Texas-Mexico Border Transportation Master Plan

Binational Regional Steering Committee

April 22, 2020

Agenda

1. Activities Since Last Meeting (November-December 2019)
2. Preliminary Table of Contents for Final Report
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4. Goals, Objectives, and Institutions (Chapter 2)
5. Existing Conditions: The Texas-Mexico Border Today (Chapter 3)
6. Binational Multimodal Transportation Network Designation (Chapter 4)
7. Needs Assessment and System Performance (Chapter 5)
8. Future Forecasts for the Border Region (Chapter 6)
9. Economic Importance of the Border (Chapter 7)
10. Next Steps

Activities Since Last Meeting (November-December 2019)

- BTAC Meetings
  - January 2020
  - April 2020
- Binational and multimodal corridor identification, designation, and needs assessment
  - Cross-border commodity flow summaries
  - Value of trade and by mode
- Forecasting movement of people and goods
- Economic importance of the Texas-Mexico border

Preliminary Table of Contents for Final Report

Preliminary Table of Contents for Final Report

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Texas-Mexico Border Transportation Master Plan

Chapter 1: Introduction

Introduction Overview

Chapter Purpose	Key Messages	Support Messages
▪ Provide background information on the importance of the Texas-Mexico border ▪ Provide purpose of the BTMP ▪ Show BTMP development process ▪ Provide BTMP Final Report content	▪ Texas-Mexico border connects people and commerce throughout U.S. and Mexico ▪ Blueprint for binational policy, program, and projects ▪ Identify transportation issues, needs, challenges, opportunities, and strategies ▪ Underpinned by data-driven analysis and binational stakeholder input	▪ Mexico is the third-largest trading partner of the U.S. ▪ The Texas-Mexico border facilitates a large amount of U.S.-Mexico trade and people crossings ▪ Border transportation infrastructure connects U.S.-Mexico-Canada ▪ BTMP is a blueprint to meet future challenges and opportunities

Background (1.1): Overarching U.S.-Mexico Relationship

- U.S.-Mexico **share 1,954 miles** of common border
  - It is the most frequently crossed international boundary in the world
- U.S.-Mexico **trade has tripled** between 1994 and 2017
  - Increased from $166 billion to $556 billion
- U.S.-Mexico **relationship goes beyond trade** and entails extensive commercial, cultural, and educational ties
- **NAFTA liberalized trade** between the U.S. and Mexico
  - USMCA will replace NAFTA (1994) and is anticipated to encourage investment in infrastructure, facilities, and operations along the U.S.-Mexico border

Background (1.1): Relevance of the Texas-Mexico Border

- Texas plays a vital role in the U.S.-Mexico relationship
  - Texas-Mexico **share 1,254 miles (64%)** of common border
- Trade
  - **70% of the $556.3 billion traded** between the U.S. and Mexico in 2017 occurred through the Texas-Mexico border
  - **Texas-Mexico trade value increased by 224%**, from $59.7 billion to $187.5 billion between 1995 and 2017
  - Texas traded with Mexico **more than three times** the amount Texas traded with China, the state's second-largest trading partner

Background (1.1): Relevance of the Texas-Mexico Border

- Economy
  - U.S.-Mexico trade supports more than **5 million jobs** across the U.S.
  - Texas-Mexico trade supports more than **382,000 jobs**
  - Border region **employment grew 86%** from 1.5 million in 1990 to 2.8 million jobs in 2017
    - 97% growth in Mexico from 830,000 to 1.6 million
    - 73% growth in Texas from 660,000 to 1.1 million
- Population
  - Border region **population grew 70%** from 4.4 million in 1990 to 7.3 million in 2017
    - 69% growth in Mexico from 2.6 million to 4.3 million
    - 65% growth in Texas from 1.8 million to 3.0 million
    - Border region outpaced national trends in the U.S. (31% growth) and in Mexico (59%)

Employment
From 1990-2017

86%
INCREASE

Population
From 1990-2017

70%
INCREASE

Background (1.1): Relevance of the Texas-Mexico Border

- Infrastructure
  - Out of 49 border crossings on the U.S.-Mexico border, **29 are along the Texas-Mexico border***
    - 28 process passenger vehicle movements
    - 24 process pedestrian movements
    - 14 process commercial movements (World Trade Bridge in Laredo is exclusively commercial)
    - 6 rail crossings
    - Some cover multiple modes (rail, pipeline, aviation, and maritime)
  - Binational transportation system serving the Texas-Mexico border is **essential to the efficient flow of people and goods**

** Including Santa Teresa, New Mexico border crossing because it is within the El Paso MPO's planning area boundary*

Background (1.1): Relevance of the Texas-Mexico Border

- People movement
  - U.S.-Mexico border experienced a **9% decline** in northbound people crossings between 1996 and 2017 from 208 million to 188 million
  - Texas-Mexico border recorded a **37% decline** in northbound people crossings in the same period, from 137 million down to 86 million
    - This is driven mainly by the reduction in personal vehicle crossings
  - **More than 45%** of the U.S.-Mexico personal crossings in 2017 occurred through the Texas-Mexico border
    - **34 million cars**, more than **17 million pedestrians**, and more than **86,000 passenger buses** crossed the Texas-Mexico border in 2017

Background (1.1): Relevance of the Texas-Mexico Border

- Goods movement
  - Northbound truck crossings **increased by 93%** from 2.2 million in 1996 to 4.2 million in 2017
  - Northbound railcar moves **increased by 285%** from 251,769 in 1996 to 970,406 in 2017
  - In 2017, **over $390 billion** in goods were traded across the Texas-Mexico border
    - $187.5 billion (or 48%) was direct trade between Texas and Mexico
    - $202.5 billion passed through Texas border crossings with origins or destinations in other U.S. states and Canadian provinces

Background (1.1): Challenges of the Texas-Mexico Border

- **Addition of nearly 0.8 million residents** in the border region between 2015 and 2030
  - 0.5 million growth on Mexico side, 0.3 million growth on the Texas side between 2015 and 2030
  - Growth increases cross-border travel demand in border region
  - Adds pressure to the port of entry (POE) facilities and connecting transportation corridors
  - Growth will lead to increasing congestion across the transportation system
    - Including border crossings, highways, airports, pipelines, maritime, and rail connections
- **Improving capacity and operations** of the binational, multimodal infrastructure is critical
  - BTMP will identify solutions to alleviate traffic congestion, facilitate international trade, reduce environmental impacts, and improve quality of life for residents in the border region

Purpose of the Border Transportation Master Plan (1.2)

- Builds on the long-standing coordination and collaboration relationship between Texas and Mexico
- Comprehensive, multimodal, binational long-range plan
  - Identifies current and future transportation needs, challenges, and opportunities
  - Identifies and designates a binational and multimodal transportation system
  - Assesses the economic importance of cross-border movement of people and trade and the economic impact of border delays and congestion
  - Outlines policy, program, and project investment strategies and planning activities to address the needs
  - Outlines a comprehensive action plan for implementing recommendations in the short-, medium-, and long-term

Serves as a blueprint for binational policy, program, and project action plan to address current and future cross-border transportation needs and challenges

BTMP Development Process (1.3)

- Development was informed by input from a wide variety of binational stakeholder groups
- Key groups that participated in the development of the plan include:
  - Border Trade Advisory Committee (BTAC)
  - Binational Regional Steering Committees (BNRSCs)
  - Texas Department of Transportation Internal Border Task Force
  - Private sector through stakeholder workshops
  - General public through public meetings

BTMP Final Draft Report Chapters (1.4)

No.	Chapter Name	Chapter Overview
1	Introduction	Purpose and development of BTMP; organization of report
2	Goals, Objectives, and Institutions	Mission and vision; goals and objectives of the BTMP; institutions and overview of planning and implementation processes
3	Existing Conditions: The Texas-Mexico Border Today	Trends and current conditions on population, employment, income, education, movement of goods and people, and supply chains
4	Binational Multimodal Transportation Network Designation	BTMP regions; spheres of influence; criteria and process for multimodal corridor designations; final multimodal transportation network
5	Needs Assessment and System Performance	Overview of current issues and needs; strengths, weaknesses, opportunities and threats; key elements of the multimodal networks and performance
6	Future Forecasts for the Border Region	Future scenario and forecast for the movement of people and goods
7	Economic Importance of the Border	Economic profiles; key supply chains; economic impact of border delays
8	Identification of Future Needs and Strategies	Future performance of the binational transportation system; economic impacts of future border conditions; identification of future needs; strategies
9	Stakeholder Engagement	Purpose; organization; membership; engagement summary
10	Recommendations	Prioritization process; project, policy and program recommendations; impacts on performance and economic impacts of recommendations
11	Implementation Plan	Implementation framework; availability of funds; implementation plan for projects, policies and programs

BNRSC Feedback

1. Did we frame Chapter 1 appropriately?
2. Are there any other information points that you would like us to include in Chapter 1?

Goals, Objectives, and Institutions

Chapter 2

Goals, Objectives, and Institutions Overview

Chapter Purpose	Key Messages	Support Messages
▪ Present BTMP vision and mission ▪ Present BTMP goals and objectives ▪ Identify the institutions and agencies that partner along the Texas-Mexico border and their roles	▪ Goals and objectives developed through consensus ▪ Joint management and collaborative efforts between binational partners allow border to function effectively	▪ Goals and objectives are a starting point for project prioritization ▪ Different processes are used to facilitate the movement of people and goods

Vision & Mission (2.1)

Vision

To collaboratively foster integrated and efficient binational transportation mobility of people and goods across the Texas-Mexico border and to promote economic development that benefits the binational Texas-Mexico border region and the United States and Mexico.

Mission

To develop and implement a trade, economic development, and transportation strategy and public policy that facilitates United States-Mexico border trade and cross-border movement of people, creates efficient corridors, and enhances the connections in the binational border region, within the United States and Mexican states that form the Texas-Mexico border region, and between the two nations that share this border.

See Handout 1

Alignment of BTMP Goals and Objectives with Existing Plans in the U.S. and Mexico (2.2)

Mobility and Reliability	Economic Competitiveness	Safety and Security	Multimodal Connectivity	Cross-Border Resiliency	Sustainable Funding	Asset Preservation	Customer Service	Stewardship
Mobility and Reliability	Optimize System Performance	Safety	Multimodal Connectivity	Foster Consistency	Sustainable Funding	Asset Preservation	Customer Service	Stewardship
Optimize System Performance	Economic Competitiveness	Promote Safety	Optimize System Performance	Increase System Resiliency	Foster Stewardship	Asset Preservation	Foster Understanding	Foster Understanding
Mobility and Reliability	Economic Competitiveness	Safety and Security	Multimodal Connectivity	Build Resilient Infrastructure	Sustainable Funding	Preserve our Assets	Focus on the Customer	Foster Stewardship
Mobility and Reliability	Promote Economic Development	Focus on Safety	Multimodal Connectivity		Infrastructure Investments	Maintain State of Good Repair	Partner with Stakeholders	Bilateral Cooperation
Mobility and Reliability			Promote Regional Connectivity		Industry Investments	Preventive Maintenance	Bilateral Cooperation	Promote Participation
Promote Sustainable Mobility							Promote Participation	Stewardship
							Customer Service	

Legend: U.S. and Mexico Planning Documents

- Texas Transportation Plan 2040
- Previous U.S.-Mexico BTMPs
- TxDOT Strategic Plan 2019-2023
- Texas Freight Mobility Plan 2018
- Texas-Mexico Border Strategic Blueprint
- Mexican State Development Plans
- Mexican Regional Development Plans

U.S.-Mexico and Texas-Mexico Border Policy Development, Planning, Infrastructure Development, and Management Processes (2.3)

- U.S.-Mexico share multidimensional border
- Different approaches are used to manage the border
  - Prior to 9/11, Mexico primarily took a hands-off approach
  - After 9/11, both countries have increased their collaboration
- Establishment of high-level forums and mechanisms
  - North American Development Bank (1994)
  - 21st Century Border Initiative (2010)
  - U.S-Mexico High Level Economic Dialogue (2013)

U.S.-Mexico and Texas-Mexico Border Policy Development (2.3)

- Federal agencies who play a role in policy-making that impacts the border
  - Binational relations
    - U.S. Department of State and the Secretaría de Relaciones Exteriores (SRE)
  - Domestic policy initiatives
    - U.S. Department of Homeland Security, U.S. General Services Administration, and Secretaría de Hacienda y Credito Publico
    - U.S. Department of Transportation and SCT
- State and local agencies who play a role in policy-making that impacts the border
  - U.S.: Texas State Legislature, Texas Transportation Commission, the Texas Department of Transportation, the Railroad Commission of Texas, Texas Secretary of State
  - Mexico: Mexican Congress of States responsible for statewide policy issues (including those related to the border) with the help of state agencies

U.S.-Mexico and Texas-Mexico Border Planning Processes (2.3)

- U.S.-Mexico Joint Working Committee on Transportation Planning (JWC)
  - Cooperate on land transportation planning and the facilitation of cross-border movements
- U.S.-Mexico Binational Bridges and Border Crossings Group (BBBXG)
  - Discuss operational matters for existing and proposed international bridges and border crossings and related infrastructure
  - Exchange technical information on policy issues
- Presidential permits are a key piece in planning of border infrastructure
  - U.S. federal presidential permit process: Follows Executive Order 13867 of April 10, 2019
  - Texas permit process: approval from the Texas Transportation Commission through TxDOT

U.S.-Mexico and Texas-Mexico Border Planning Processes (2.3)

U.S. Planning Process

Federal

- Guidance by USDOT on transportation planning process
  - FAST Act
- Statewide planning requirements
- Metropolitan planning requirements

Texas

- Texas Transportation Plan (TTP) 2040
- TxDOT Strategic Plan
- Statewide Transportation Improvement Program (STIP)
- Texas-Mexico Border Transportation Master Plan
- Texas Freight Mobility Plan 2018
- Metropolitan Transportation Plans

Mexico Planning Process

"General Planning Law" (1985)

- Norms and principles (including National Development Plan)
- Basis for integration and functioning (National System of Democratic Planning)
- Basis of participation and coordination

National Development Plan

- Describes programs that need to be developed including:
  - Sectorial plans (for key federal agencies)
  - Institutional (for quasi-governmental agencies)

Other Plans

- Sectorial Plan for Transportation and Communications by SCT
- Infrastructure Modernization Plan (IMP) by Aduanas

Institutions and Agencies Involved in Texas-Mexico Border (2.3)

U.S.

Federal Agencies

- Department of Homeland Security
- General Services Administration
- Department of Transportation
- Department of State
- Department of Agriculture
- Army Corps of Engineers
- International Boundary and Water Commission

State Agencies

- Texas State Government– Representatives and Senators
- New Mexico State Government– Representatives and Senators
- Texas Department of Transportation
- New Mexico Department of Transportation
- Texas Department of Public Safety
- New Mexico Department of Public Safety
- New Mexico Border Authority

Mexico

Federal Agencies

- Secretaria de Hacienda y Crédito Público
- Secretaría de Relaciones Exteriores
- Secretaría de Comunicaciones y Transportes
- Secretaría de Bienestar
- Instituto Nacional de Estadística y Geografía
- Secretaría de Energía
- Comisión Internacional de Límites y Aguas (CILA)
- Secretaría de Economía
- Secretaría de Agricultura y Desarrollo Rural

State Agencies

- Estados de Coahuila, Nuevo León, Tamaulipas, Chihuahua
- Secretaría de Obras Públicas de Tamaulipas
- Secretaría de Economía y Turismo de Tamaulipas
- Secretaría de Desarrollo Urbano y Medio Ambiente de Tamaulipas
- Secretaría de Obras Públicas y Transporte de Coahuila (SOPT)
- Corporación para el Desarrollo de la Zona Fronteriza de Nuevo León (CODEFRONT)
- Secretaría de Comunicaciones y Obras Públicas Chihuahua
- Centro SCT
- Secretaria de Economía y Turismo Coahuila
- Secretaria de Innovación y Desarrollo Económico de Chihuahua
- Secretaría de Economía y Trabajo de Nuevo León
- Secretaría de Desarrollo Sustentable de Nuevo León

Institutions and Agencies Involved in Texas-Mexico Border (2.3)

U.S.		Mexico	
Local Agencies	**Private Sector**	**Local Agencies**	**Private Sector**
▪ Local Metropolitan Planning Organizations ▪ Regional Mobility Authorities ▪ County and City Governments	▪ Bridge owners ▪ Trucking companies ▪ Railroad companies (Class I railroads and shortlines) ▪ Airport operators ▪ Seaport owners and terminal operators ▪ Pipeline owners and operators ▪ Brokers and logistics companies ▪ Passenger bus companies	▪ Municipios ▪ Institutos Municipales de Investigación, Planeación y/o Desarrollo Urbano	▪ Bridge owners (for some border crossings) ▪ Trucking companies ▪ Railroad companies ▪ Airport owners ▪ Seaport owners (in joint venture with federal government) and terminal operators ▪ Brokers and logistics companies ▪ Passenger bus companies

Overview of Management, Program, and Project Implementation along the Texas-Mexico Border (2.3)

Primary Responsibilities

	Border Management and Operations	Border Infrastructure and Support Facilities	Roadway Infrastructure	Rail Infrastructure	Seaport Infrastructure	Airport Infrastructure	Pipeline Infrastructure
U.S.	CBP	GSA and other parties	TxDOT and local agencies	Private sector	Port authorities and navigation districts	Municipal or county governments	Private sector
Mexico	Aduanas	INDAABIN and other parties	SCT, state and local agencies	SCT	SCT and other parties (APIs)	Private sector and small SCT role	SENER and small private sector role

Overview of Management, Program, and Project Implementation along the Texas-Mexico Border (2.3)

Funding Considerations

	Border Management and Operations	Border Infrastructure and Support Facilities	Transportation Infrastructure
U.S.	Budget appropriations to CBP and other agencies	Budget appropriations to GSA and CBP (some third party contributions)	Funded based on ownership of facility
Mexico	Budget appropriations to Aduanas & other agencies	Budget appropriations to INDAABIN and Aduanas (some third party contributions)	Primarily funded through SCT, with some state, local and private sector contribution

BNRSC Feedback

1. Did we frame Chapter 2 appropriately?
2. Is there any other information that needs to be included in Chapter 2?

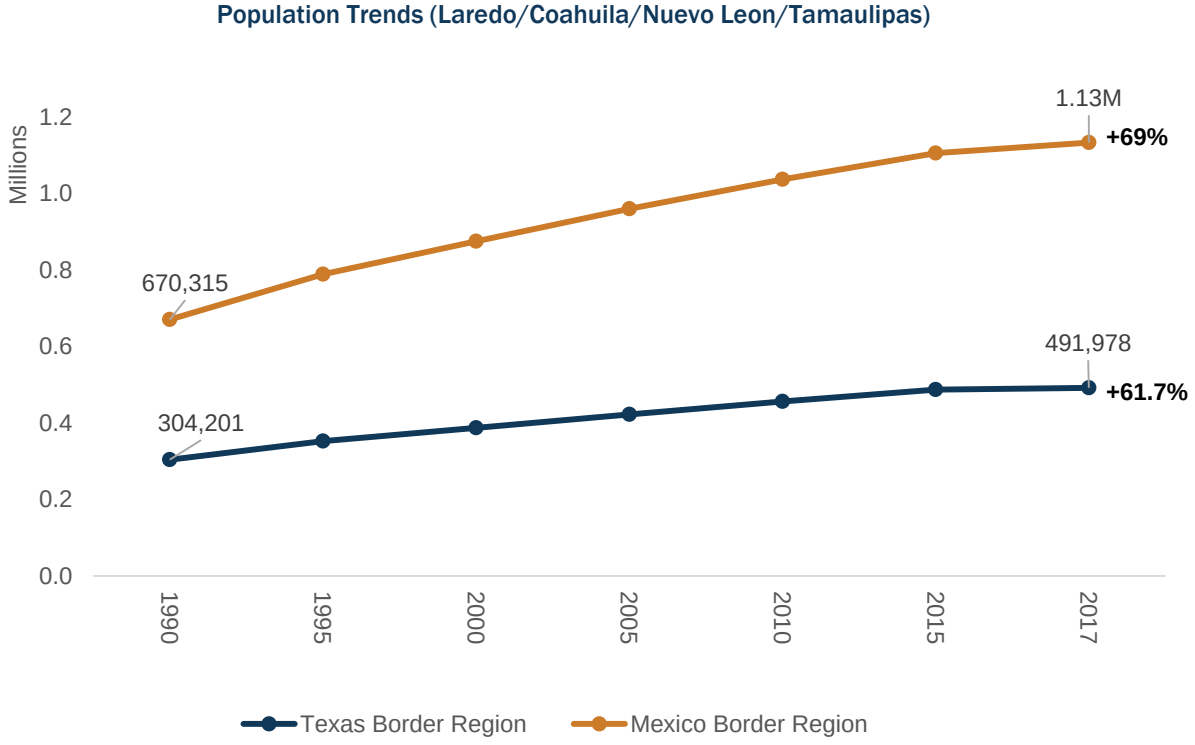
Existing Conditions: The Texas-Mexico Border Today

Chapter 3

Current Conditions at the Texas-Mexico Border Overview

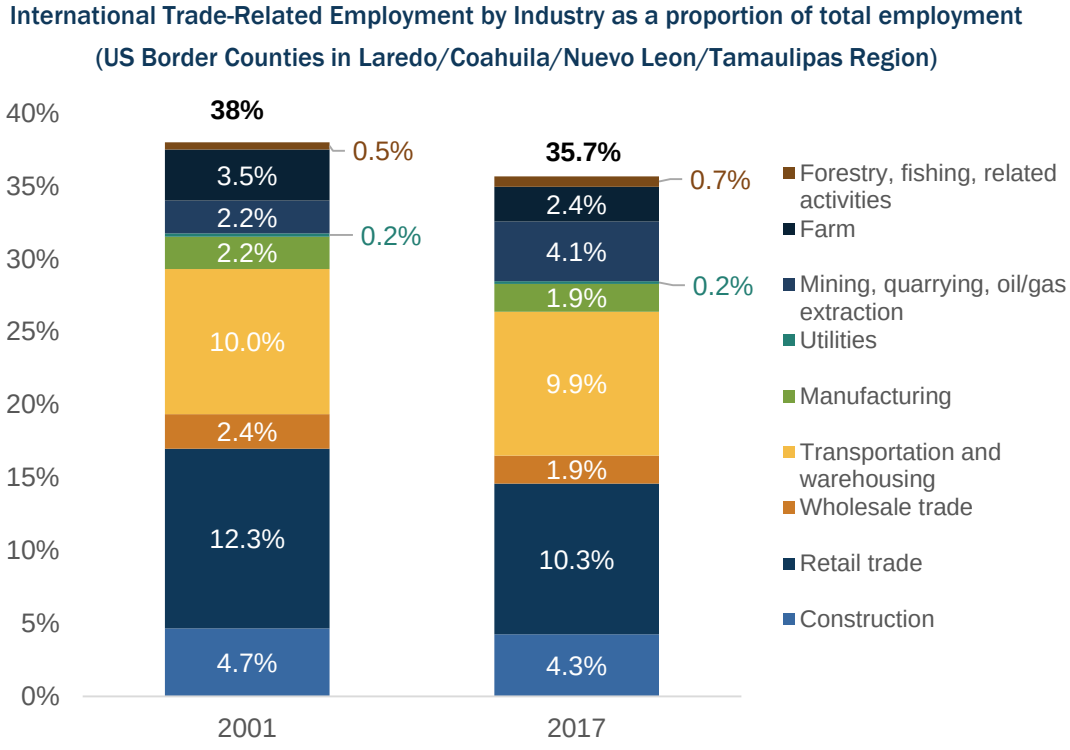
Chapter Purpose	Key Messages	Support Messages
▪ Identify the trends and current conditions of the Texas-Mexico border ▪ Provide high-level socioeconomic and cross-border movements ▪ Guide preliminary identification of issues and needs	▪ The border region population and employment is growing ▪ Less people are crossing the border ▪ Trade continues to grow ▪ Border facilitates 12 key supply chains within North America	▪ Residents are becoming more educated ▪ Personal vehicle crossings have declined ▪ Trade across the border continues to increase ▪ Most truck and rail movement occurs northbound ▪ Most air, vessel, and pipeline movement moves southbound

Current Conditions: Population at the Border (3.1) – Laredo/Coahuila/ Nuevo León/Tamaulipas Region



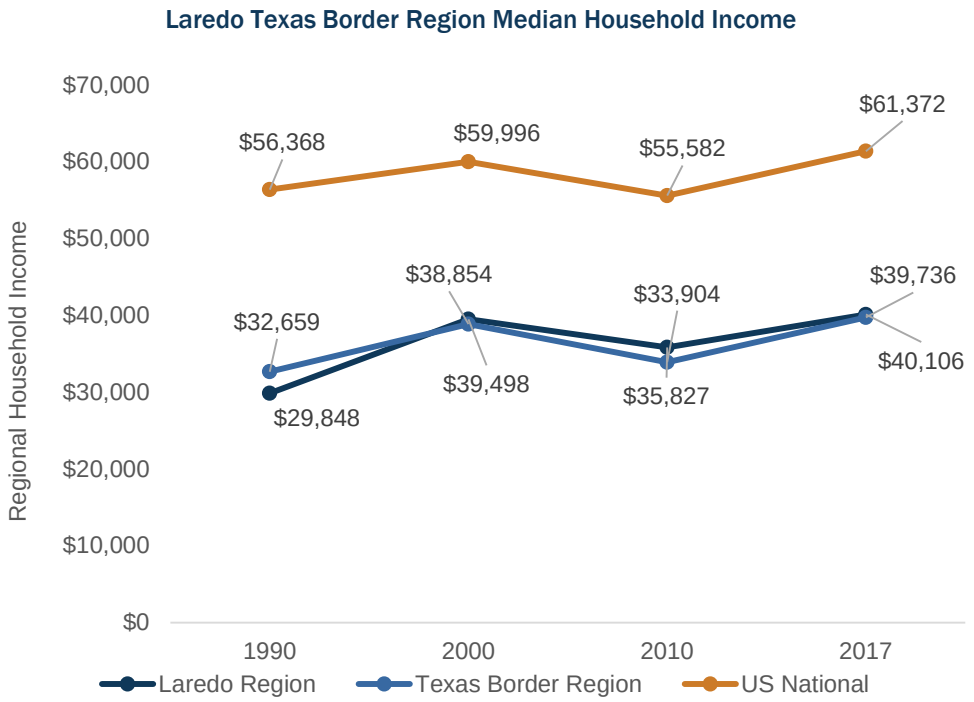
Sources: U.S. Census Bureau (1990–2017), INEGI (1990–2017)

Current Conditions: Employment at the Border (3.2) – Laredo/Coahuila/ Nuevo León/Tamaulipas Region



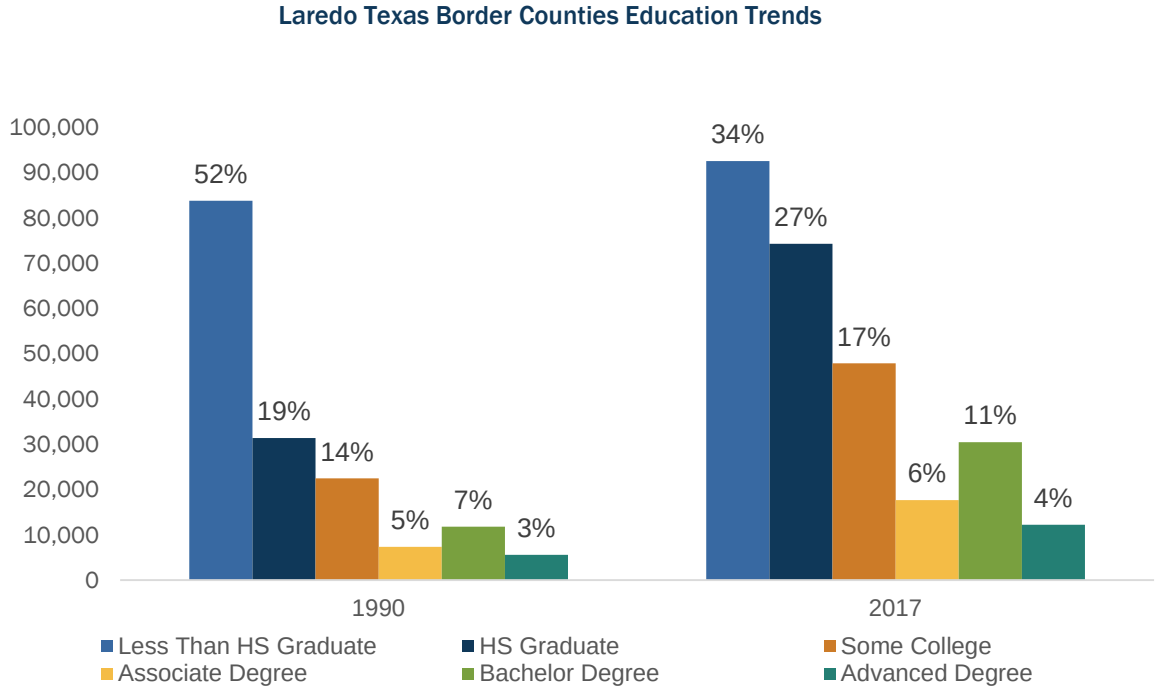
Source: Bureau of Economic Analysis, Total Full-Time and Part-Time Employment by NAICS Industry (2001-2017)

Current Conditions: Income at the Border (3.3) – Laredo/Coahuila/ Nuevo León/Tamaulipas Region



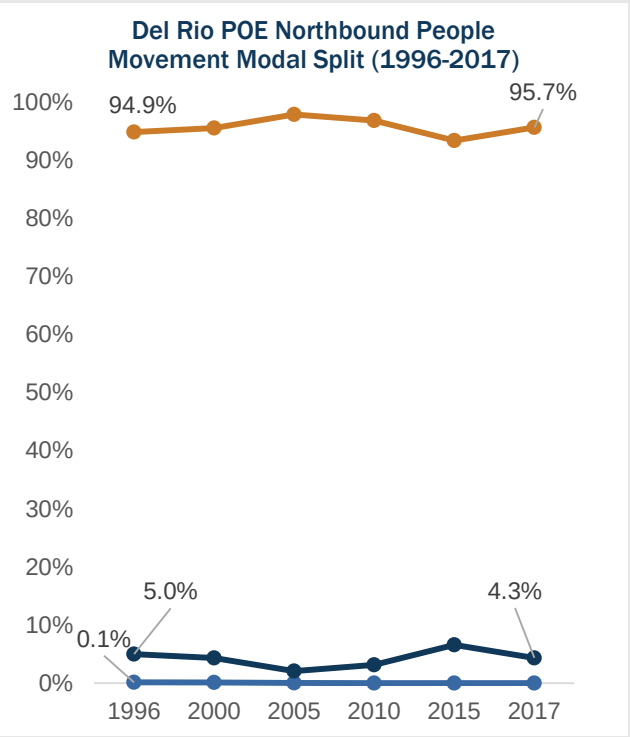
Source: U.S. Census Bureau; ACS Economic Characteristics Income and Families & Households data tools (1990-2017). Data of HHI on the US-side of region includes Dona Ana County in New Mexico.

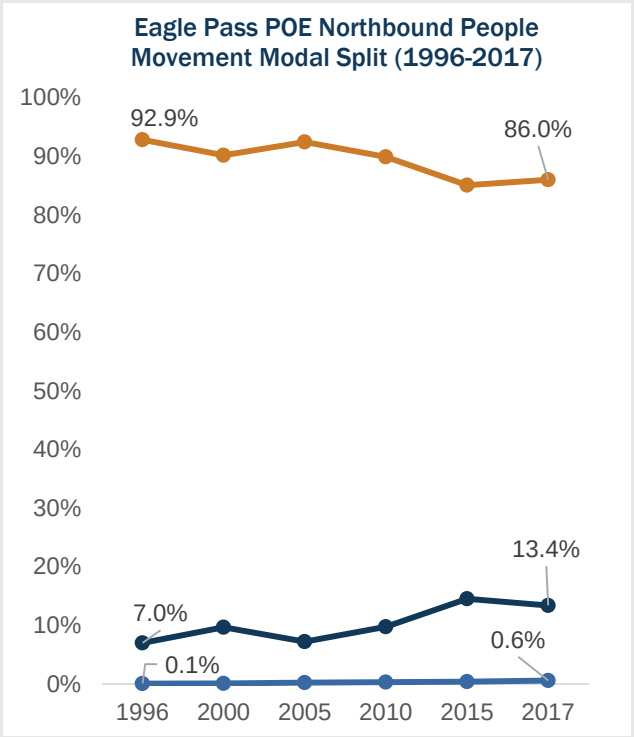
Current Conditions: Education at the Border (3.4) – Laredo/Coahuila/ Nuevo León/Tamaulipas Region

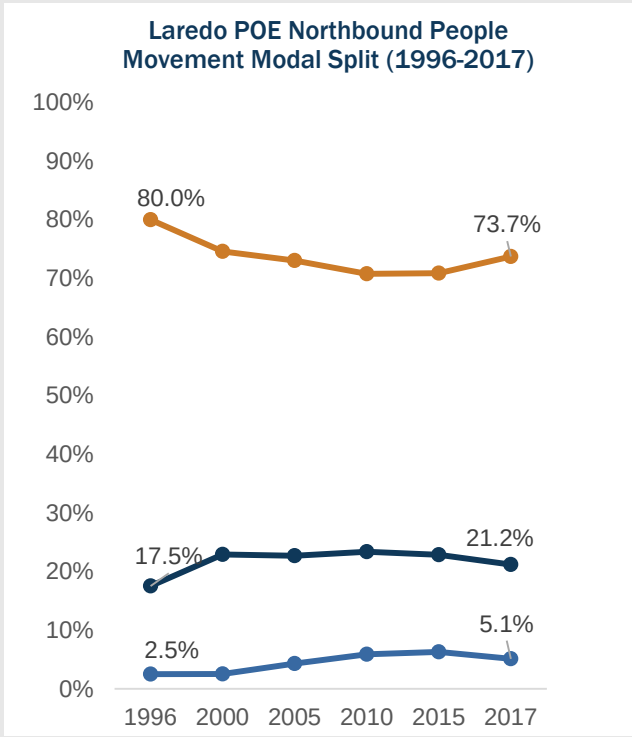


Source: U.S. Census Bureau (1990-2017). Note: Accounts for Population 25+

Current Conditions: Movement of People at the Border (3.5) – Laredo/ Coahuila/Nuevo León/Tamaulipas Region



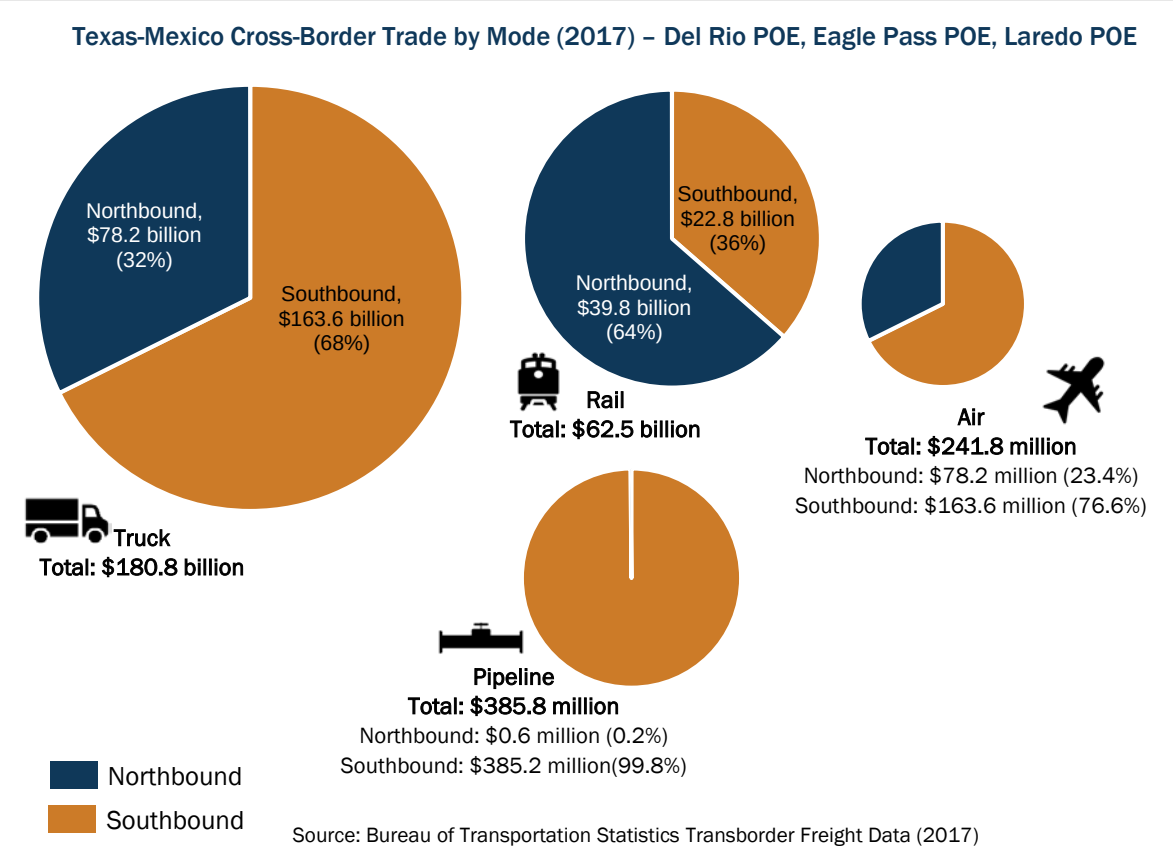




Source: Bureau of Transportation Statistics Border Crossing/Entry Data (2017), Northbound

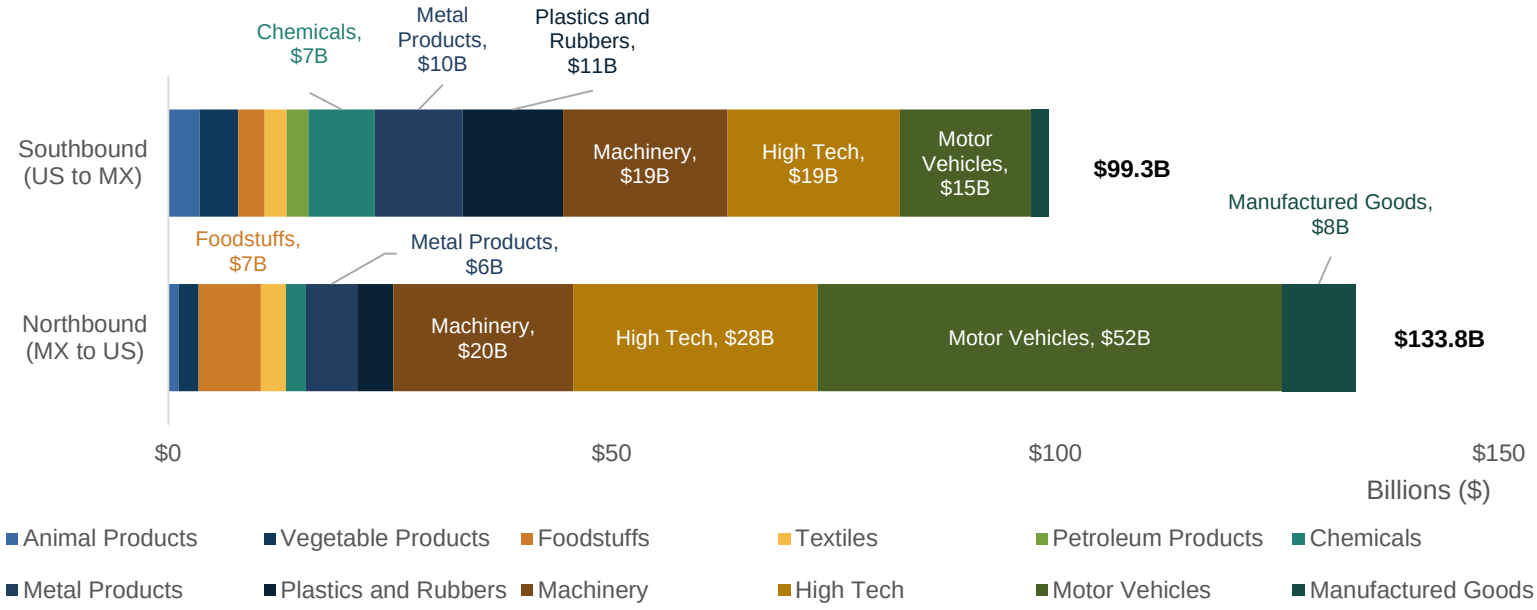
Bus Passengers Pedestrians Personal Vehicle Passengers

Current Conditions: Movement of Goods at the Border (3.6) – Laredo/ Coahuila/Nuevo León/Tamaulipas Region



Current Conditions: Supply Chains at the Border (3.7) – Laredo/ Coahuila/Nuevo León/Tamaulipas Region

Goods Moving Northbound and Southbound 2017 (Billions of Dollars) – Del Rio POE, Eagle Pass POE, Laredo POE



Source: Bureau of Transportation Statistics Transborder Freight Data, U.S. Census Bureau Trade Online, FAF v4

BNRSC Feedback

1. Did we frame Chapter 3 appropriately?
2. Do the findings in Chapter 3 match what you observe/experience at the border?

Binational Multimodal Transportation Network Designation

Chapter 4

Designation Process for Binational Multimodal Transportation Corridors Overview

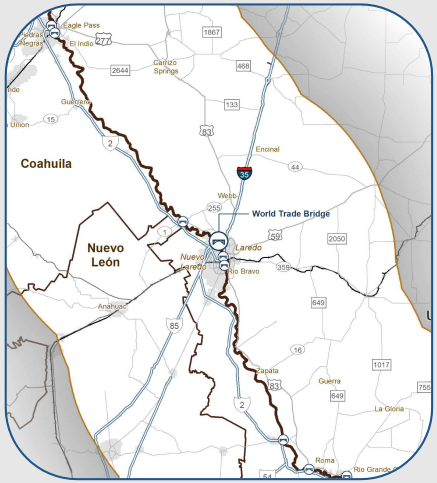
Chapter Purpose	Key Messages	Support Messages
▪ Summarize the binational multimodal transportation network designation process for: – Texas and local regions – Mexico's four border states – U.S. and Mexico	▪ Three border regions were identified, consistent with previous efforts ▪ 5-sphere planning analysis structure ▪ Developed designation criteria ▪ 11 multimodal transportation corridors are designated	▪ Designated multimodal corridors based on 10-mile buffers linking all modes ▪ Multimodal connections identified for the 29 border crossings ▪ Designated corridors will be used to identify needs and solution strategies

BTMP Border Regions

Three border regions have been identified for the BTMP:

El Paso/Santa Teresa/
Chihuahua Region

Laredo/Coahuila/Nuevo León/
Tamaulipas Region

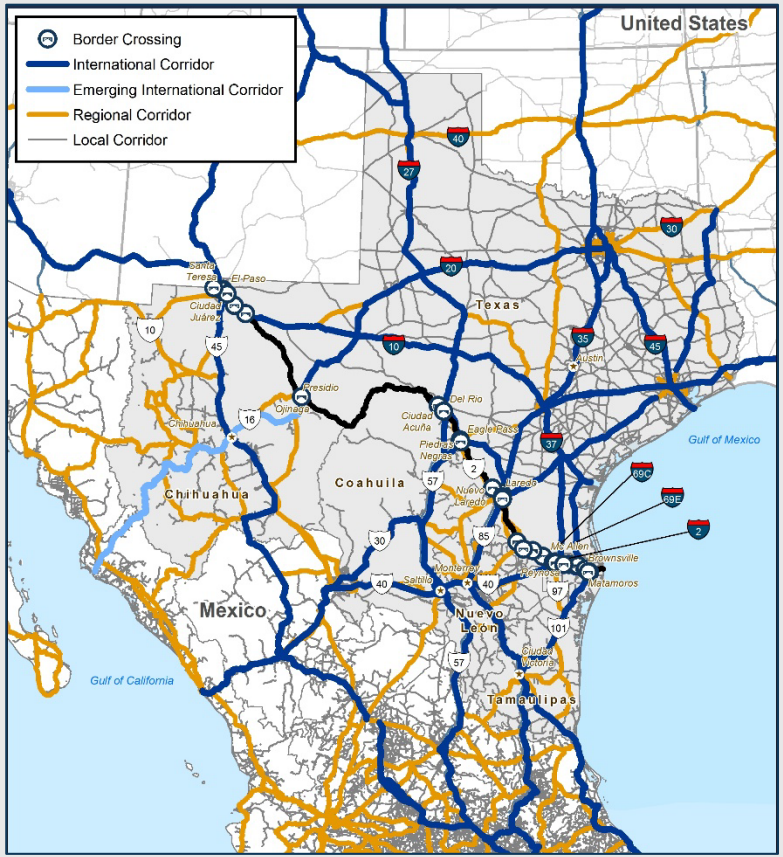


Rio Grande Valley/
Tamaulipas Region

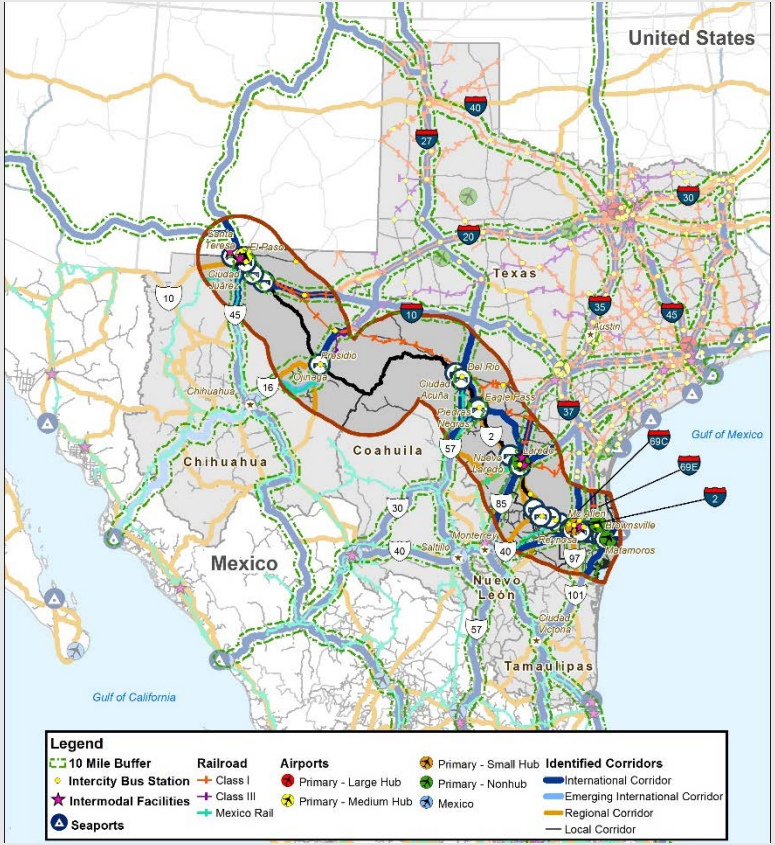
Spheres of Influence

- Spheres present the transportation system and analysis at different levels of detail based on proximity to the Texas-Mexico border. The planning spheres used to develop the BTMP include:
  - **Sphere 1:** 60 miles (100 km) north and south of the border, including the 1 mile and 60-mile transportation system analysis detail from the border
  - **Sphere 2:** Approximately 100 miles (160 km) north and south of the border, including key population and goods production centers in the border states
  - **Sphere 3:** Five border states (Texas, Chihuahua, Coahuila, Nuevo León, and Tamaulipas)
  - **Sphere 4:** U.S. and Mexico
  - **Sphere 5:** U.S., Mexico, and Canada (NAFTA/USMCA)

Criteria and Process to Identify and Designate Multimodal Corridors: Foundation, Defined International Roadways

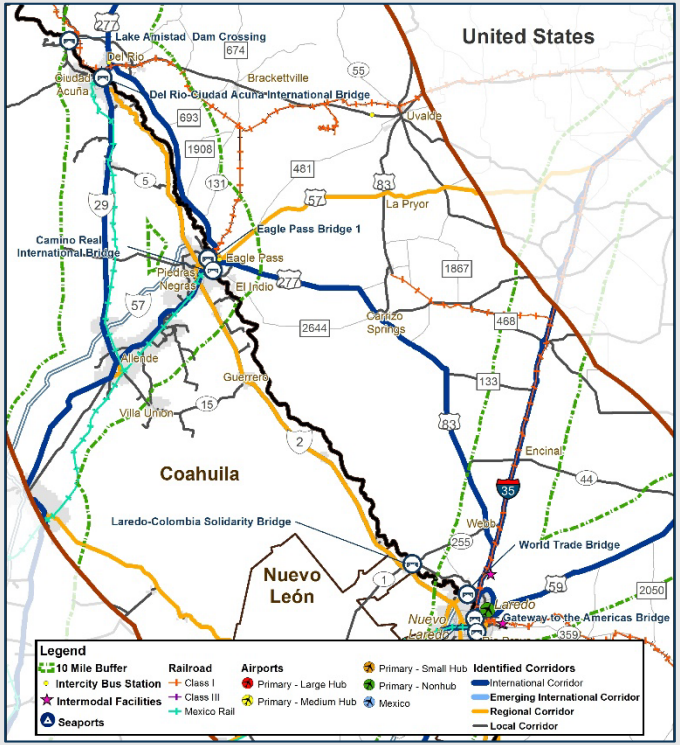


Criteria and Process to Identify and Designate Multimodal Corridors: Sphere 1 Binational Multimodal Network

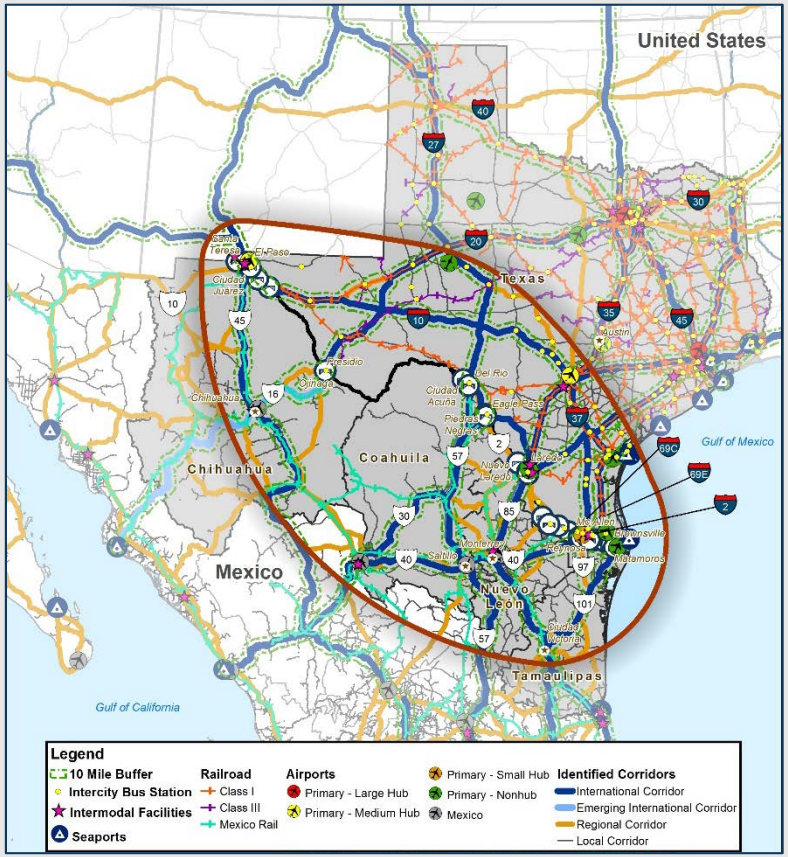


Criteria and Process to Identify and Designate Multimodal Corridors: Sphere 1 Binational Multimodal Network—Border Region

Laredo/Coahuila/Nuevo León/Tamaulipas

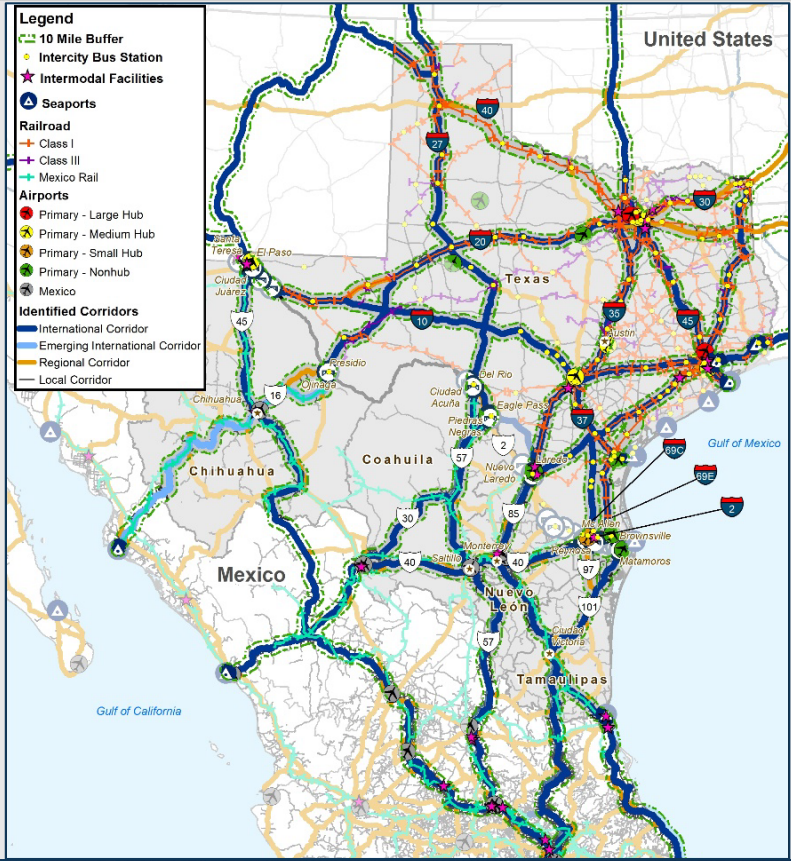


Criteria and Process to Identify and Designate Multimodal Corridors: Sphere 2 Binational Multimodal Network



Criteria and Process to Identify and Designate Multimodal Corridors: Sphere 3 Binational Multimodal Network

- Represents the binational multimodal transportation network for all modes, including designated corridor operations in the planning spheres
- Supports later technical analysis to identify
  - Needs
  - Solutions and strategies
- Supports detailed network analysis in Spheres 1 and 2, representing the three border regions
- Focuses Sphere 3 analysis on designated multimodal corridors



BNRSC Feedback

1. Did we frame Chapter 4 appropriately?
2. Is there any other information that needs to be included in Chapter 4?

Needs Assessment and System Performance

Primer to Chapter 5

Needs Assessment and System Performance Overview

Chapter Purpose	Key Messages	Support Messages
▪ Provide overview of issues and needs for binational transportation system ▪ Identify strengths, weaknesses, opportunities and threats at the border ▪ Define key elements of the multimodal networks and performance	▪ Long wait times and capacity constraints are key issues ▪ Strong cooperation exists between U.S. and Mexican agencies ▪ Lack of communication about crossing conditions to users is prevalent	▪ Concentration of demand along key corridors and urban areas ▪ ITS developments could solve several issues ▪ Lack of funding continues to be a threat

Issues at the Texas-Mexico Border: Freight Mobility

Key issues:

- Corridors and routes to/from the border crossings are impeded by urban growth and have various modes mixed into the same lanes
- Excessive wait times to cross the border (average 20-25 minutes)

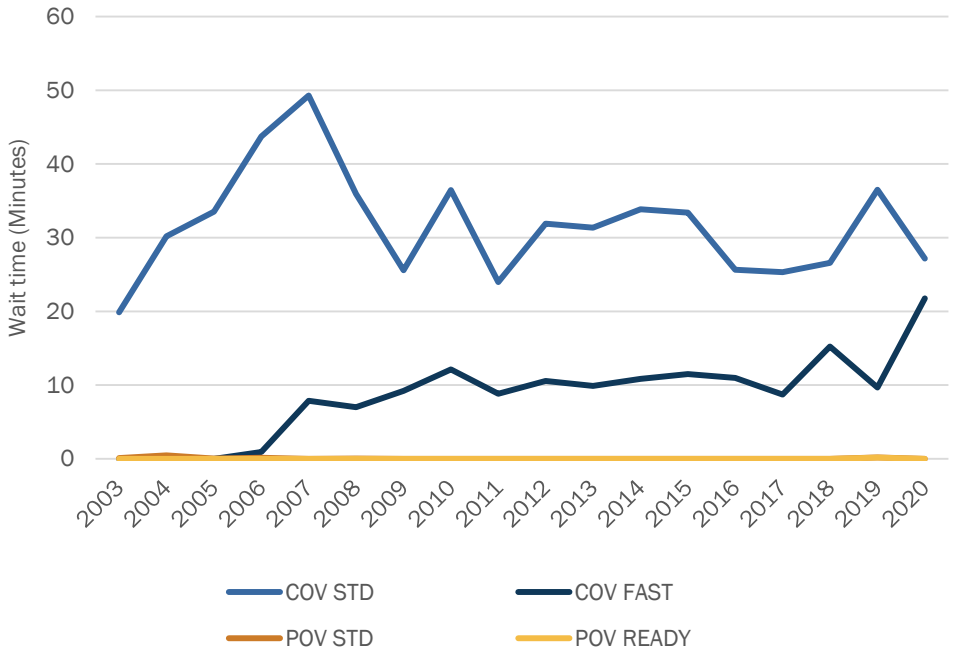
Additional issues:

- Few cross-border locations support passage of hazardous materials via truck
- Some corridors and connector routes are inefficient and/or not well-maintained
- The network of overweight & oversize routes needs periodic review due to changing needs

Texas-Mexico Border Wait Times

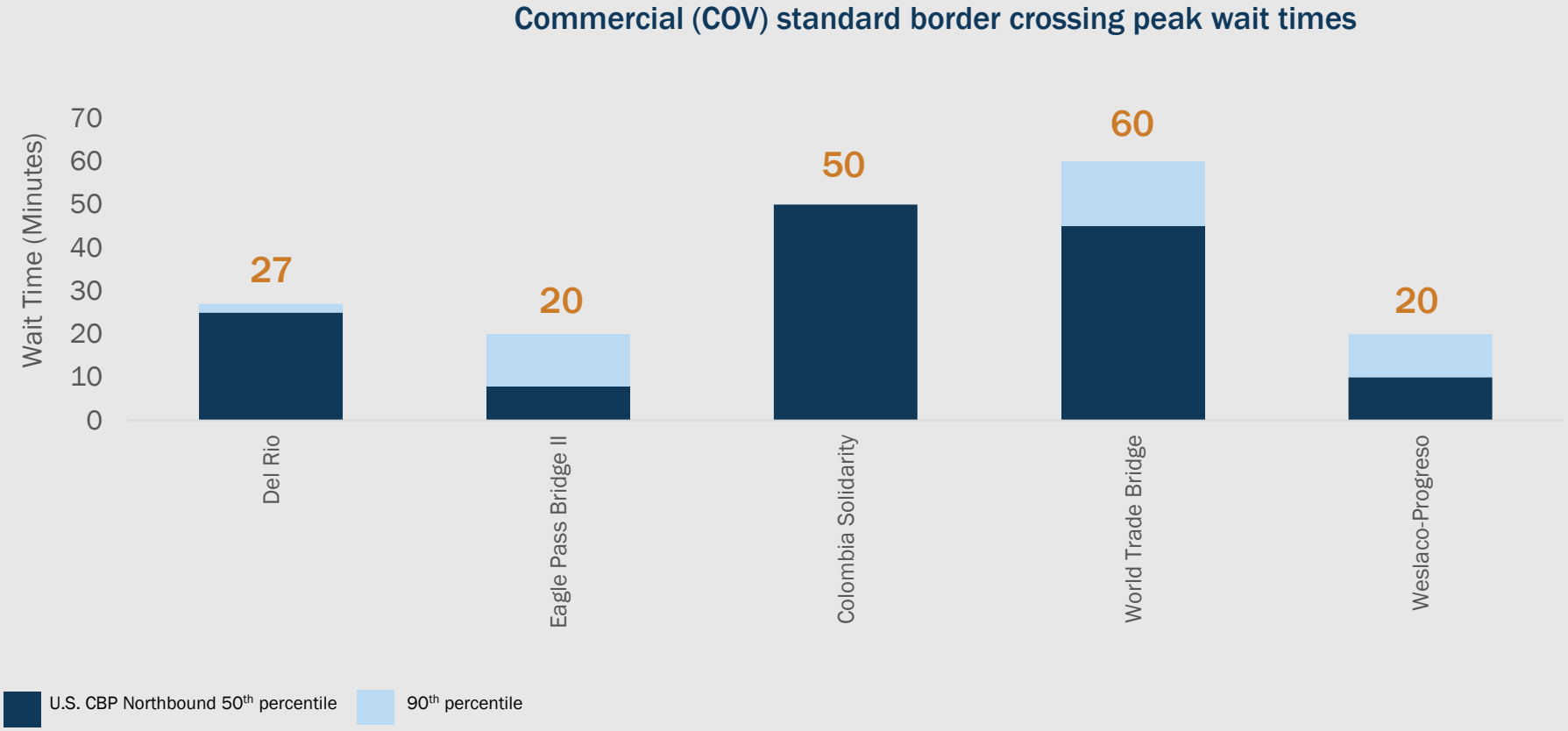
- Stakeholder input:
  - Stakeholders noted long border wait times
- Findings:
  - Northbound border wait times have increased since 2003 across all border crossings
  - Passenger vehicle wait times have generally increased
  - Wait times vary across each border crossing and lane type

Laredo World Trade Bridge Northbound Average Wait Time during Peak Hour



Source: U.S. CBP Northbound Hourly Border Wait Times, 2020 includes January and February only

Texas-Mexico Border Wait Times: Laredo/Coahuila/Nuevo León/Tamaulipas Region (2017)



Issues at the Texas-Mexico Border: Freight Mobility

Key issues:

- Large percentage of freight movement concentrated at small number of crossings; top 6 truck crossings = 98% of truck freight
- Most truck crossing locations have limited hours of operation
- Rail bridges are all single rail line; takes an average of 90 minutes for a train to cross

Additional issues:

- Two oldest rail bridges support more than 75% of rail traffic
- Laredo rail bridge is 100 years old
- Acute truck parking shortage across entire region
- Rail traffic impedes roadway mobility in certain locations

Needs at the Texas-Mexico Border: Freight Mobility

Key needs:

- Current and readily-available information on cross-border wait times
- Joint customs inspections for both trucks and rail to reduce total crossing time
- Increased use of technology to conduct non-intrusive inspections
- More cross-border capacity for trucks to cross

Needs for Laredo/Coahuila/Nuevo León/Tamaulipas Border Region:

- Trucks need more and better parking areas while waiting to pick-up and/or delivery trailers
- Border crossing hours of operation are too limited
- Need to develop a truck hazardous material route network
- Need more focus on education and training for using more advanced technology equipment, and more efficient processes

Issues at the Texas-Mexico Border: People Mobility

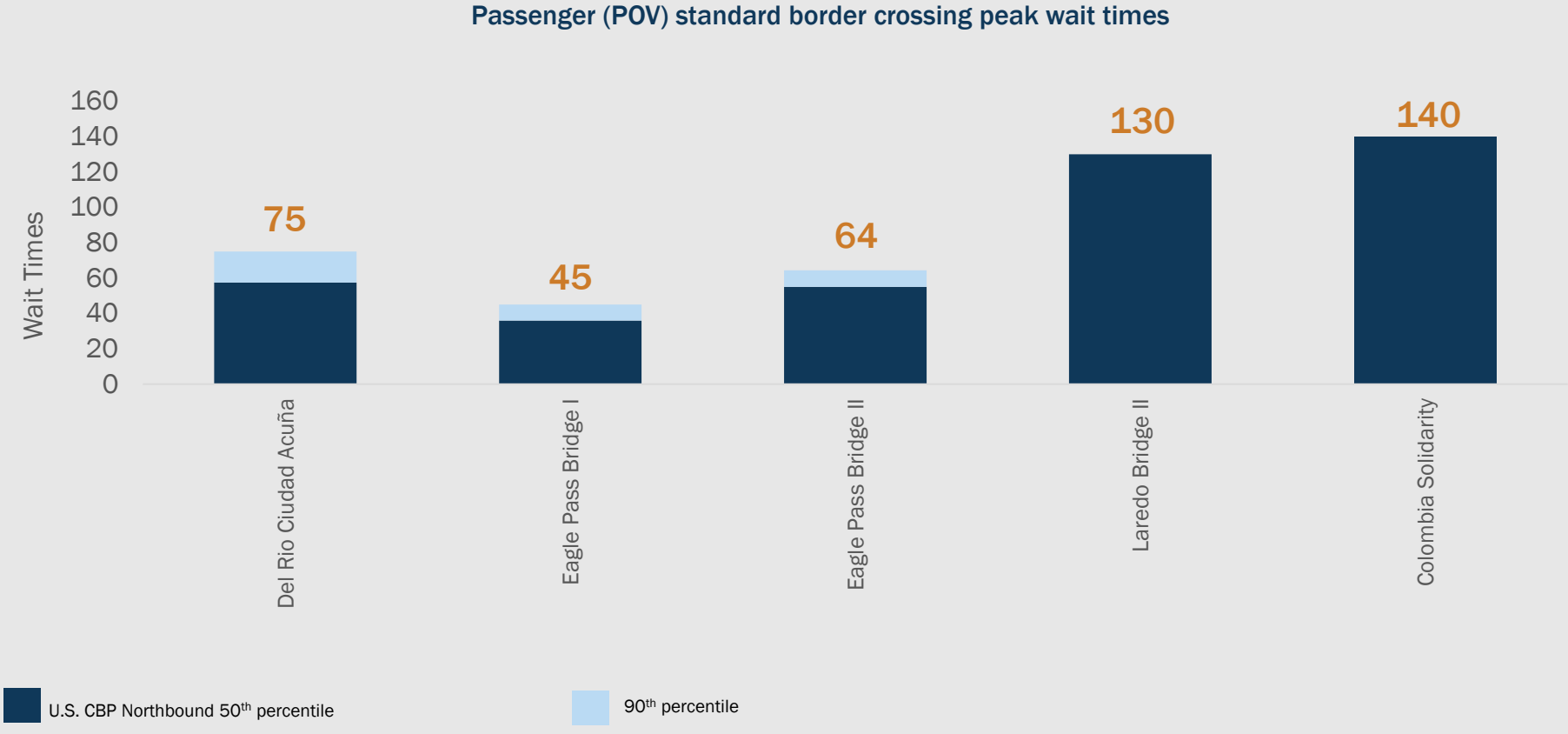
Key issues:

- Pedestrian traffic coexisting with cars and truck traffic at border crossings
- Excessive wait times to cross the border: passenger vehicles average 30-40 minutes; pedestrians average 5-25 minutes

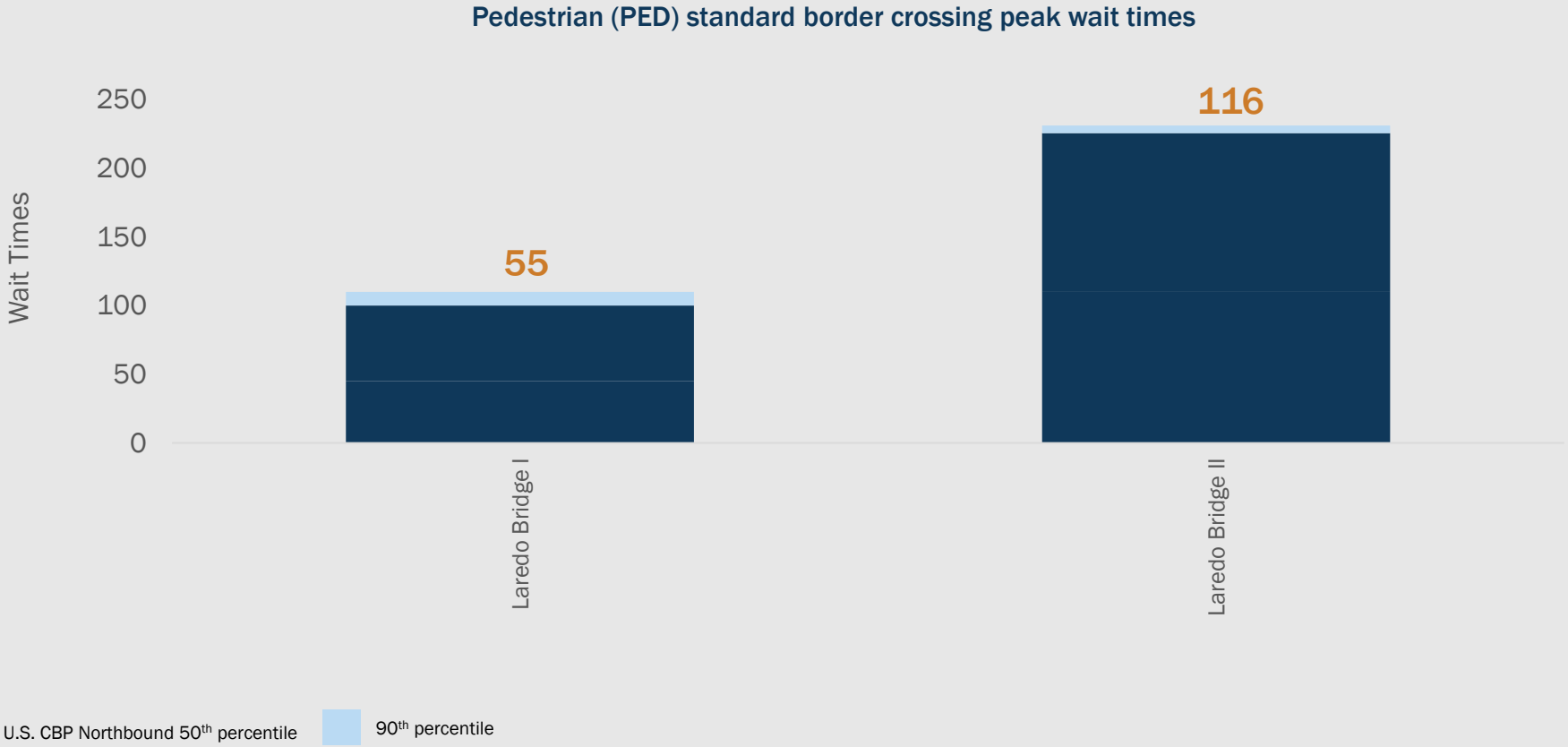
Additional issues:

- Shortage of border crossings and lanes equipped with SENTRI
- Lack of dedicated bicycle lanes
- Lacking informative signage to key destinations
- Pedestrian walkways on most border crossings are narrow
- Once across the border, there is little/no connectivity to public transportation on either side
- General shortage of drop-off and pick-up areas for pedestrians on both sides of the border

Texas-Mexico Border Wait Times: Laredo/Coahuila/Nuevo León/ Tamaulipas Region (2017)



Texas-Mexico Border Wait Times: Laredo/Coahuila/Nuevo León/ Tamaulipas Region (2017)



Needs at the Texas-Mexico Border: People Mobility

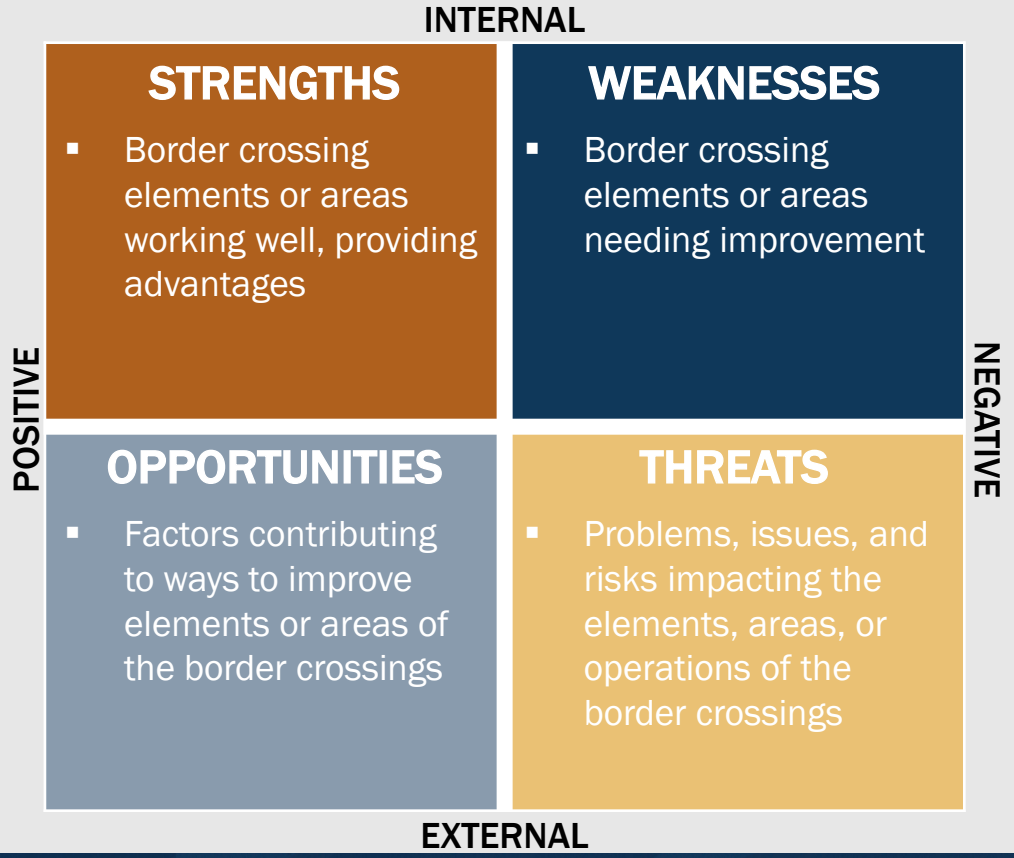
Key needs:

- Pedestrian border crossings need to be key nodes for incorporation into urban plans for transit, bike/pedestrian, and multimodal people mobility
- Employ technology, i.e. biometric facial recognition technology to improve throughput and decrease crossing times
- Need accurate & real-time information on wait times and other incidents

Needs for Laredo/Coahuila/Nuevo León/Tamaulipas Border Region:

- Need to address safety in the movement of people around the border area, in particular in Mexico

Strengths, Weaknesses, Opportunities and Threats Analysis of the Binational Border: Overview



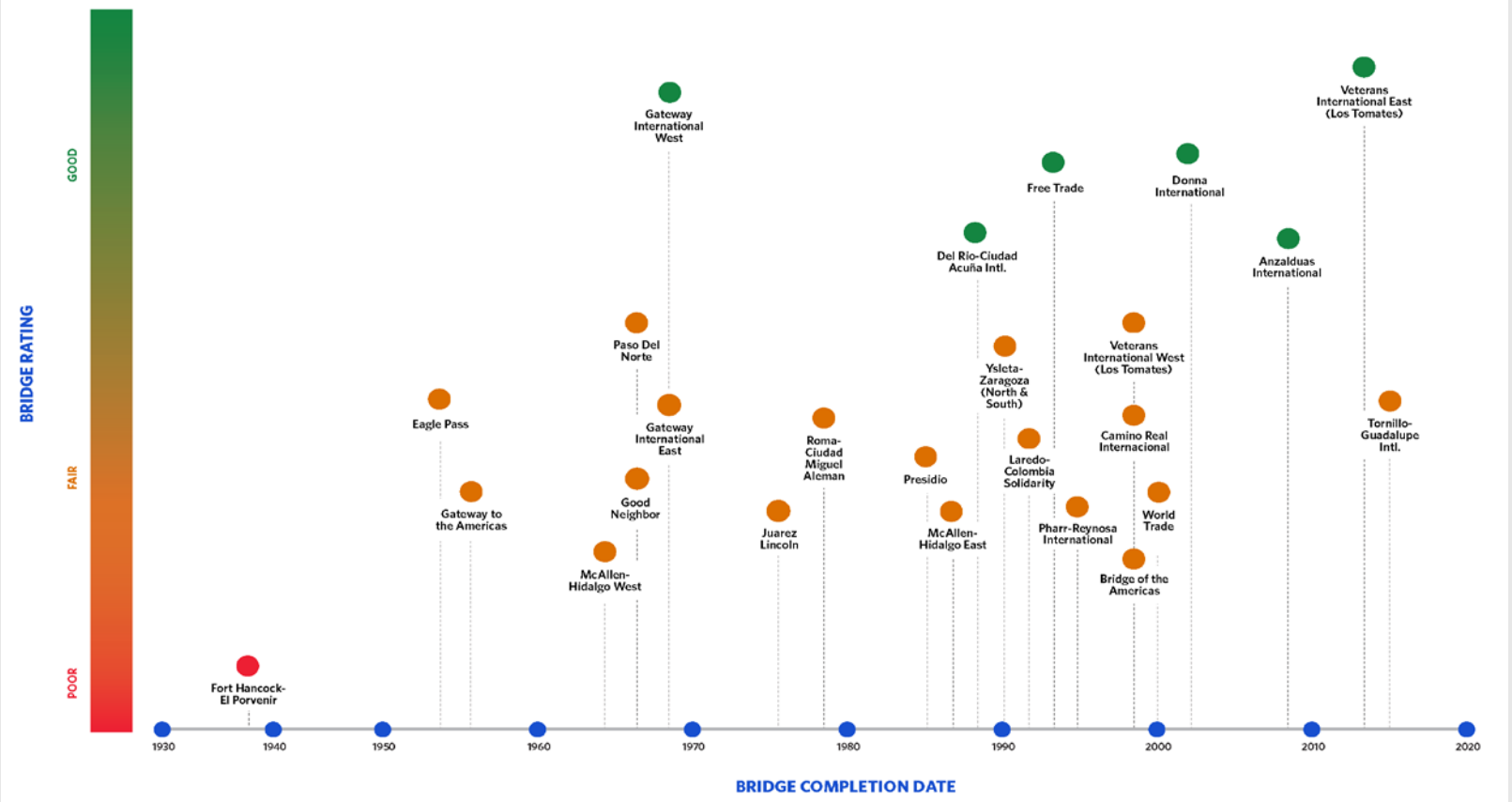
SWOT Analysis of the Binational Border: Multimodal Analysis of the Border Region

- Evaluates range of variables that influence, hinder, or support transportation needs, goals, and objectives of the BTMP
  - Needs analysis focused on assessing the capacity of the border crossings and transportation system to facilitate the movement of people and goods
- Evaluates all 29 border crossings/border regions and supporting network:
  - Border crossing infrastructure assets
  - Auto
  - Truck and Highway Freight
  - Freight Rail
  - Pedestrian
  - Aviation
  - Pipeline

SWOT Analysis of the Binational Border: Borderwide Findings

Strengths	Weaknesses	Opportunities	Threats
▪ Programs that expedite movement of people and goods at different locations along the border ▪ Cooperation between U.S. and Mexican agencies on border-crossing operations	▪ Urban border crossings located in downtown areas adjacent to residential areas ▪ Lack of reliable, timely communication of border crossing conditions with users	▪ Forecasted increase in border movements are coupled with strong infrastructure and expected improvements ▪ Availability of Intelligent Transportation Systems (ITS) solutions to expedite future border movements	▪ Lack of funding to pay for improvements ▪ Measures to improve efficiency at the border may take time to implement

Border Crossing Infrastructure: Bridge Ratings



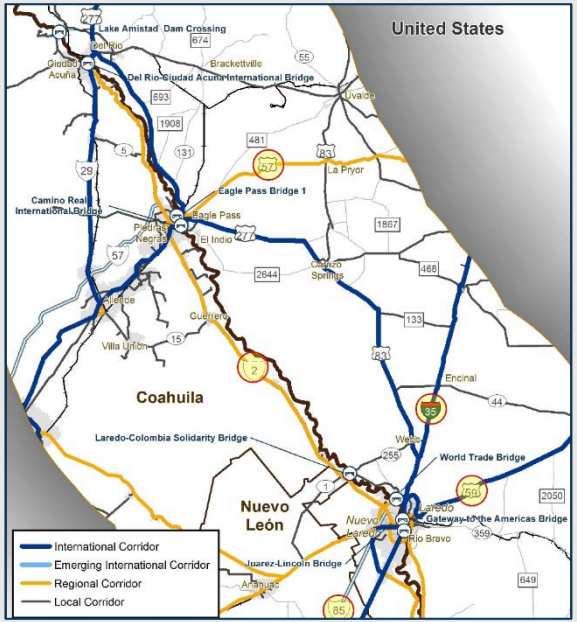
Truck and Highway Freight Strengths

- Texas-Mexico border crossings are linked to main and direct highway trade routes
- Five border crossings have segregated northbound truck lane approaches and others have dedicated FAST lanes
- Some border counties and cities in the U.S. allow heavy-weight trucks from Mexico on designated routes
- Existing cooperation between U.S. and Mexican agencies reduce truck delay
  - Pre-inspection facility
  - Santa Teresa international export/import livestock crossing
  - Integrated border safety inspection facilities

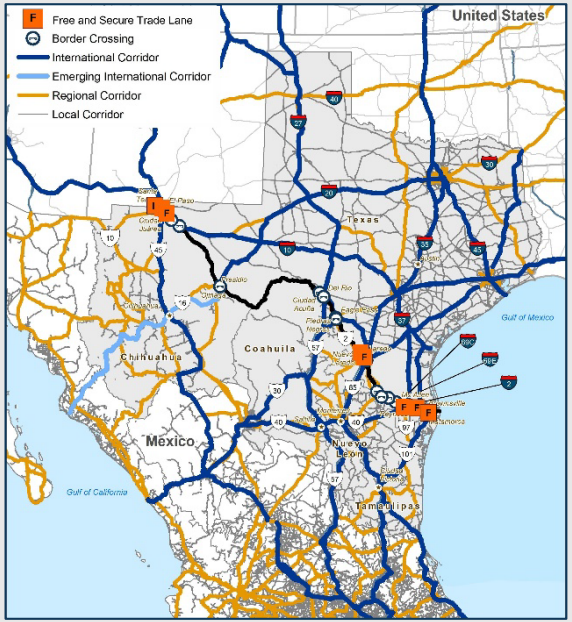
See Handout 2

Truck and Highway Freight Strengths

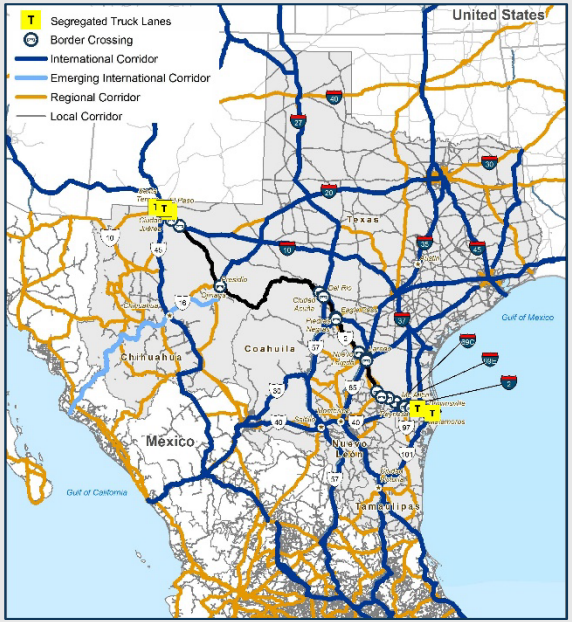
Connection to major trade routes: Sphere 1



Free and secure trade lane (FAST): Sphere 3



Segregated truck lanes: Sphere 3



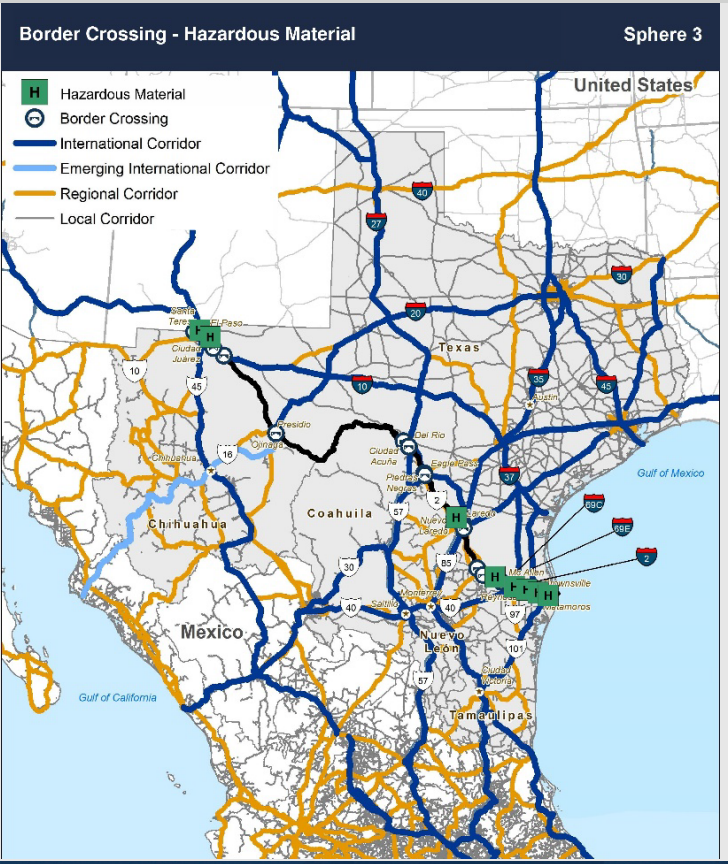
See Handout 2

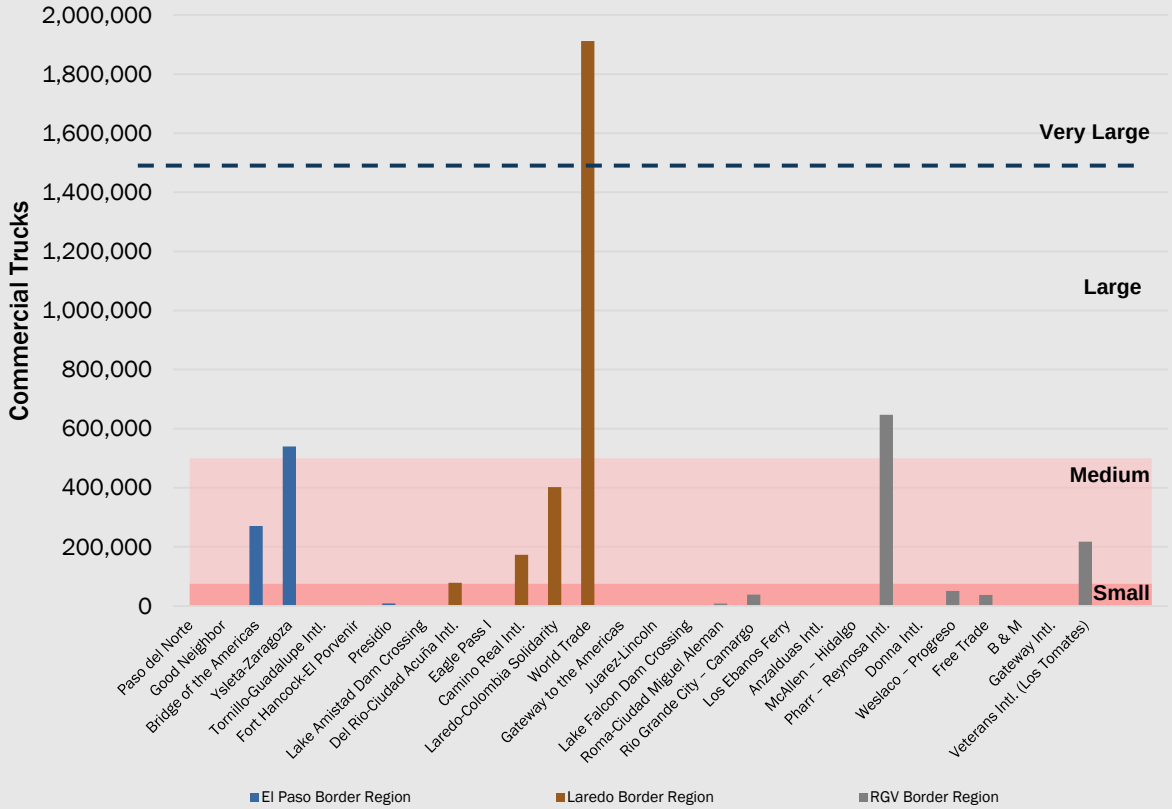
Preliminary Findings: Truck and Highway Freight Weaknesses

- Not all border crossings serving trucks can accommodate hazardous materials
- Truck trade patterns can strain border crossing facilities, especially during peak seasons
- Crossings on the Texas-Mexico border are not open 24 hours per day for trucks
- Laredo/Coahuila/Nuevo León/Tamaulipas border region has heavily-congested truck routes
- Border regions send more cargo into other parts of the U.S. than they receive

See Handout 2

Truck and Highway Freight Weaknesses





See Handout 2

Truck and Highway Freight Opportunities and Threats

Opportunities

Improve	Identify	Deploy
▪ Truck load efficiency ▪ Efficiency and options for goods movement ▪ Border crossing hours to increase capacity ▪ FAST program with more users ▪ Non-invasive screening measures	▪ Opportunities for pre-inspection ▪ Opportunities for joint customs operations ▪ Incentive programs to replace older trucks	▪ ITS solutions ▪ Vehicle booking systems

Threats

- Strains at border crossing during peak season
- Increasing truck volumes
- Lack of funding and physical space for installations of new technology

See Handout 2

BNRSC Feedback

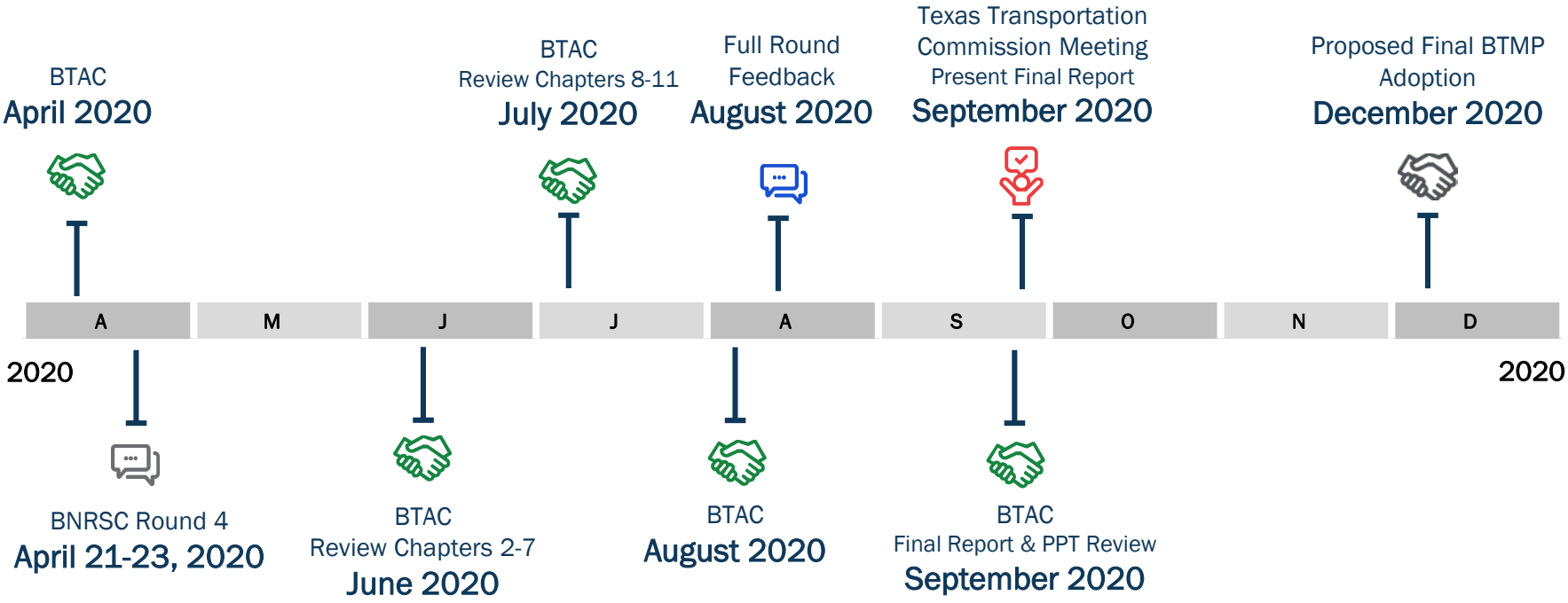
1. Did we frame Chapter 5 appropriately?
2. Is there any other information that needs to be included in Chapter 5?

Study Tasks/Three Month Look-Ahead

Data Collection (Task 4)	Corridor Analysis (Task 5)	Forecasting (Task 6)	Economic Analysis (Task 7)	Recommendations & Investment Plan (Task 8)
▪ Knowledge Clearinghouse ▪ Provide data to all other tasks	▪ Refinements to high-level project prioritization framework ▪ Report future performance metrics of designated corridors	▪ Validate key drivers for future scenarios ▪ Develop future scenarios ▪ Develop forecasts	▪ Assess economic importance of trade through the border ▪ Assess economic impact of wait times at the border ▪ Assess economic impact of BTMP recommendations	▪ Identify policies, programs & projects from existing plans and stakeholders ▪ Identify funding sources ▪ Finalize project prioritization process

Next BNRSC Meetings	Next BTAC Meeting	Next BTAC Meeting Content
August 2020	June 2020	▪ Chapter 4: Binational Multimodal Transportation Network Designation ▪ Chapter 5: Needs Assessment and System Performance ▪ Chapter 6: Future Forecasts for the Border Region ▪ Chapter 7: Economic Importance of the Border

BTMP Schedule



Contact Info

Texas-Mexico BTMP Project Managers

Timoteo “Tim” Juarez, Jr.
TxDOT, Branch Manager, International Trade & Border Planning
Tim.Juarez@TxDOT.gov
(512) 230-8990

Alejandro Solis, Ph.D.
HDR, Principal Economist & Business Class Lead, Economics & Finance
Alejandro.Solis@HDRinc.com
(202) 594-3280

BTMP Contact:

Email: TxDOT_BorderTrade@txdot.gov
Phone: (512) 685-2955