

Commercial Vehicle Driver Training Program Update

Border Trade Advisory Committee April 16, 2024



Commercial Vehicle Driver Training Program Update

Commercial Vehicle Driver Training Program

2

- The Program was presented to BTAC on February 20, 2024.
- The Committee instructed TxDOT to start next steps to begin the implementation of the program.

Goals:

- Develop and implement a cross-border driver training program to:
 - Increase commercial vehicle safety and compliance, reducing the number of violations and out-of-service rates
 - Improve cross-border efficiency at Texas Land Ports of Entry, reducing disruptions and delays of deliveries

Benefits:

- ✓ Make Texas' roads safer
- ✓ Boost Texas' economy
- Help commerce move across the Texas-Mexico border
- Streamline the commercial vehicle cross-border process
- Reduce congestion, delays, and costs to cross the border

Progress Made to Date

- Conducted an initial meeting with Texas Department of Public Safety (DPS) / Commercial Vehicle Enforcement.
- ✓ Discussed the Commercial Driver Training plan and concepts and gained DPS support.
- ✓ Coordinated with DPS to identify trainers throughout the program's life, which is ongoing.
- ✓ Secured the 2023 version of the Commercial Vehicle Safety Alliance (CVSA) Out of Service Criteria in English and Spanish.

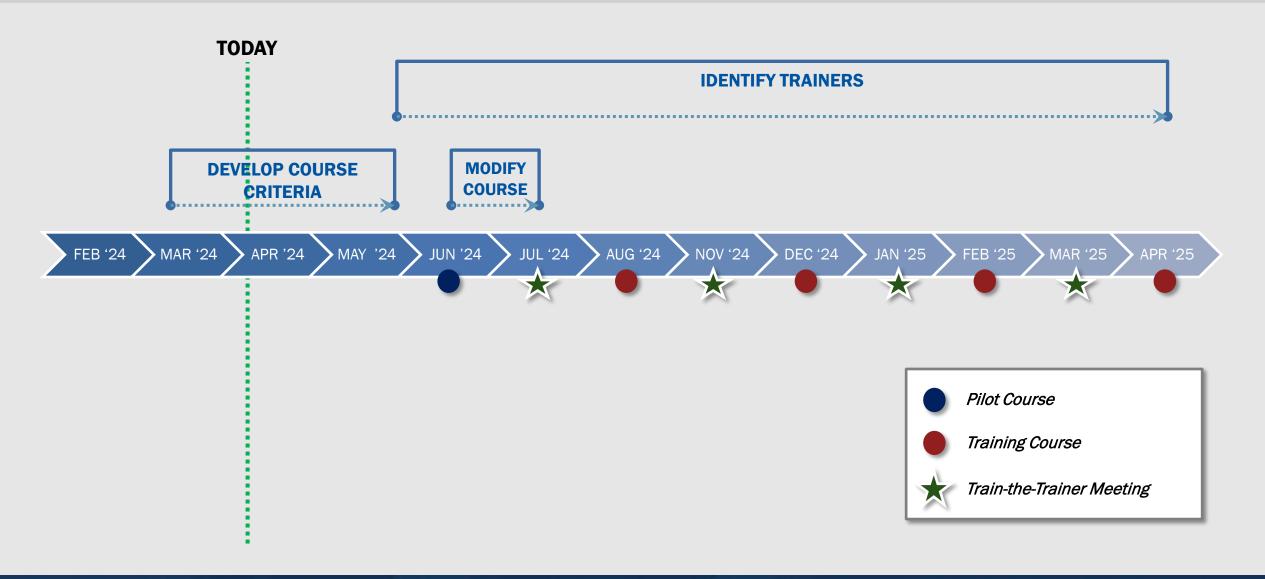


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- Develop and finalize course curriculum with DPS feedback- June 2024.
- Conduct *a pilot training course* in June 2024.
- Modify curriculum and material based on *feedback from the pilot*.
- Conduct the first Train-the-Trainer Course July 2024 in Laredo.
- Begin monthly training courses along the Texas-Mexico Border.

Next Steps

5



Thank You !!

6

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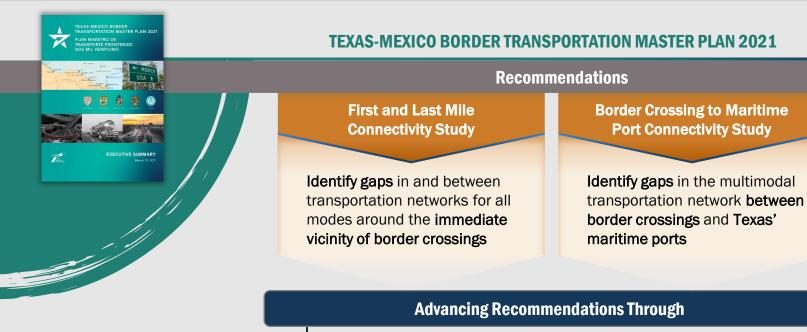
Border Connectivity Studies Update

Border Trade Advisory Committee April 16, 2024



Border Connectivity Studies Update

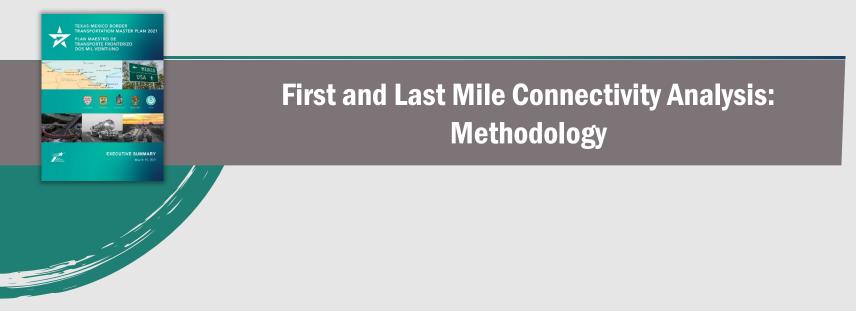
BTMP Border Crossing Connectivity Studies



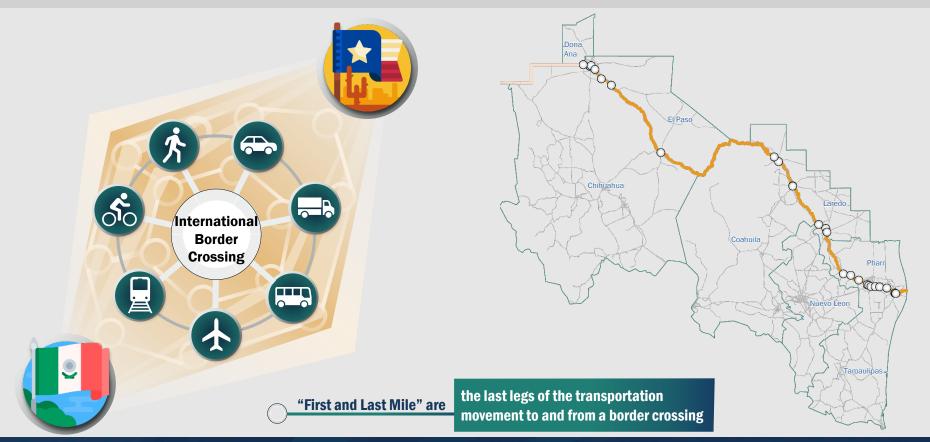
BORDER CONNECTIVITY ANALYSIS

STAKEHOLDER ENGAGEMENT

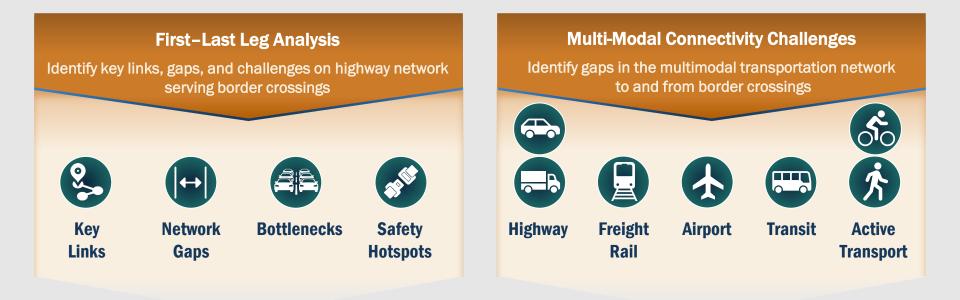




Border Connectivity - First and Last Mile



Border Connectivity Analysis



Advancing Recommendations for Multi-Modal Improvements

Stakeholder Engagement





Airport
Are there connectivity gaps?

What are the investment needs?



What are the existing and planned transit serving cross-border pedestrians?

Is there a need for park and ride facilities?

How many bus stations available within 30-minute walking distance from border crossings?

Active

Transport

Are there bike-ped friendly infrastructure from border crossing to bus stations?

Texas/New Mexico-Mexico Border Crossings: Highway Connectivity



First and Last Leg Highway Connectivity Analysis Additional input (stakeholder interviews)

performance indicators

Quantify highway

Identify proposed investments

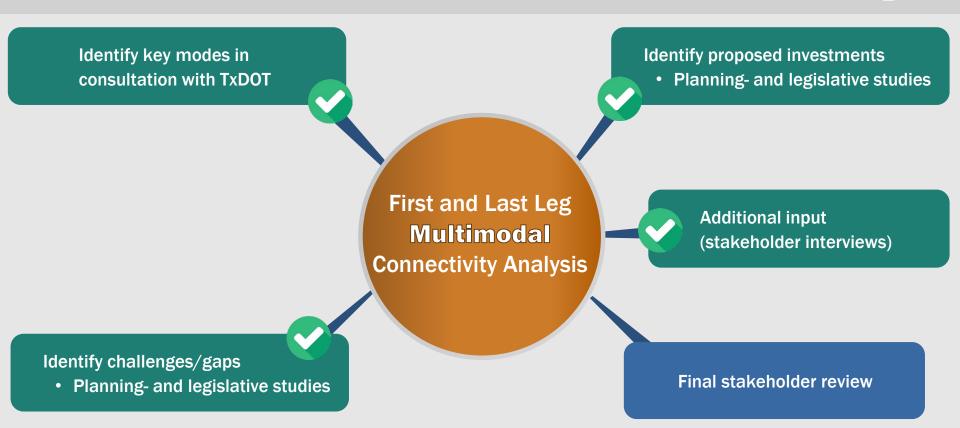
- TxDOT's Project Tracker
- Planning- and legislative studies

Final stakeholder review

Texas/New Mexico-Mexico Border Crossings: Highway Connectivity



Texas/New Mexico-Mexico Border Crossings: Multimodal Connectivity



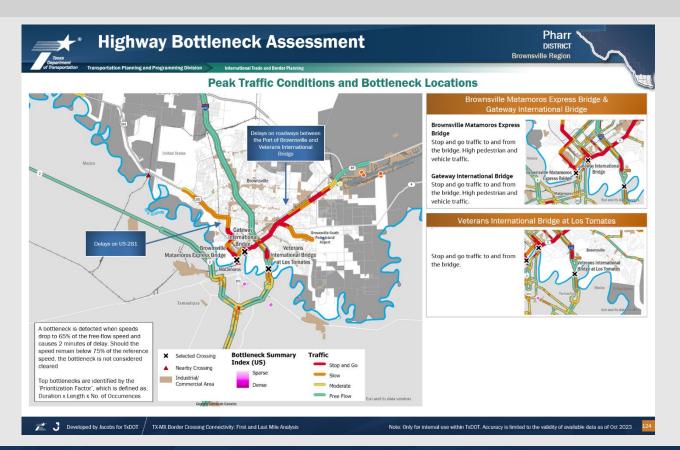
Texas/New Mexico-Mexico Border Crossings: Multimodal Connectivity

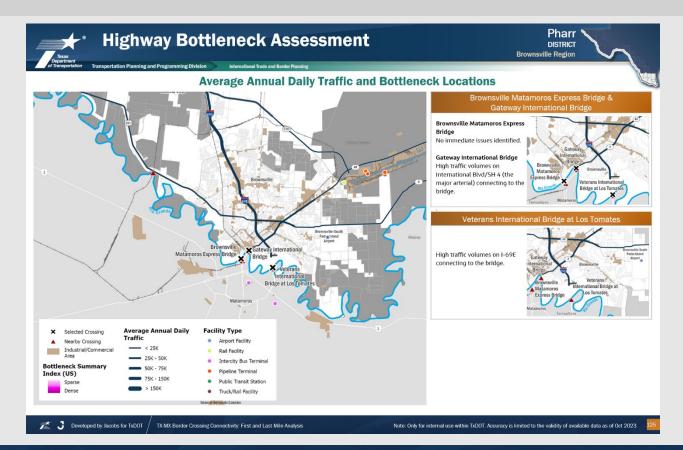


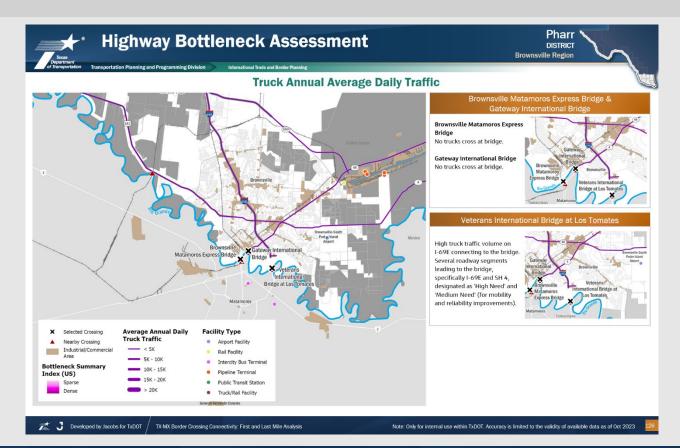
Stakel	older Agency
BNSF Railway Company	TxDOT Laredo District
City of El Paso, Sun Metro	TxDOT El Paso District
El Metro Transit	TxDOT Pharr District
El Paso Metropolitan Planning Organization	TxDOT Rail Division
Kansas City Southern Railway Company	City of McAllen
Laredo and Webb County Area Metropolitan Planning Organization	McAllen Airport
Union Pacific Railroad	New Mexico DOT
Valley Metro	City of Laredo
Lower Rio Grande Valley MPO	City of El Paso

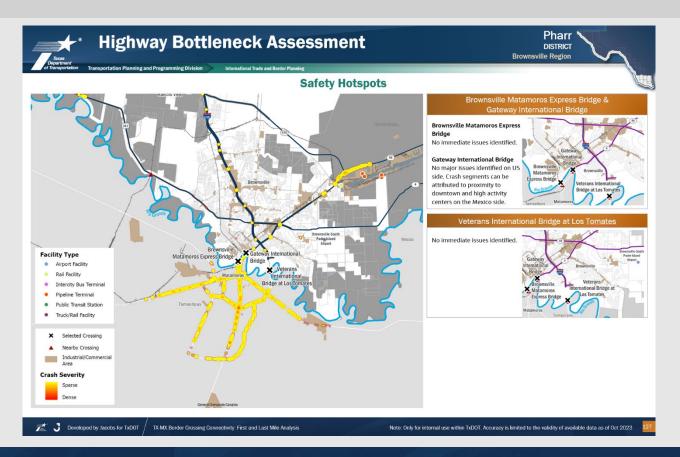






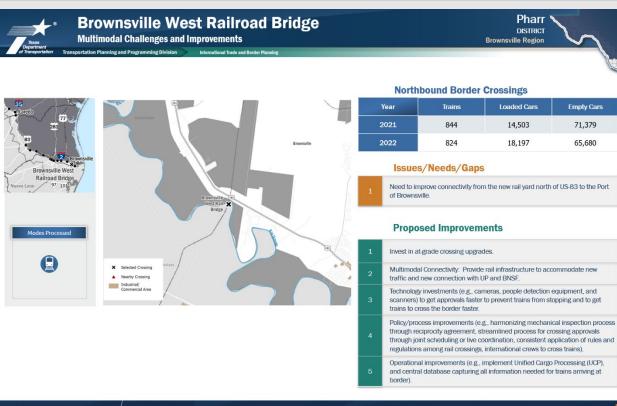




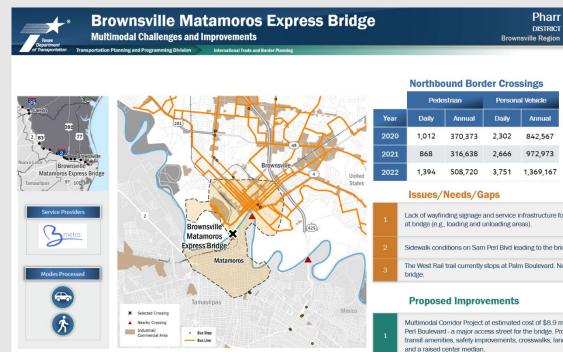




💉 Ĵ Developed by Jacobs for TxDOT / TX-MX Border Crossing Connectivity: First and Last Mile Analysis



Z J Developed by Jacobs for TxDOT / TX-MX Border Crossing Connectivity: First and Last Mile Analysis



Year	Pedestrian		Personal Vehicle	
	Daily	Annual	Daily	Annual
2020	1,012	370,373	2,302	842,567
2021	868	316,638	2,666	972,973
2022	1,394	508,720	3,751	1,369,167

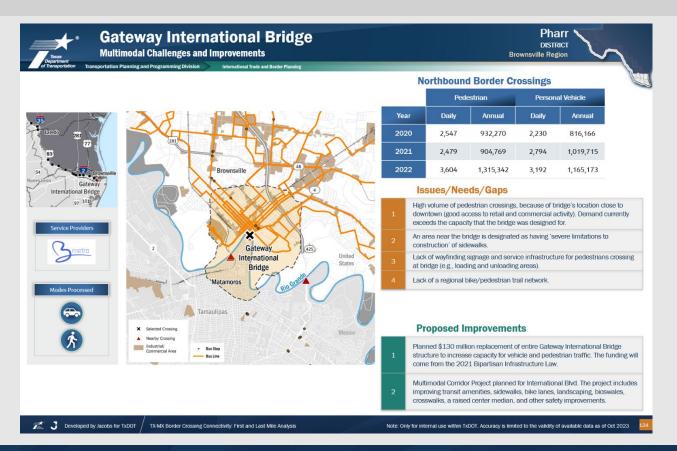
Lack of wayfinding signage and service infrastructure for pedestrians crossing

Sidewalk conditions on Sam Perl Blvd leading to the bridge are deteriorating.

The West Rail trail currently stops at Palm Boulevard. Need to extent trail to the

Multimodal Corridor Project at estimated cost of \$8.9 million planned for Sam Perl Boulevard - a major access street for the bridge. Project includes improving transit amenities, safety improvements, crosswalks, landscaping, bioswales,

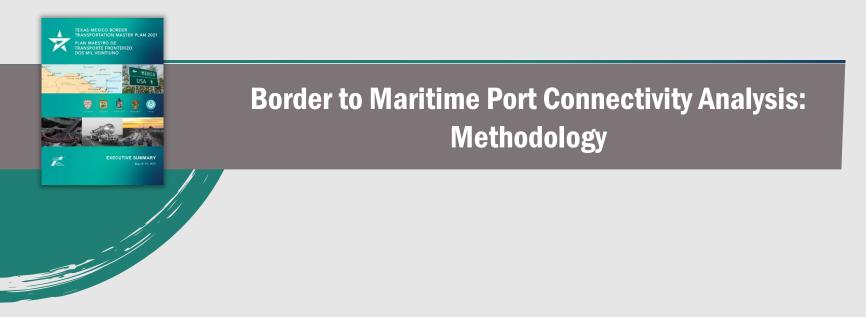
Z J Developed by Jacobs for TxDOT TX-MX Border Crossing Connectivity: First and Last Mile Analysis





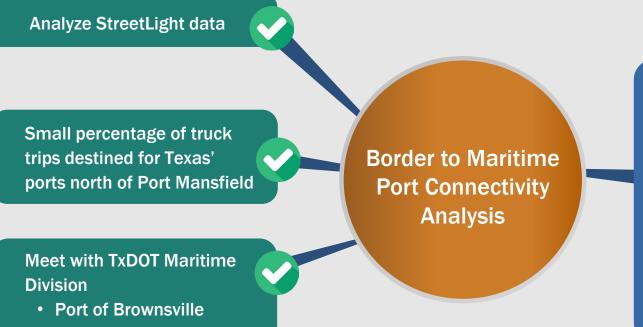
Z J Developed by Jacobs for TxDOT / TX-MX Border Crossing Connectivity. First and Last Mile Analysis





Texas/New Mexico-Mexico Border Crossings: Highway Connectivity





Meet with Texas ports

- Trade moving between land POEs and Texas/Mexico maritime ports? (Texas ports, commodities, supply chains, origins/destinations, truck/rail)
- Challenges/connectivity gaps linking land POEs and Texas' maritime ports
- Investment needs/ strategies

- Port of Harlingen
- Port Mansfield
- Port Isabel



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Jolanda Prozzi

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Border Region to Region Connectivity Study

BTAC Briefing April 16, 2024



April 16, 2024



Border Region to Region Connectivity Study

Background & Study Approach

2 Regional Border Connectivity Network Assessment

Schedule and Next Steps

1

3

Background & Study Approach



Border Region to Region Connectivity Study

Border Region to Region Connectivity Study – BTMP Background

BTMP Policy Recommendation

Provide multimodal connectivity between border crossings to provide enhanced network redundancy for efficient border region trips.



TEXAS-MEXICO BORDER TRANSPORTATION MASTER PLAN 2021 PLAN MAESTRO DE TRANSPORTE FRONTERIZO DOS MIL VEINTIUNO



BTMP Objectives

- Address the potential impact of disruptive events by providing **enhanced network redundancy** on both sides of the border.
- Enable demand management techniques to address congestion.
- Support the future growth of the Texas (U.S.) and Mexican economies by meeting demands of higher forecasted movements of people and goods through enhanced network connectivity.
- Facilitate connectivity between border region multimodal transportation networks.

Purpose: Enhance multimodal connectivity between border regions

Focus Areas:

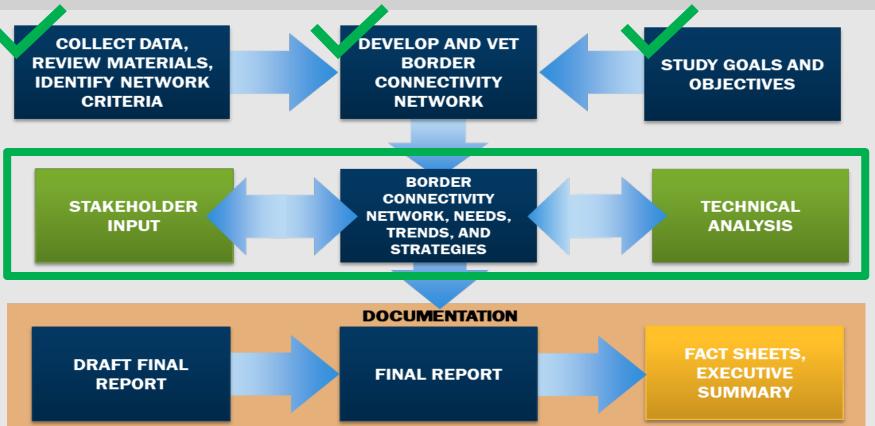
- East-west connectivity between border regions
- Efficiency and directness of existing routes
- Multimodal supply chain connectivity
- Multimodal people connectivity
- Resiliency of statewide border network
- Safety and security
- Innovative technologies and operational strategies



Study Goals







Border Region to Region Connectivity Study

April 16, 2024

- BTAC updates
- Binational industry and agency stakeholder meetings
 - MPOs and local officials
 - Mexican Federal, State and Local officials
 - Shippers, carriers, business associations
- Binational Regional Steering Committees
- District coordination meetings
- Public meetings





Border Region Connectivity Network Assessment



Regional Border Connectivity Network (RBCN)

PEOPLE & GOODS MOVEMENT

- Existing and future passenger demand
- Socioeconomic data
- Existing and future freight demand
- Region-to-region demand for passenger vehicles and trucks

MARKET ACCESS MOVEMENT

- Airport, bus, rail access
- Cargo generator access
- Access to employment, education, healthcare, retail, tourism



Border Region to Region Connectivity Study

Regional Goods Mobility Demand

30 El Paso Fort Stockton 342,145 563 3,150 San 124 776 Antonio 2,395 Del Rio 68,967 800 2,811 42,618 467 Eagle Pass 57,958 10,655 353 Laredo 3,758 1,236 1,956,294 RGV Estimated Truck Trips for 6 months in 2022 958,998 Urban Areas 🔿 Travel Within an Area 3,848 Travel Between Areas

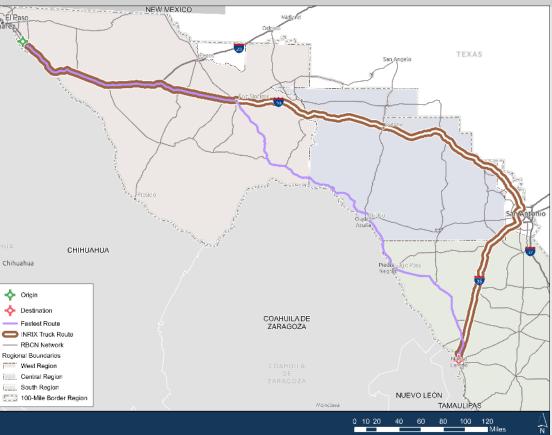
Regional roadway network facilitates the transportation of nearly 50M tons of goods valued at over \$180B, driving economic growth in both the US and Mexico

Assessing Region to Region Connectivity Inefficiencies

 Assessing shortest/fastest routes against the observed routes taken by trucks

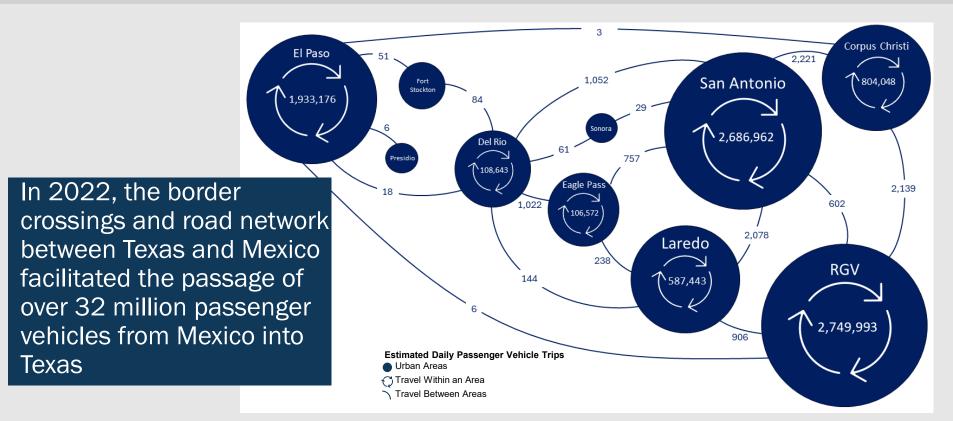
	Route	Length (Miles)	Time (Hours)
СМV	Observed (INRIX)	681	11.15
	Shortest (ArcGIS)	580	9.44
	Fastest (ArcGIS)	583	9.22

Commercial Vehicle Connectivity Analysis Example



Border Region to Region Connectivity Study

Regional People Mobility Demand

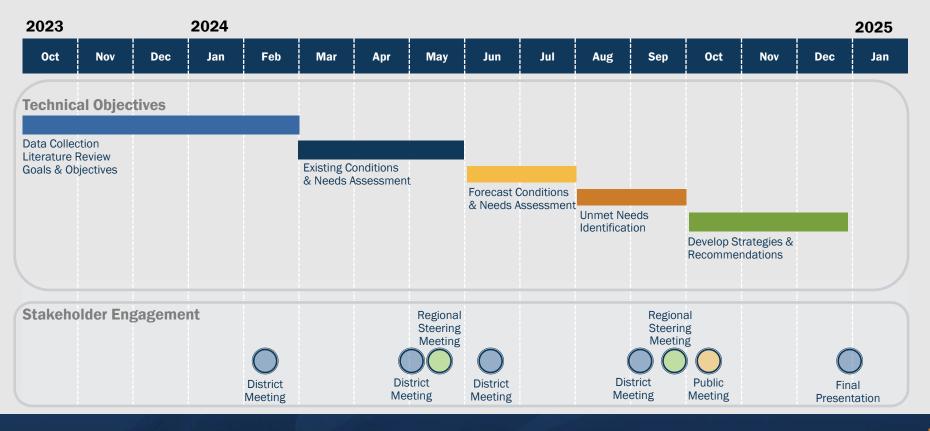


Schedule and Next Steps



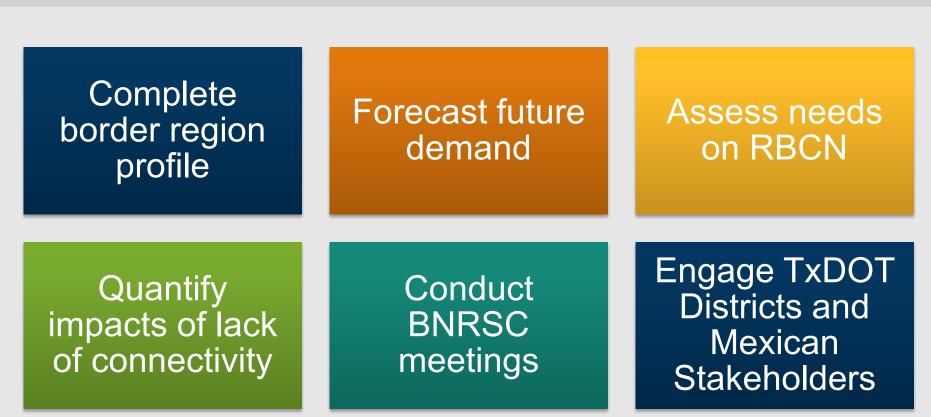
Border Region to Region Connectivity Study

Project Timeline



Border Region to Region Connectivity Study

Next Steps





For more information:

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Texas House Bill 4422

Border Trade Advisory Committee Briefing

April 16, 2024

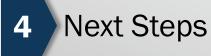


Agenda



2 Project Status





- TxDOT shall conduct a study on
 - public safety, border security, and transportation infrastructure on Texas-Mexico borders crossings
 - to ensure safe, efficient, and streamlined commercial motor vehicle (CMV) connectivity
 - that amplifies Operation Lone Star efforts
- Conducted in consultation with seven organizations or groups, specified in bill
- Focused on Commercial Motor Vehicle performance, technology and networks, from the perspective and for purposes of public safety and border security
 - How can one improve the other
- Study is to include recommendations for enhancement for transportation infrastructure and road technology near border crossings to:
 - Maximize safety of communities near the border and people using highways near the border
 - Improve transportation efficiency and CMV connectivity
- Written report and study findings must be submitted to Governor, Lieutenant Governor and the Legislature no later than December 1, 2024.

TxDOT

- Direct and oversee study
- Facilitate coordination with partners

TxDOT, DPS, TMD Coordination

- Guide study
- Help ensure intent of legislation is met

Working Group

- Guide study
- Advise on current issues
- Ensure recommendations are implementable

CONSULTANT TEAM

vsp

- Overall technical and stakeholder engagement management
- Lead transportation and connectivity-focused tasks
- Integrate findings into final products

HNTB

- Lead border security and public safetyfocused tasks
- Support transportation-focused tasks led by WSP team

✓Convene Working Group (WG)

☑ Met twice with WG

Completed Study Guidelines

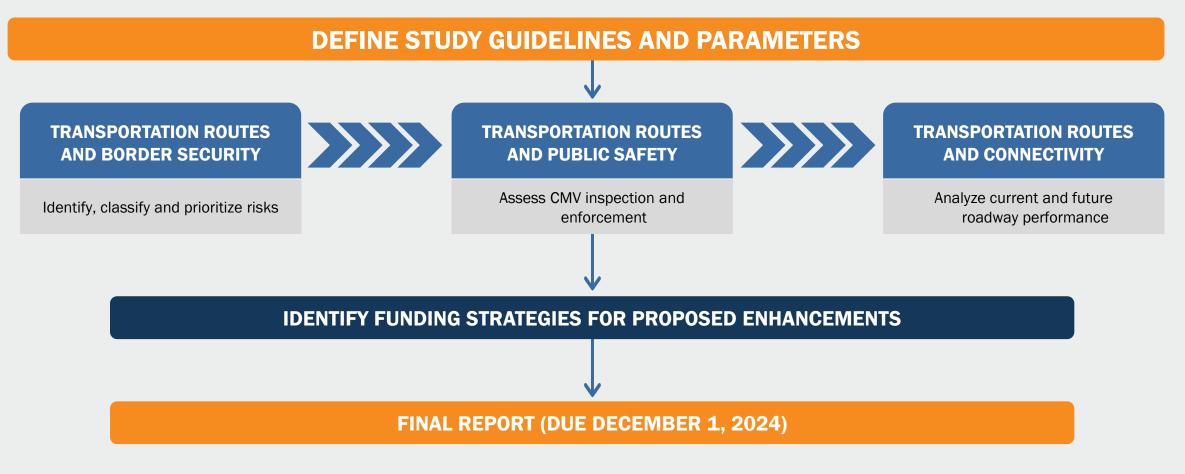
- **⊡**Complete assembly of study materials
 - Existing and ongoing studies, data sets, networks, etc.
- Commence stakeholder engagement
 - Begin interaction with BTAC group for stakeholder outreach

Begin Transportation Routes analysis

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Project Status



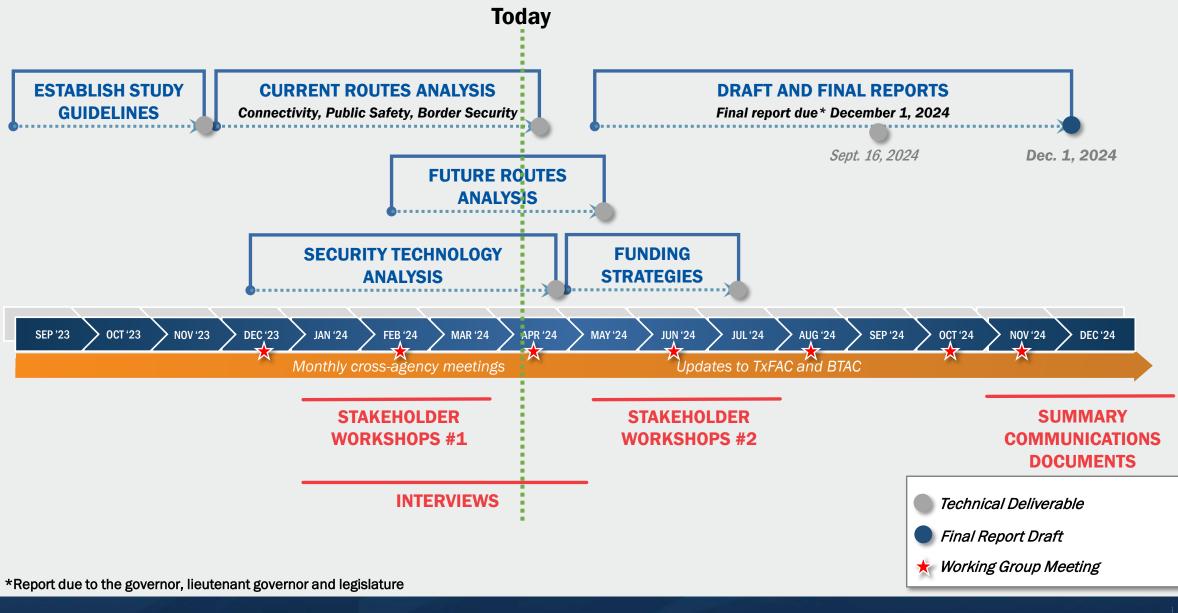


STAKEHOLDER & WORKING GROUP ENGAGEMENT

House Bill 4422: Border Trade Advisory Committee Briefing

7

Schedule and Deliverables



House Bill Engagement Requirements and Approach



Working Group of Prescribed Stakeholders

The department [TxDOT] shall conduct the study in consultation with:

The Texas Department of Public Safety (DPS)

- **2** Texas Military Department (TMD)
- 3 Texas A&M Transportation Institute (TTI)
- 4 Law enforcement agencies near the Texas-Mexico border
 - 18 county sheriffs and city police departments invited
- **County government representatives**
 - 8 judges from counties with CMV crossings invited
- **Baresentatives of the transportation industry** 4 invited



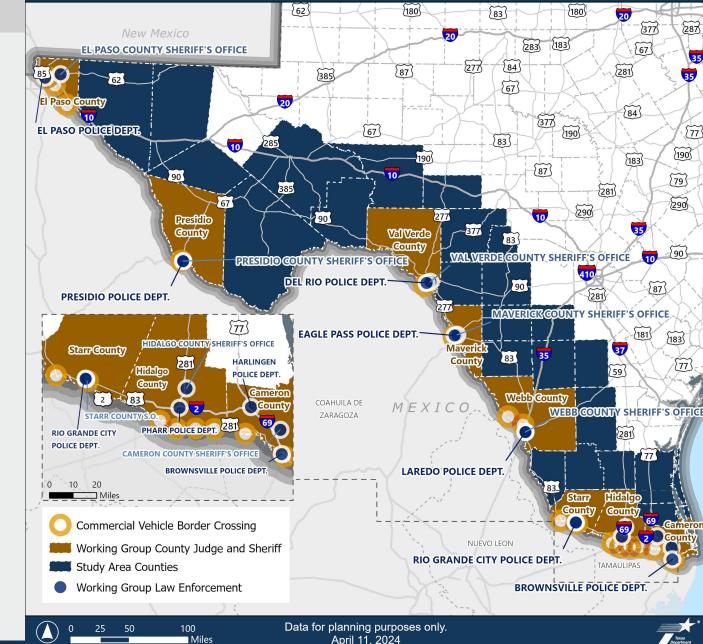
Independent nonprofit applied research & development organization selected by the State 1 invited

Engagement Required by HB 4422

The Department shall:

- Select multiple Texas-Mexico international border crossings that serve commercial vehicles
- 16 CMV Border Crossings have Been Visited
 - 14 CMV Crossings
 - 2 Limited CMV Crossings
- All Working Group Members have been contacted for individual interviews
 - Most have participated
 - Additional interviews pending

County Judge and Local Law Enforcement Working Group Members



11

Working Group Engagement

 The Working Group (WG) is meeting bi-monthly throughout the study

- Meetings report progress, discuss issues, seek guidance, review next steps and adjust direction
- One-on-one interviews are being requested with WG members in person or virtually.
- WG members are guiding the study and provide relevant stakeholders.



PUBLIC SECTOR

- County administrations
- Law enforcement agencies 14 cities & counties
- DPS with on-site meetings
- City governments, bridge owners, chambers of commerce, and MPOs
- Texas A&M Transportation Inst.

PRIVATE SECTOR

- Texas Trucking Association
- El Paso Mobility Coalition
- Mines Road Mobility Coalition
- Laredo Motor Carriers Association
- Parker & Company
- Bullet Transport Services
- HP Carriers

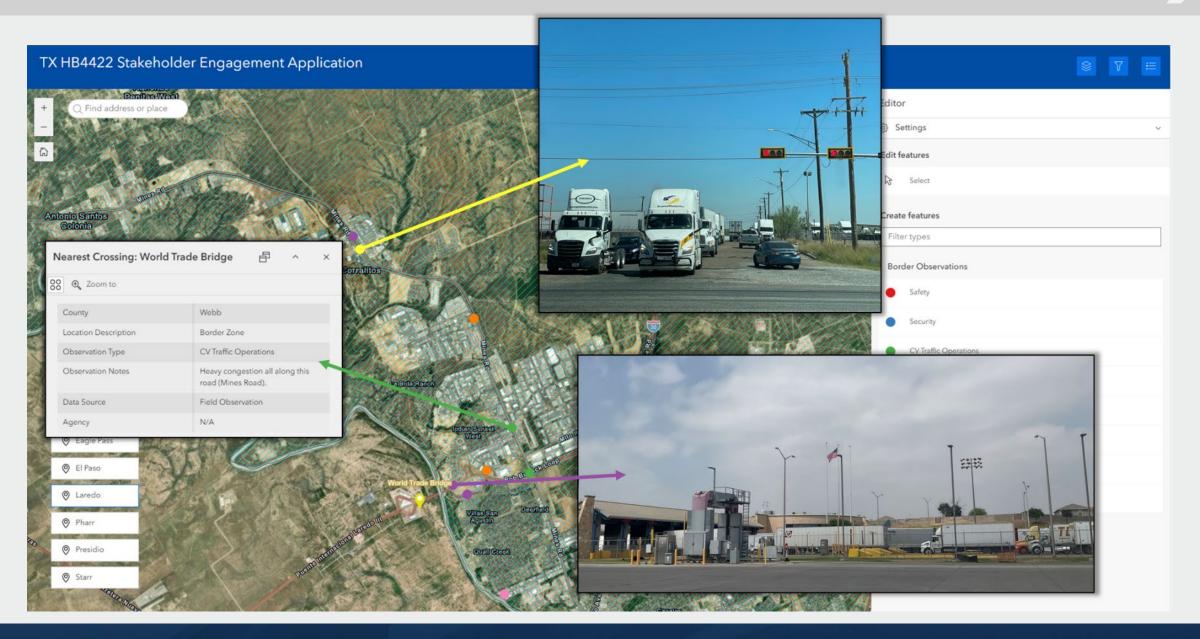
CMV CROSSING SITE VISITS

- Bridge of the Americas
- Ysleta Port of Entry
- Tornillo-Guadalupe
- Presidio-Ojinaga
- Acuna Del Rio
- Camino Real
- Laredo Colombia Solidarity
- World Trade Bridge
- Roma-Ciudad Migel Aleman
- Starr-Camargo
- Anzalduas International Bridge
- Pharr-Reynosa
- Donna International Bridge
- Weslaco Progreso Intl. Bridge
- Free Trade Bridge
- Veterans International Bridge

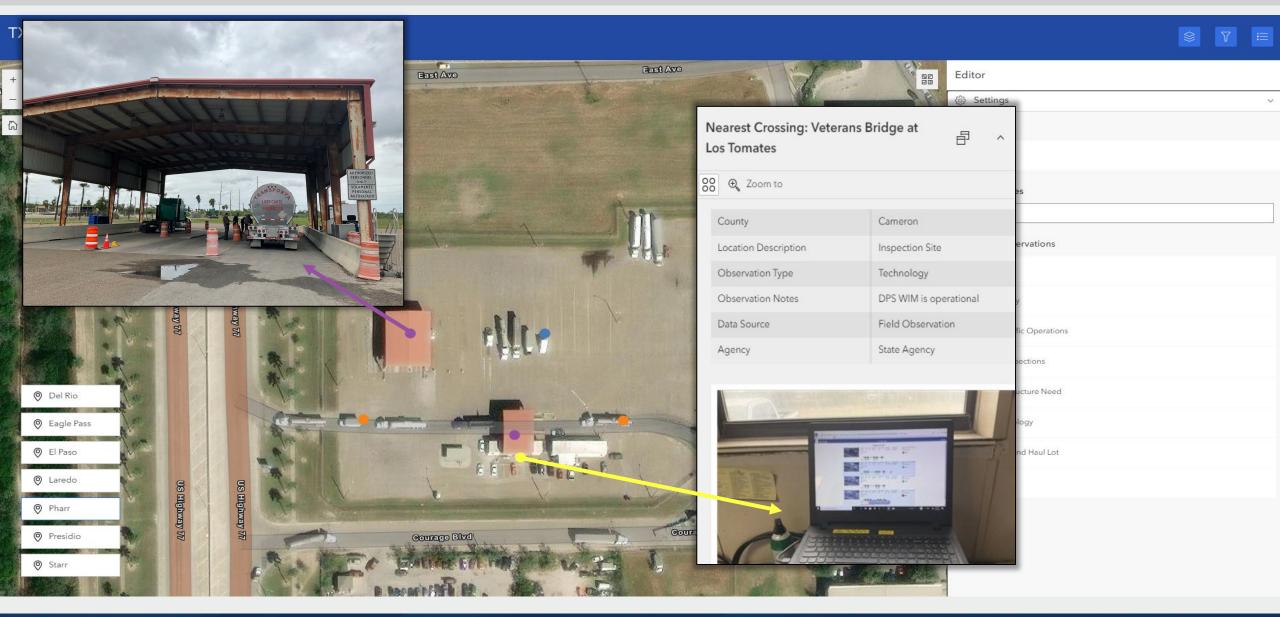
MEXICAN PARTNERS

- Roundtable Discussion in Presidio, Texas
- Roundtable Discussion in Nuevo Laredo, Tamaulipas, Mexico
- Roundtable Discussion
 in Reynosa, Tamaulipas, Mexico
- Fideicomiso de Puentes
 Fronterizos de Chihuahua (FPFCH)
 virtual meeting
- Juarez roundtable scheduling underway

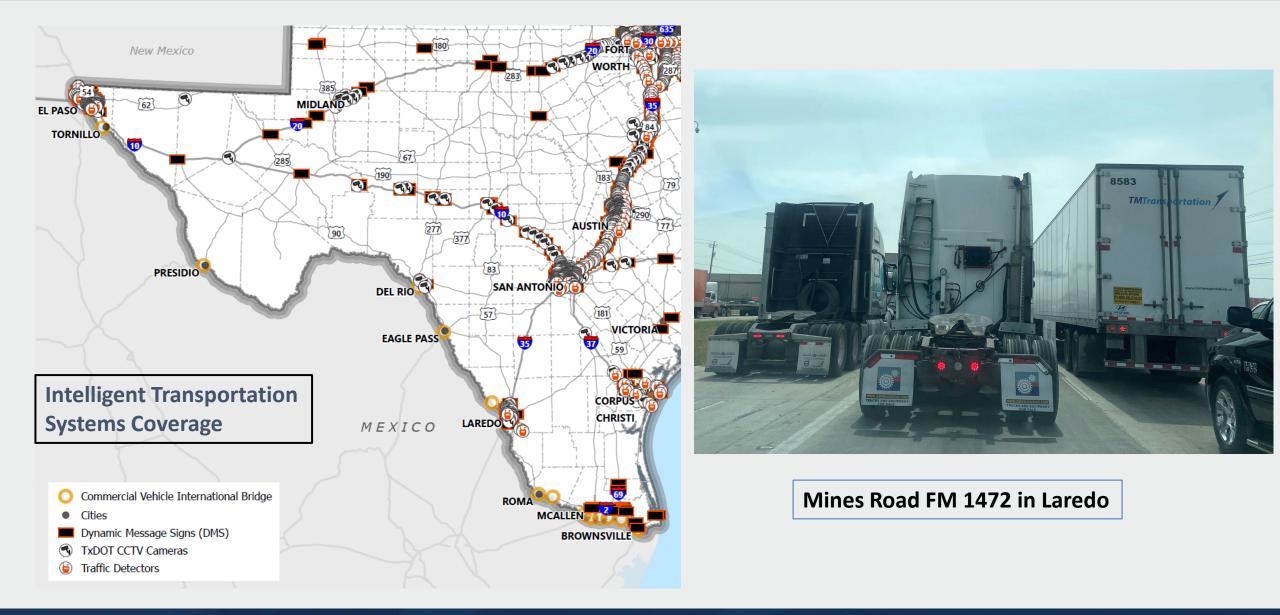
Types of Engagement: Site Visits, Ride-alongs



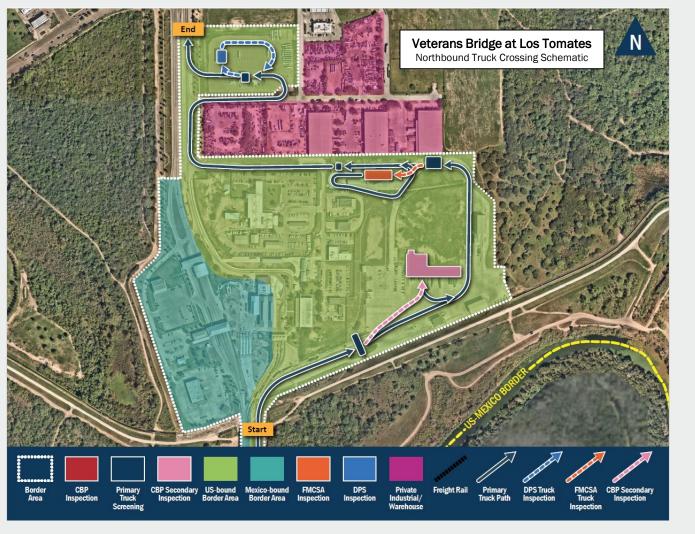
Synthesizing Stakeholder Feedback



Types of Engagement: Road Condition Observation, Data Analysis



Veterans Bridge at Los Tomates Profile



- 232,466 Northbound CMV crossings in 2023
 - 230,619 crossings in 2022
- 23,977 CMV violations (2023)
 - Top five violations: brakes, lights, tires, miscellaneous vehicle violations, and exhaust systems
- 5,678 total inspections (2023)
 - 4,186 inspections with violations
 - 1,492 inspections with no violations
- Average of 4.2 violations per inspection
 - Highest average in past six years
- 1,058 inspections led to out of service violation (18.6%)

CMV crossings data source: U.S. Customs and Border Protection CMV inspections and violations data source: DPS

Next Steps



Next Steps

- Conduct Third Working Group Meeting
- Draft Current Routes Analysis Technical Memorandum
 - Safety, security, efficiency supporting Operation Lone Star
- Draft Security Technology Analysis Technical Memorandum
- Additional Stakeholder Engagement



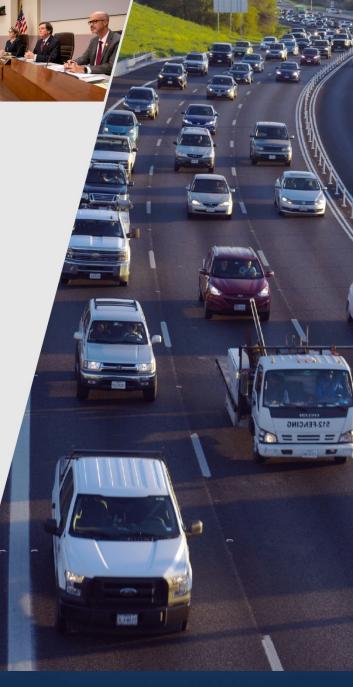
THANK YOU!

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Border Trade Advisory Committee Pedro R. Alvarez, P.E. *Pharr District Engineer*

Texas Department of Transport



April 16, 2024







Safety Never Stops!

HELP HELP H

f y 🖻 #EndTheStreakTX Toolkit



TxDOT.gov (Keyword: #EndTheStreakTX)





TxDOT Project Updates

Brownsville, **TX**



April 19, 2024



SH 4 CONC. PAV.

CSJ: 1504-01-037



April 19, 2024

SH 4 Project Location



- CSJ: 1504-01-037
- SH 4
- Cameron County
- Scope of Work:
 - The construction of rehabilitate existing roadway consisting of grading, base, surfacing, structures, drainage, signing, and pavement marking.
- Limits:
 - From IH 69E to SH 48
- Total Project Length:
 - 1.434 miles

Contract

Contractor:

- Posilico Civil, Inc.

Contract Amount:

- \$20,955,780.74

Contract Days:

- 445 working days

Time Charges Began:

- January 08, 2024
- Working Day Charges: Standard Workweek (Item 8.3.1.4)
 - Working days will be charged Monday through Friday, excluding national or state holidays, if weather or other conditions permit the performance of the principal unit of work underway, as determined by the Engineer for a continuous period of time of at least 7hrs, between 7:00A.M. to 6:00P.M., unless otherwise shown in the contract. The Contractor has the option of working on Saturdays or state holidays. Provide sufficient advance notice to the Engineer when scheduling work on Saturdays. Work on Sundays and national holidays will not be permitted without written permission of the Engineer, If work requiring an Inspector to be present is performed on a Saturday, Sunday, or holiday, and weather or other conditions permit the performance of work for 7 hr. between 7:00 A.M. to 6:00P.M., a working day will be charged.
- 12% Complete

EST. COMPLETION DATE: MARCH 2026

Traffic Control Plan - Overview



Existing Conditions



Southside Construction Looking West



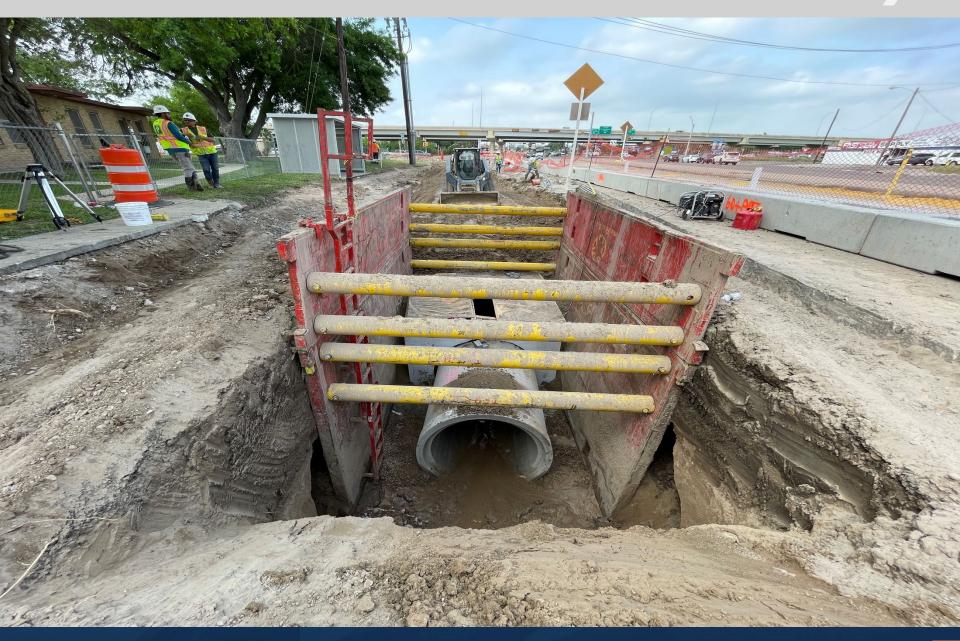
Southside Construction Looking East



Prop. 60" RC Pipe Outfall @ I69E



Prop. 60" RC Pipe Storm Sewer near I69E





SH 48 Conc. Medians

CSJ: 0220-05-080



April 19, 2024

Project Location – SH 48 Conc. Median



- CSJ: 0220-05-080
- SH 48
- Scope of Work: Concrete medians and roadway overlay
- Limits:
 - From SH 4 (Boca Chica Blvd.) to FM 511
- Total Project Length:
 - 3.8MI

Contract

Contract:

IOC Company LLC

Contract Amount:

- \$4,549,748.76

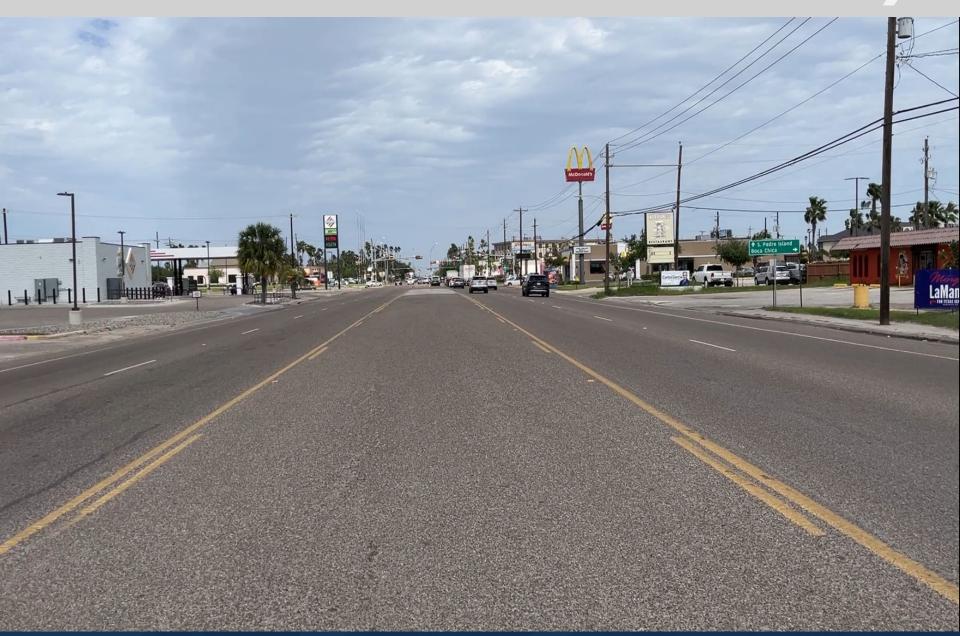
Contract Days:

- 201 working days

Time Charges Began:

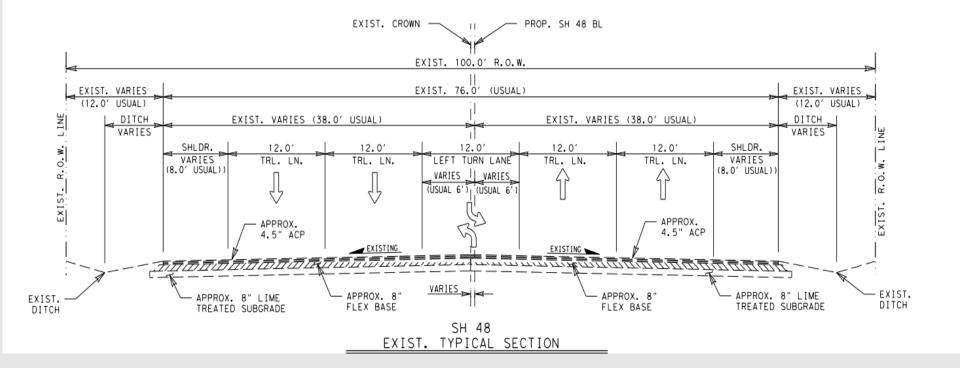
- 04/01/2024
 - Working Day Charges: Standard Workweek (Item 8.3.1.4)
 - Working days will be charged Monday through Friday, excluding national or state holidays, if weather or other conditions permit the performance of the principal unit of work underway, as determined by the Engineer for a continuous period of time of at least 7hrs, between 7:00A.M. to 6:00P.M., unless otherwise shown in the contract. The Contractor has the option of working on Saturdays or state holidays. Provide sufficient advance notice to the Engineer when scheduling work on Saturdays. Work on Sundays and national holidays will not be permitted without written permission of the Engineer, If work requiring an Inspector to be present is performed on a Saturday, Sunday, or holiday, and weather or other conditions permit the performance of work for 7 hr. between 7:00 A.M. to 6:00P.M., a working day will be charged.
- 0.00% Complete
- START DATE: APRIL 2024
- EST. COMPLETION DATE: MAY 2025

Existing Condition



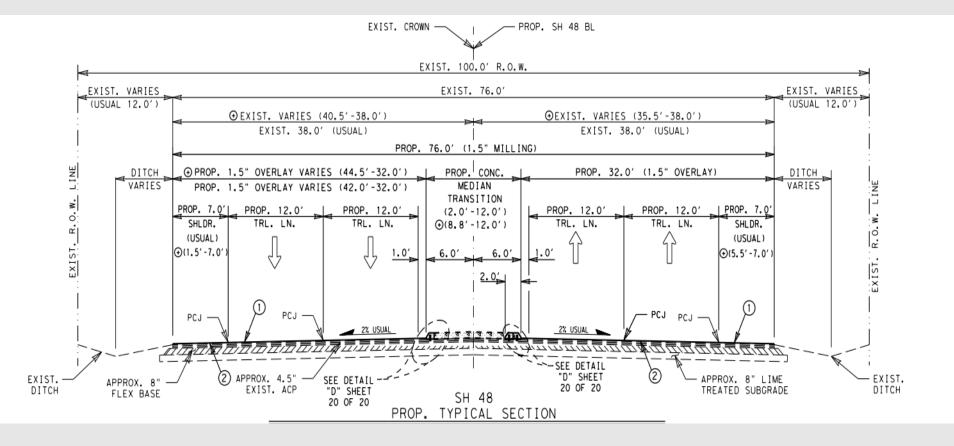
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Existing Typical Section



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Proposed Typical Section



April 19, 2024



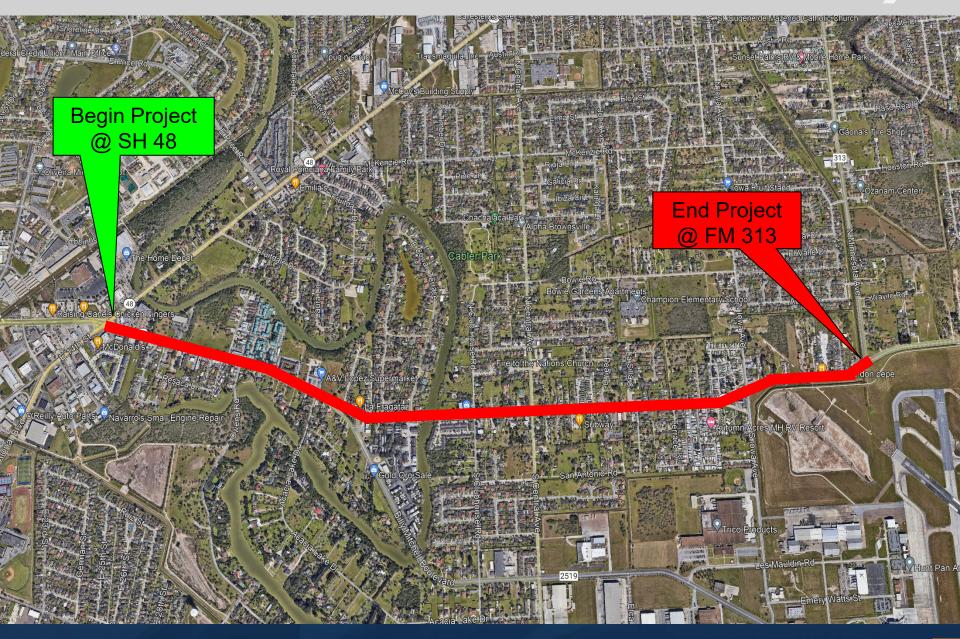
SH 4 Conc. Medians Upcoming Project

CSJ: 0039-10-083



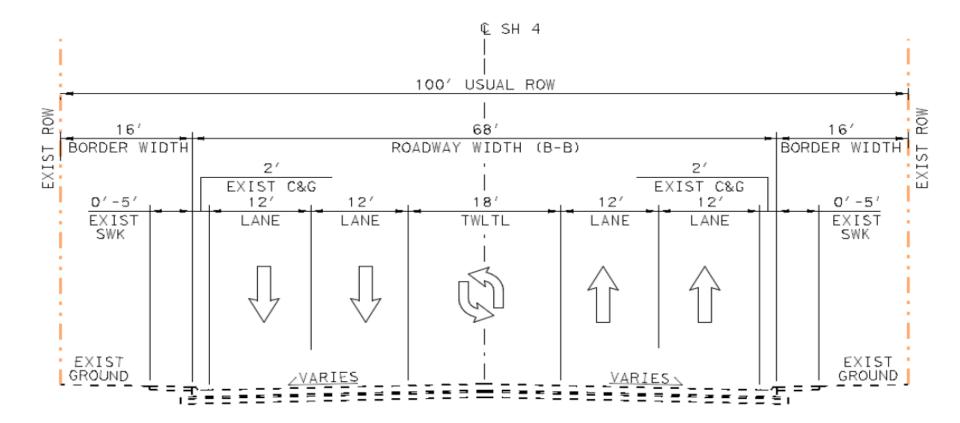
April 19, 2024

Project Location – SH 4 Conc. Median

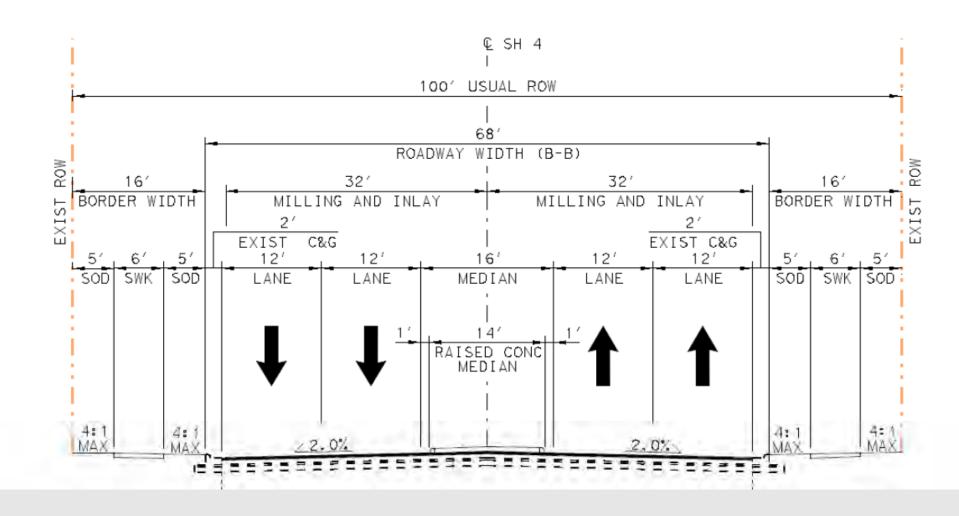


- CSJ: 0039-10-083
- SH 4
- Cost = \$15 M
- Scope of Work: Concrete medians and roadway overlay
- Limits:
 - From SH 48 to FM 313
- Total Project Length:
 - 2.24MI

Existing Typical Section



Proposed Typical Section





SH 4 Rehabilitation Upcoming Project

CSJ: 0039-10-080

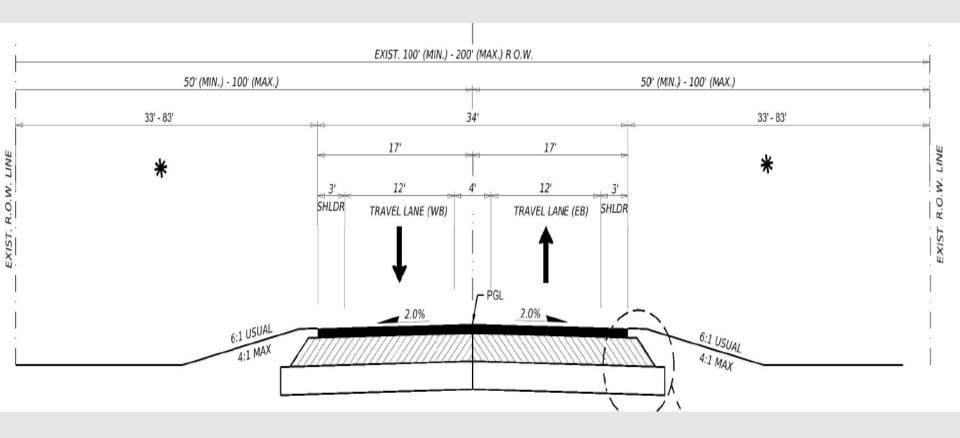


Project Location – SH 4 Rehab



- CSJ: 0039-10-080
- SH 4
- Cost = \$39 M
- Scope of Work: The rehabilitation of a non-freeway facility
- Limits:
 - From FM 1419 (Oklahoma Ave.) to 1/4 Mile West Massey Way
- Total Project Length:
 - 9.06MI

Proposed Typical Section



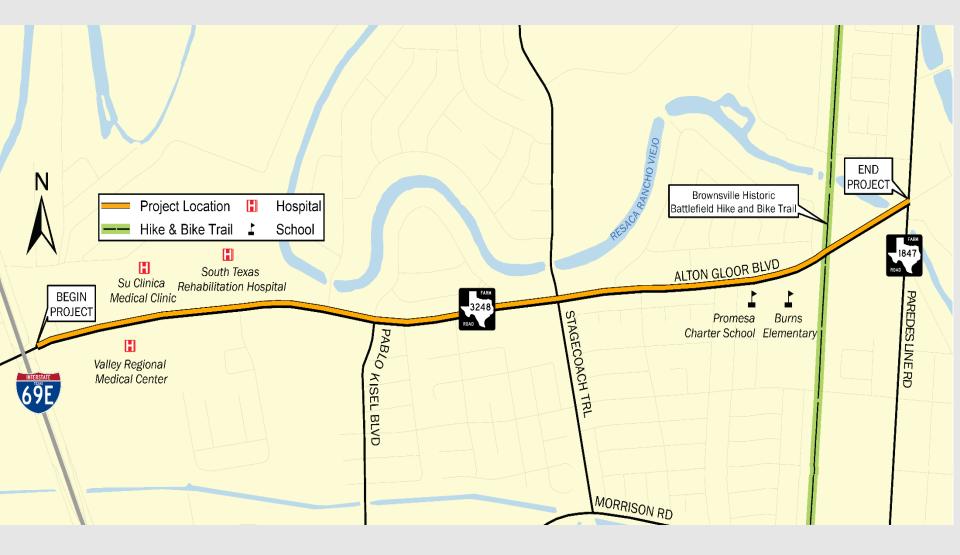


FM 3248 Conc. Median & Widening Upcoming Project

CSJ: 2717-01-027

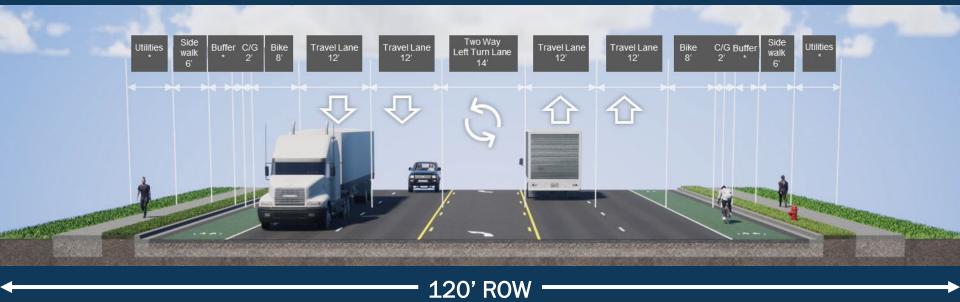
LA SAL

Project Location – FM 3248 Conc. Median & Widening



- CSJ: 2717-01-027
- FM 3248
- Cost = \$30 M
- Scope of Work: Construct 6 lane with raised median
- Limits:
 - From IH-69E to FM 1847
- Total Project Length:
 - 2.1MI

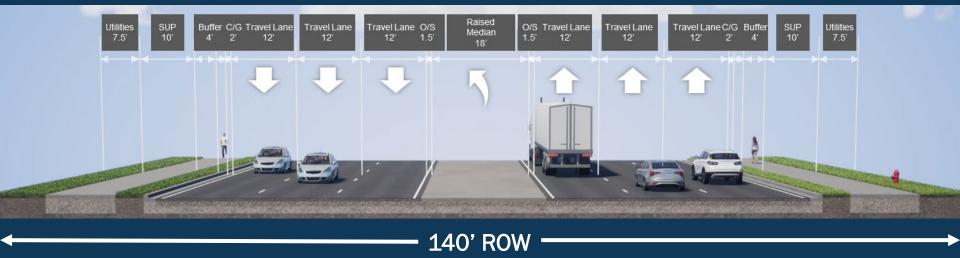
Existing Condition



 \star - Width Varies Buffer 0-6', Utilities 7-13' C/G – Curb and Gutter

TxDOT – San Benito Area Office

Proposed Condition



SUP - Shared Use Path C/G – Curb and Gutter O/S - Offset

TxDOT – San Benito Area Office

April 19, 2024







TxDOT.gov (Keyword: #EndTheStreakTX)

TxDOT – San Benito Area Office

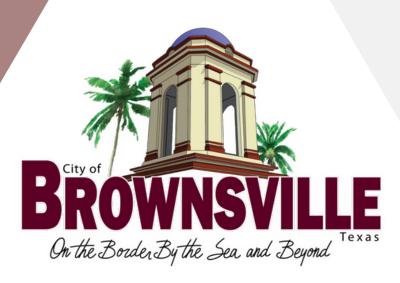
April 19, 2024



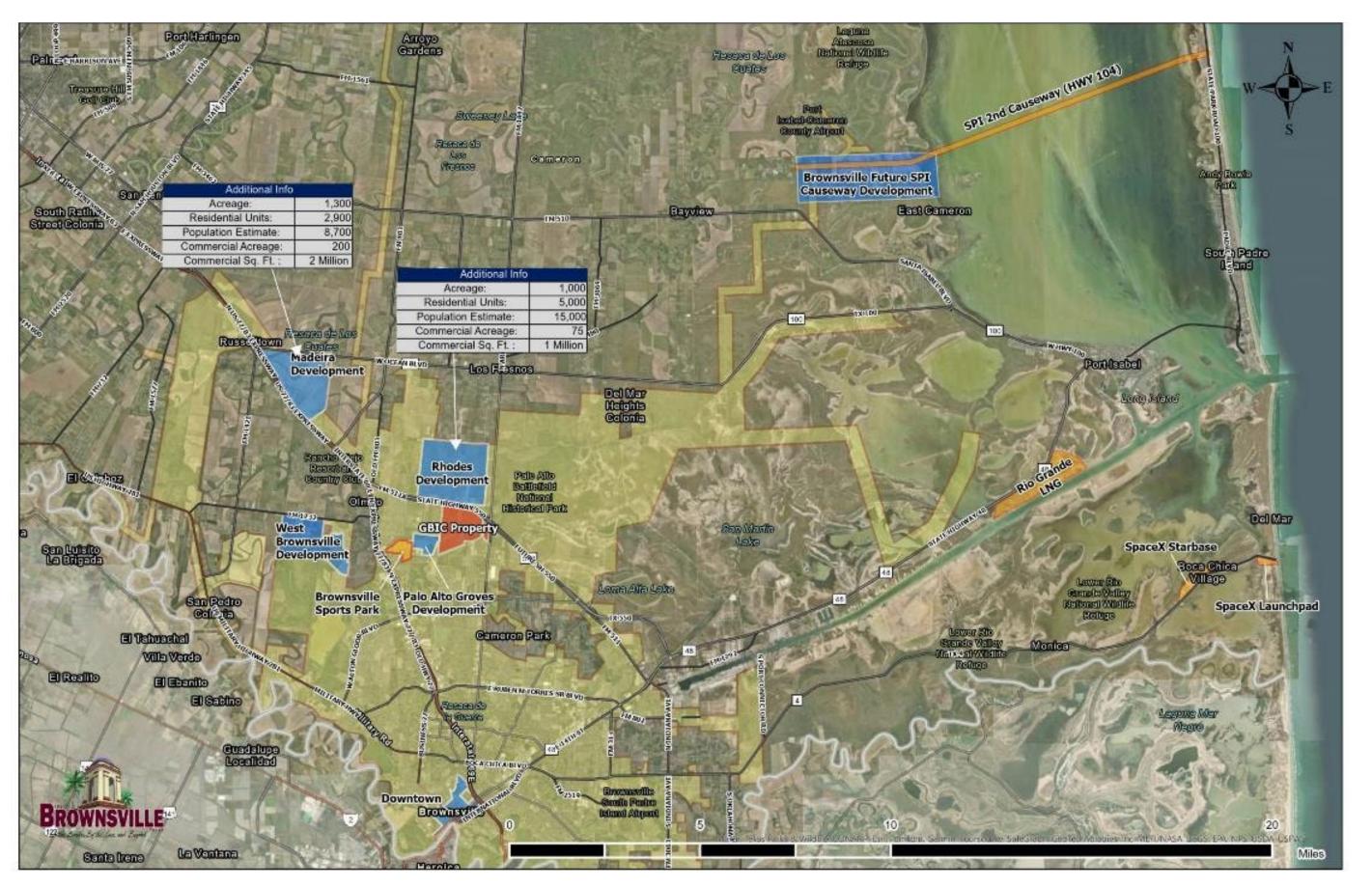
BORDER TRADE Advisory commitee

APRIL 16, 2024

HELEN RAMIREZ, AICP CITY MANAGER Helen.Ramirez@brownsvilletx.gov



REGIONAL ECONOMIC GROWTH

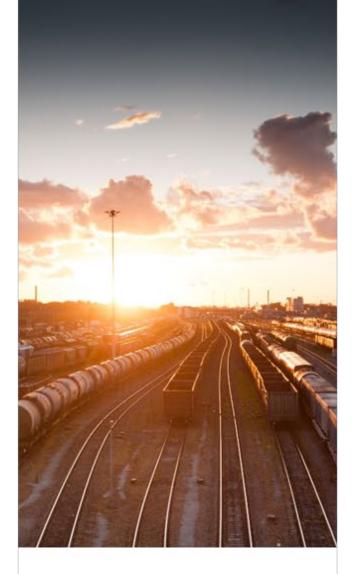




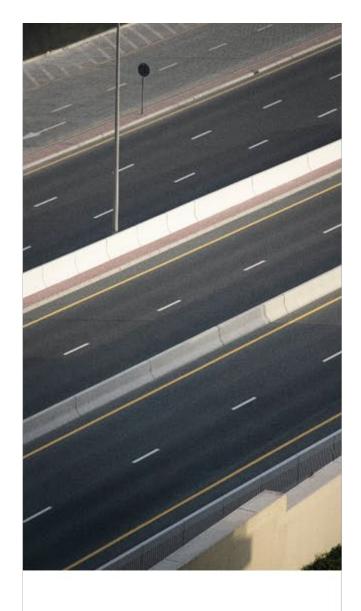
BROWNSVILLE, TEXAS, OFFERS FIVE MAJOR Modes of international transportation



WATER



RAIL



HIGHWAY





SPACE



RIO GRANDE

- Rio Grande LNG in the largest privately funded infrastructure or pect in Texas.
 At full scale, Rio Grande LNG will deliver
- At full scale, the Grande LNG will deliver enough energy to heat and cool the equivalent of nearly 34 million U.S. households annually.
- \$18.4 Billion Investment
- Bechtel EPC Contractor
- 6,000 construction jobs will be created at the project's peak time

Texas LNG

- Projected \$3.2-4 Billion investment
- 1,200 construction jobs
- 100 Full-time positions
- Construction begins 2024







SPACEX IMPACT

- 2,100 + direct em ployees at Starbase
- 7,300+jobs in Cameron County
- \$633M in Labor Income and Employment Benefits
- \$73 IM Gross County Output in "value-add" from production of goods & services in Rio Grande Valley
- \$ 1.04 B Gross Economic Output in aggregate market value of goods and services in Rio Grande Valley

- 57K Texas Households & Businesses with Starlink internet
- \$3B+ Starbase infrastructure investment since 2014
- 98% of Starship was built in Brownsville Cameron County, Texas
- 2% of Starship built in Hawthorne, California (Raptor Vacuum engines)







BTX FIBER

Middle Mile

•City is investing \$ 19.5 Million in American Rescue Plan Act funding •The City will be the owner of Middle Mile infrastructure to serve essential locations by redundant ring architecture that is 100% underground.

La st Mile

•Lit Fiber-BTX Fiber is investing \$70mm in private equity funding to build the Last Mile network making sure that it is:

•Fast

- •Secure
- •Affordable



Introducing BTX Fiber

BTX Fiber is a new fiber internet project to serve residents and businesses in Brownsville, Texas. The project is a public-private partnership between Lit Communities and the City of Brownsville.







BTXFiber.com

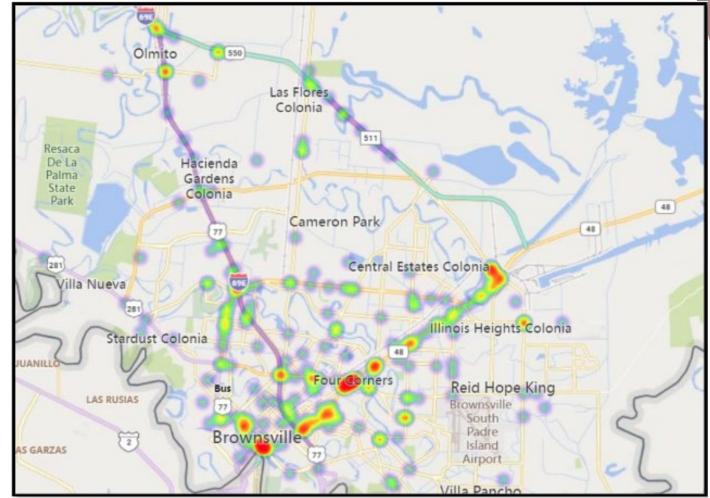
TRAFFIC MANAGEMENT AND SAFETY ENHANCEMENTS BY THE BROWNSVILLE POLICE DEPARTMENT

The creation of a Commercial Motor Vehicle (CMV) Enforcement Unit by the Brownsville Police Department marks a significant step in enhancing road safety. Officers in this unit are certified and adhere to the Federal Motor Carrier Safety Administration (FMCSA) guidelines and State and Local Laws

1. Downtown Surveillance Equipment – Cameras 2.License Plate Recognition (LPR) Readers **3.CMV** Accidents

4.Crash-related Software: CRIS (Crash System)/DDACTS (Data-Driven Approaches to Crime and Traffic Safety)

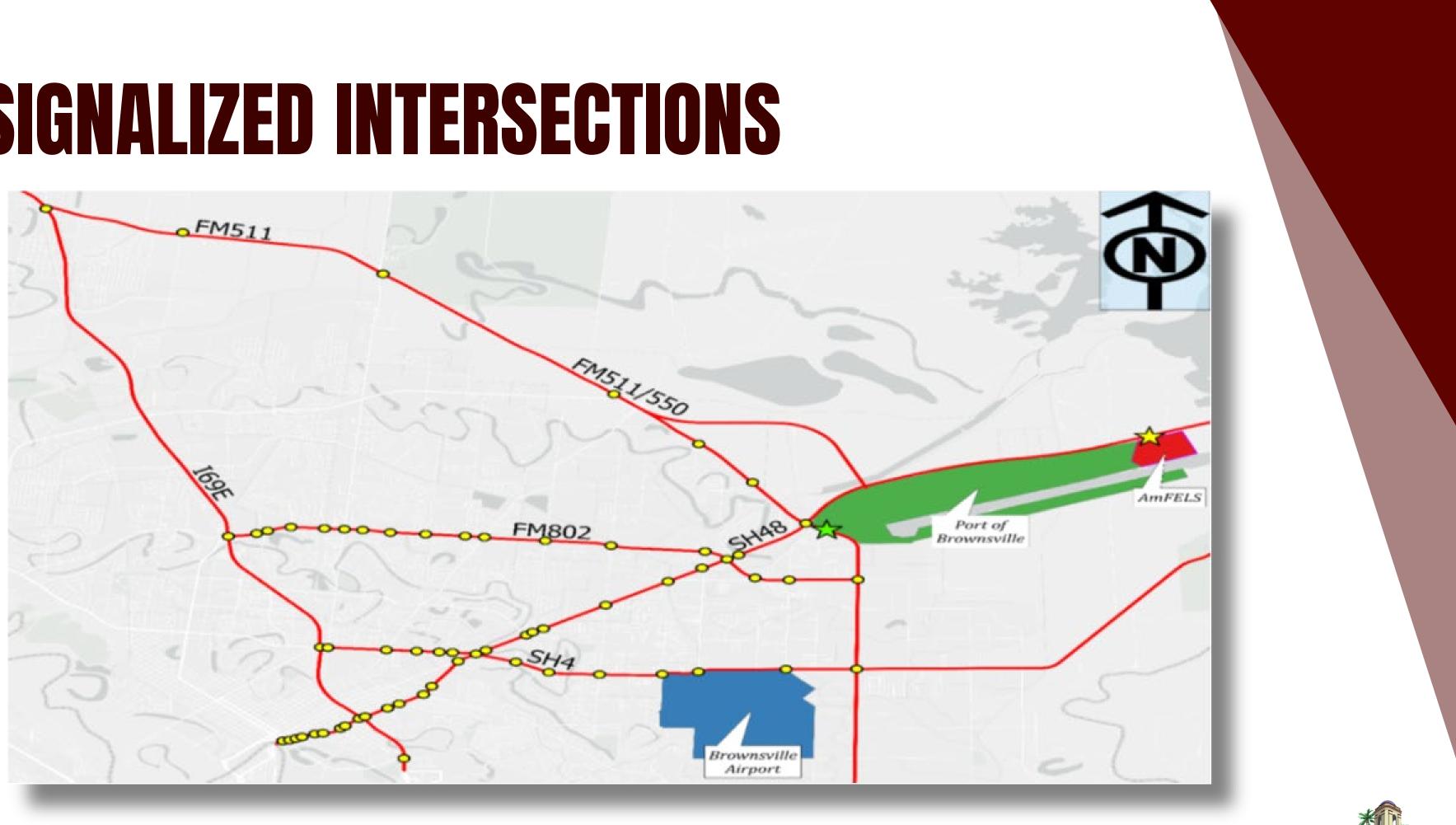
5.Routes Impacted by LNG/Truck Traffic 6.Mega Site Locations/Large Truck Locations 7.Major Sites for CMV Congestion 8.Heat Map 2022 – 2023 CMV Accidents 9.Detailed Analysis of Crash Data



Heat Map 2022 – 2023 CMV Accident



SIGNALIZED INTERSECTIONS



SIGNALIZATION COST PROPOSAL

INTERSECTION	TRAFFIC SIGNAL CONTROL CABINET	TRAFFIC DETECTION	GPS
FM 511	\$195,006.80	\$605,722.50	0
FM 802	\$585,020.40	\$1,144,142.50	\$1,500.00
SH 4	\$731,275.50	\$1,278,747.50	\$7,500.00
SH 48	\$390,013.60	\$1,346,050.00	\$500.00
	\$1,901,316.30	\$4,374,662.50	\$9,500.00
		TOTAL COST OF IMPROVEMENTS UNFUNDED	\$6,285,478.80

Currently we have allocated the following funds thus far:

- City of Brownsville from 2021 – 2024 has invested \$1,539,726
- In addition, we have a current project \$712,316
- TX DOT has allocated \$401,055



P5G AND SMART CITY USE CASES

CELLULAR **CONNECTIVITY**

5g: Ultra-fast, reliable connectivity powering tomorrow's smart city innovations.



Real-time crowd monitoring enhances safety and event management efficiency.



VEHICLE CLASSIFICATION

Streamlines traffic management by categorizing vehicles for better flow control.

Automates vehicle identification, bolstering security and stolen vehicle recovery.







Forecasts trends, improving city planning and operational decision-making.

