residents and visitors in the state of Texas. Additional information on recently awarded USDOT discretionary grants to TxDOT, as well as project risk information can be found in the Project Readiness document.

STATUTORY SELECTION REQUIREMENT \#9: (MEGA ONLY)

THE APPLICATION INCLUDES A PLAN FOR THE COLLECTION AND ANALYSIS OF DATA TO IDENTIFY THE IMPACTS OF THE PROJECT AND ACCURACY OF FORECASTS INCLUDED IN THE APPLICATION:

Appendix D includes TxDOT's proposed Mega Data Plan for this application.

# Project Readiness 

## ENVIRONMENTAL RISK

## DETAILED PROJECT SCHEDULE

A detailed project schedule has been developed for the IBTC project. Listed below are major milestones and the estimated completion date:

- Finding of No Significant Impact (FONSI) Confirmation and NEPA Clearance: September 2023
- Complete railroad coordination: July 2025
- PS\&E completion: February 2026
- ROW acquisition completion: March 2026
- Utility coordination and relocation complete: May 2026
- Construction letting: June 2026
- Construction begins: September 2026
- Substantial construction completion: June 2029
- Construction completion: December 2029

A final Environmental Assessment (EA) for the IBTC was published in May 2023 and is currently available for public comment on HCRMA's website. The final EA can be found at the following link: Final Environmental Assessment IBTC. The final EA notes that the project would not result in a significant impact on the human and natural environment and recommends a Finding of No Significant Impact (FONSI).
Public involvement and community engagement efforts have occurred throughout the NEPA process, with public hearings for the project having been held most recently in 2022. Additional details on the extensive community engagement efforts that were undertaken as part of the EA can be found in the final draft of the EA at the link above (Section 7.0 - Public Involvement). Continued public and community engagement is critical to the success of the project and will occur throughout future project stages. The project schedule ensures that all necessary activities will be complete to allow MPDG funds to be obligated sufficiently in advance of the statutory deadline for FY 2023 INFRA and Rural funds, September 30, 2026.

All ROW and property acquisition for the project will be completed in a timely manner and in accordance with 49 CFR Part 24, 23 CFR Part 710, and other applicable legal requirements. All ROW acquisition undertaken by TxDOT adheres to federal and state requirements detailed in TxDOT's ROW Acquisition Manual. TxDOT's ROW acquisition process works to ensure acquisition that minimally disrupts communities and maintains community cohesion.

## REQUIRED APPROVALS

The IBTC is included in both TxDOT's Statewide Transportation Improvement Program (STIP) as well as the in Rio Grande Valley MPO's Long Range Transportation Plan (LRTP) and Transportation Improvement Program (TIP). In TxDOT's STIP, funding for the project is identified as part of the STIP's identification of local MPO's programs of projects (see Page 3450), CSJ \# 0921-02-142. In the Rio Grande Valley MPO's LRTP, funding for the project is identified for Engineering as 2045 MTP ID 24, for ROW as 2045 MTP ID 58, and for Construction as 2045 MTP ID 212. Finally, funding for the project is identified in the Rio Grande Valley MPO's TIP 2023-2026 TIP. Funding is

## ENVIRONMENTAL RISK

continued
spread out across three Fiscal Years, 2023, 2024, and 2026, and detailed costs are identified for Engineering, ROW, Construction and Construction Engineering, as well as a Contingency.
The project has received the following permits and approvals:

- National Resources Conservation Service (NRCS) - Score of less than 160 on Farmland Conservation Impact Rating analysis - No further consideration for protection and no additional evaluation needed (July 2018)
- Concurrence from the Texas Historical Commission (THC) on the draft intensive archeological survey report (June 2019)
- Subsequent approval from the THC on a mitigation plan (March 2021)
- State Historic Preservation Office (SHPO) concurrence on finding of no adverse effects on historic properties (April 2019)

In addition to permits and approvals from the NRCS, THC, and SHPO, the HCRMA has undertaken extensive agency coordination efforts for the IBTC, including with Native American tribes in the area, with the Texas Parks and Wildlife Department (TPWD), with the U.S. Fish and Wildlife Service (USFWS), with the US Environmental Protection Agency (EPA), with the Texas Commission on Environmental Quality (TCEQ) and has held numerous coordination meetings with the U.S. Army Corps of Engineers (USACE).
Future anticipated permits and approvals include:

- Concurrence from the International Boundary and Water Commission (IBWC) that the project and construction will not interfere with operation and maintenance of any project works of the IBWC
- USACE Section 404 Permit
- Archeological Mitigation (Data Recovery) Permit from the Texas Historical Commission
- Construction soil and water management for the Donna Superfund from the EPA and other state and federal agencies as applicable
As noted in previous sections, a final Environmental Assessment for the IBTC has been published with a recommendation for a FONSI.


## ASSESSMENT OF PROJECT RISKS AND MITIGATION STRATEGIES

On April 5, 2022, the HCRMA held a risk management workshop for the IBTC project. The focus of the workshop was to review a list of initial risks developed prior to the workshop and to develop specific Action Plans to mitigate risks during the next phases of project development. The risk workshop identified four risks for the project that were rated "High":

1. Natural events (hurricanes) or Force Majeure events delay construction activities
2. Current market conditions are not adequately accounted for in project cost estimates and schedule
3. Reasonable procurement of material lead times and resource assumptions due to uncertain market conditions are not accounted for in time determination schedule
4. Insufficient or delayed coordination with Union Pacific Railroad (UPRR).

## ENVIRONMENTAL RISK

continued
Actions to mitigate the four risks cited above include:

- Sufficient delay days incorporated into the schedule as contingency to account for at least one hurricane.
- Review current contingency and assess if additional risk contingency is appropriate to account for Force Account work (relief event costs related to schedule delays, clean up and delay costs) associated with Force Majeure events.
- Continue to monitor market conditions and adjust cost estimate and project schedule accordingly.
- Apply appropriate risk contingency based on current market conditions to the current estimate and schedule.
- Consider current impacts on regional projects from supply chain delays, year-over-year inflation increases, CPI and CCl index fluctuations, economic growth rates, current increases in material and production costs, skilled labor costs, labor availability and equipment availability.
- Develop a milestone schedule using reasonable assumptions based on current market conditions.
- Include appropriate schedule float to determine number of working days.
- Adjust schedule accordingly as conditions change (for example, anticipated production rates based on current labor and material availability).
- Initiate and mitigate delay risk by early coordination with RR.
- Begin preparing railroad exhibits.
- Provide adequate railroad review time in milestone schedule.
- Coordinate with railroad to request a preliminary engineering letter of agreement (PELOA)
- Utilize the TxDOT Rail-Highway Operations Manual for guidance in scheduling coordination with UPRR.

In addition to the 4 "High" risks identified above, the workshop identified an additional 29 risks that were cited as "Medium" or "Low" risk.

It is important to note that by awarding an MPDG grant to this project, the anticipated schedule can be advanced and will reduce some risks by shortening the time exposure to them. The full set of project risks identified, and a summary of the risk management workshop, can be found in Appendix C.

## TECHNICAL CAPACITY

TxDOT is the lead applicant for this application and is a partner with the HCRMA in the development of the IBTC. TxDOT's vision is to be a "forward-thinking leader delivering mobility, enabling economic opportunity, and enhancing quality of life for all Texans." As of August 2021, TxDOT has over 12,000 employees at 25 districts and its headquarters in Austin. Approximately 40 percent of TxDOT's revenue comes from federal funds. TxDOT has a long history of delivering transformational transportation projects for the people of the state of Texas.

## TECHNICAL CAPACITY

continued
TxDOT has been awarded several USDOT discretionary grants in recent years. The table below summarizes USDOT discretionary grants that have been awarded to TxDOT since 2015:

| $\begin{gathered} \text { USDOT } \\ \text { PROGRAM } \\ \hline \end{gathered}$ | AWARD AMOUNT | AWARD YEAR | LOCATION | PROJECT TYPE |
| :---: | :---: | :---: | :---: | :---: |
| Low and No Emission and Bus and Bus Facilities | \$7,443,765 | 2023 | Statewide | Transit assets |
| RCE | \$19,550,000 | 2023 | Dayton | Rail crossing elimination |
| RCE | \$17,187,552 | 2023 | Fort Worth | Rail crossing elimination |
| BIP | \$14,037,887 | 2022 | Goliad County | Bridge replacement |
| SMART | \$1,900,000 | 2022 | College Station | Connected vehicles |
| RAISE | \$25,000,000 | 2022 | El Paso and Paris | Bike and pedestrian |
| RAISE | \$12,000,000 | 2021 | Dallas | Bike and pedestrian |
| INFRA | \$50,000,000 | 2021 | Gainesville | Roadway improvements |
| BUILD | \$25,000,000 | 2020 | Odessa/Midland | Interchange improvements |
| BUILD | \$25,000,000 | 2018 | Winkler County | Grade separation |
| BUILD | \$25,000,000 | 2018 | Glasscock and Reagan Counties | Roadway improvements and grade separation |
| INFRA | \$65,000,000 | 2018 | Tarrant County | Roadway improvements |
| ATCMTD | \$6,850,000 | 2018 | I-10 Corridor | Truck parking availability system |
| ATCMTD | \$6,090,221 | 2017 | Statewide | Freight technology |

## TECHNICAL CAPACITY

continued

| USDOT <br> PROGRAM | AWARD <br> AMOUNT | AWARD YEAR | LOCATION | PROJECT TYPE |
| :---: | :---: | :---: | :---: | :---: |
| FASTLANE | $\$ 7,000,000$ | 2017 | Presidio County | Railroad <br> improvements |
| ATCMTD | $\$ 8,900,000$ | 2016 | Houston | ITS <br> improvements |
| TIGER | $\$ 20,802,400$ | 2015 | Statewide | Transit |

Working with USDOT on delivering these past grant awards has positioned TxDOT to expeditiously obligate MPDG funding for the IBTC project. As part of this project, TxDOT will comply with all applicable Federal requirements including but not limited to Buy America provisions, Americans with Disabilities Act (ADA) regulations, Civil Rights requirements, and Federal Motor Vehicle Safety Standards (FMVSS).


[^0]:    ${ }^{1}$ https://bridge.pharr-tx.gov/world-city-report/
    ${ }^{2}$ https://myrgv.com/local-news/2023/05/19/partial-funding-secured-for-commercial-expansion-of-donna-rio-bravo-international-bridge/

[^1]:    ${ }^{1}$ Rio Grand Valley Freight and Trade Transportation Plan
    ${ }^{2}$ Texas-Mexico Border Transportation Master Plan 2021
    ${ }^{3}$ Mexico's Trade with Texas Edition 2022

[^2]:    ${ }^{4}$ Economic Contributions of Freight - Rio Grande Valley Freight and Trade Transportation Plan

[^3]:    ${ }^{5}$ Census Tracts - overburdened and underserved highlighted

[^4]:    ${ }^{6}$ Employment Impacts of Highway Infrastructure Investment

[^5]:    ${ }^{6}$ Transportation Funding in Texas 2023 Edition

