Welcome to the Border Trade Advisory Committee Meeting

- The meeting will start at 8:00 a.m. CST
- Please turn off your video and mute your phones
- We will be using the Mentimeter polling application during this meeting
  - You may find it helpful to load www.menti.com into the browser of your device now. The meeting code is: 32 91 6

Having trouble connecting?
Contact Giacomo Yaquinto:
via text (512-656-2818) or in the chat box
Recap of Previous BTAC Meeting (January 2020)

- Stakeholder outreach
  - BNRSC round 3 themes
- 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

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- 1.3 BTMP Development Process
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- 2.2 Goals and Objectives
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- 11.4 Implementation Plan for Policy Recommendations
- 11.5 Implementation Plan for Program Recommendations
<table>
<thead>
<tr>
<th>Chapter Purpose</th>
<th>Key Messages</th>
<th>Support Messages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide background information on the importance of the Texas-Mexico border</td>
<td>- Texas-Mexico border connects people and commerce throughout U.S. and Mexico</td>
<td>- Mexico is the third-largest trading partner of the U.S.</td>
</tr>
<tr>
<td>Provide purpose of the BTMP</td>
<td>- Blueprint for binational policy, program, and projects</td>
<td>- The Texas-Mexico border facilitates a large amount of U.S.-Mexico trade and people crossings</td>
</tr>
<tr>
<td>Show BTMP development process</td>
<td>- Identify transportation issues, needs, challenges, opportunities, and strategies</td>
<td>- Border transportation infrastructure connects U.S.-Mexico-Canada</td>
</tr>
<tr>
<td>Provide BTMP Final Report content</td>
<td>- Underpinned by data-driven analysis and binational stakeholder input</td>
<td>- BTMP is a blueprint to meet future challenges and opportunities</td>
</tr>
</tbody>
</table>
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%)
Background (1.1): Relevance of the Texas-Mexico Border

- **Infrastructure**
  - Out of 49 border crossings in 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
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
<table>
<thead>
<tr>
<th>No.</th>
<th>Chapter Name</th>
<th>Chapter Overview</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction</td>
<td>Purpose and development of BTMP; organization of report</td>
</tr>
<tr>
<td>2</td>
<td>Goals, Objectives, and Institutions</td>
<td>Mission and vision; goals and objectives of the BTMP; institutions and overview of planning and implementation processes</td>
</tr>
<tr>
<td>3</td>
<td>Existing Conditions: The Texas-Mexico Border Today</td>
<td>Trends and current conditions on population, employment, income, education, movement of goods and people, and supply chains</td>
</tr>
<tr>
<td>4</td>
<td>Binational Multimodal Transportation Network Designation</td>
<td>BTMP regions; spheres of influence; criteria and process for multimodal corridor designations; final multimodal transportation network</td>
</tr>
<tr>
<td>5</td>
<td>Needs Assessment and System Performance</td>
<td>Overview of current issues and needs; strengths, weaknesses, opportunities and threats; key elements of the multimodal networks and performance</td>
</tr>
<tr>
<td>6</td>
<td>Future Forecasts for the Border Region</td>
<td>Future scenario and forecast for the movement of people and goods</td>
</tr>
<tr>
<td>7</td>
<td>Economic Importance of the Border</td>
<td>Economic profiles; key supply chains; economic impact of border delays</td>
</tr>
<tr>
<td>8</td>
<td>Identification of Future Needs and Strategies</td>
<td>Future performance of the binational transportation system; economic impacts of future border conditions; identification of future needs; strategies</td>
</tr>
<tr>
<td>9</td>
<td>Stakeholder Engagement</td>
<td>Purpose; organization; membership; engagement summary</td>
</tr>
<tr>
<td>10</td>
<td>Recommendations</td>
<td>Prioritization process; project, policy and program recommendations; impacts on performance and economic impacts of recommendations</td>
</tr>
<tr>
<td>11</td>
<td>Implementation Plan</td>
<td>Implementation framework; availability of funds; implementation plan for projects, policies and programs</td>
</tr>
</tbody>
</table>
BTAC 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

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

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

**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**
- **Customer Service**
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
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 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)

<table>
<thead>
<tr>
<th>U.S.</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Federal Agencies</strong></td>
<td><strong>State Agencies</strong></td>
</tr>
<tr>
<td>Department of Homeland Security</td>
<td>Secretaria de Hacienda y Crédito Público</td>
</tr>
<tr>
<td>General Services Administration</td>
<td>Secretaría de Relaciones Exteriores</td>
</tr>
<tr>
<td>Department of Transportation</td>
<td>Secretaría de Comunicaciones y Transportes</td>
</tr>
<tr>
<td>Department of State</td>
<td>Secretaría de Bienestar</td>
</tr>
<tr>
<td>Department of Agriculture</td>
<td>Instituto Nacional de Estadística y Geografía</td>
</tr>
<tr>
<td>Army Corps of Engineers</td>
<td>Secretaría de Energía</td>
</tr>
<tr>
<td>International Boundary and Water Commission</td>
<td>Comisión Internacional de Límites y Aguas (CILA)</td>
</tr>
<tr>
<td>New Mexico State Government– Representatives and Senators</td>
<td>Secretaría de Economía</td>
</tr>
<tr>
<td>New Mexico Department of Transportation</td>
<td>Secretaría de Agricultura y Desarrollo Rural</td>
</tr>
<tr>
<td>Texas Department of Transportation</td>
<td>Estados de Coahuila, Nuevo León, Tamaulipas, Chihuahua</td>
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<tr>
<td>New Mexico Department of Public Safety</td>
<td>Secretaría de Obras Públicas de Tamaulipas</td>
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<tr>
<td>Texas Department of Public Safety</td>
<td>Secretaría de Economía y Turismo de Tamaulipas</td>
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<tr>
<td>New Mexico Border Authority</td>
<td>Secretaría de Desarrollo Urbano y Medio Ambiente de Tamaulipas</td>
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<td></td>
<td>Secretaría de Obras Públicas y Transporte de Coahuila (SOPT)</td>
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<td></td>
<td>Corporación para el Desarrollo de la Zona Fronteriza de Nuevo León (CODEFRONT)</td>
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<tr>
<td></td>
<td>Secretaría de Comunicaciones y Obras Públicas Chihuahua</td>
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<td></td>
<td>Centro SCT</td>
</tr>
<tr>
<td></td>
<td>Secretaria de Economía y Turismo Coahuila</td>
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<tr>
<td></td>
<td>Secretaria de Innovación y Desarrollo Económico de Chihuahua</td>
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<td></td>
<td>Secretaria de Economía y Trabajo de Nuevo León</td>
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<td></td>
<td>Secretaría de Desarrollo Sustentable de Nuevo León</td>
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</tbody>
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### Institutions and Agencies Involved in Texas-Mexico Border (2.3)

<table>
<thead>
<tr>
<th>U.S.</th>
<th>Mexico</th>
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<tbody>
<tr>
<td><strong>Local Agencies</strong></td>
<td><strong>Local Agencies</strong></td>
</tr>
<tr>
<td>Local Metropolitan Planning Organizations</td>
<td>Municipios</td>
</tr>
<tr>
<td>Regional Mobility Authorities</td>
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</tr>
<tr>
<td>County and City Governments</td>
<td>Institutos Municipales de Investigación, Planeación y/o Desarrollo Urbano</td>
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</table>
## Primary Responsibilities

<table>
<thead>
<tr>
<th>U.S.</th>
<th>Border Management and Operations</th>
<th>Border Infrastructure and Support Facilities</th>
<th>Roadway Infrastructure</th>
<th>Rail Infrastructure</th>
<th>Seaport Infrastructure</th>
<th>Airport Infrastructure</th>
<th>Pipeline Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBP</td>
<td>CBP</td>
<td>GSA and other parties</td>
<td>TxDOT and local agencies</td>
<td>Private sector</td>
<td>Port authorities and navigation districts</td>
<td>Municipal or county governments</td>
<td>Private sector</td>
</tr>
<tr>
<td>Mexico</td>
<td>Aduanas</td>
<td>INDAABIN and other parties</td>
<td>SCT, state and local agencies</td>
<td>SCT</td>
<td>SCT and other parties (APIs)</td>
<td>Private sector and small SCT role</td>
<td>SENER and small private sector role</td>
</tr>
</tbody>
</table>
### Funding Considerations

<table>
<thead>
<tr>
<th></th>
<th><strong>Border Management and Operations</strong></th>
<th><strong>Border Infrastructure and Support Facilities</strong></th>
<th><strong>Transportation Infrastructure</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>U.S.</strong></td>
<td>Budget appropriations to CBP and other agencies</td>
<td>Budget appropriations to GSA and CBP (some third party contributions)</td>
<td>Funded based on ownership of facility</td>
</tr>
<tr>
<td><strong>Mexico</strong></td>
<td>Budget appropriations to Aduanas &amp; other agencies</td>
<td>Budget appropriations to INDAABIN and Aduanas (some third party contributions)</td>
<td>Primarily funded through SCT, with some state, local and private sector contribution</td>
</tr>
</tbody>
</table>
BTAC 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

<table>
<thead>
<tr>
<th>Chapter Purpose</th>
<th>Key Messages</th>
<th>Support Messages</th>
</tr>
</thead>
</table>
| - 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)

Population Trends

- Texas Border Region
- Mexico Border Region

Current Conditions: Employment at the Border (3.2)

International Trade-Related Employment by Industry as a Proportion of Total Employment (TX Border Counties)

Current Conditions: Income at the Border (3.3)

Texas Border Region Median Household Income

Current Conditions: Education at the Border (3.4)

Texas Border Counties Education Trends

Current Conditions: Movement of People at the Border (3.5)


- **2017**: 1.4% Bus, 19.3% Bicycle/Pedestrian, 76.0% Personal Vehicle, 3.2% Air
- **2010**: 2.0% Bus, 20.3% Bicycle/Pedestrian, 75.0% Personal Vehicle, 2.6% Air
- **2005**: 1.4% Bus, 16.1% Bicycle/Pedestrian, 80.7% Personal Vehicle, 1.8% Air
- **2000**: 1.2% Bus, 12.4% Bicycle/Pedestrian, 85.4% Personal Vehicle, 1.2% Air
- **1996**: 1.2% Bus, 12.3% Bicycle/Pedestrian, 85.5% Personal Vehicle, 1.0% Air

Source: Bureau of Transportation Statistics Border Crossing/Entry Data (2017), Northbound
Current Conditions: Movement of Goods at the Border (3.6)

- Most truck and railcar movement is northbound, while air, vessel, and pipeline movement is southbound.
- Global trading arrangements impact cross-border trade trends.

Texas-Mexico Cross-Border Trade by Mode (2017)

- **Truck**
  - Total: $281.4 billion
  - Northbound: $156.9 billion (56%)
  - Southbound: $124.5 billion (44%)

- **Rail**
  - Total: $70.6 billion
  - Northbound: $47.1 billion (65%)
  - Southbound: $23.5 billion (35%)

- **Vessel**
  - Total: $25.4 billion
  - Northbound: $1.2 billion (76.6%)
  - Southbound: $16.4 billion (23.4%)

- **Air**
  - Total: $1.57 billion
  - Northbound: $372 million (23.4%)
  - Southbound: $1.2 billion (76.6%)

- **Pipeline**
  - Total: $3.45 billion
  - Northbound: $146 million (4%)
  - Southbound: $3.3 billion (96%)

Source: Bureau of Transportation Statistics Transborder Freight Data
Current Conditions: Supply Chains at the Border (3.7)

Goods Moving Northbound and Southbound 2017 (Billions of Dollars)

- Petroleum Products, $20B
- Chemicals, $13B
- Metal Products, $14B
- Plastics and Rubbers, $16B
- Machinery $28B
- High Tech $61B
- Motor Vehicles $63B
- Manufactured Goods, $12B

Northbound (MX to US)
- $0
- $40
- $80
- $120
- $160
- $200

Southbound (US to MX)
- $0
- $40
- $80
- $120
- $160
- $200

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

<table>
<thead>
<tr>
<th>Chapter Purpose</th>
<th>Key Messages</th>
<th>Support Messages</th>
</tr>
</thead>
</table>
| 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
Criteria and Process to Identify and Designate Multimodal Corridors: Sphere 1 Binational Multimodal Network—Border Region
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
BTAC 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

<table>
<thead>
<tr>
<th>Chapter Purpose</th>
<th>Key Messages</th>
<th>Support Messages</th>
</tr>
</thead>
</table>
| - Provide overview of issues and needs for binational transportation system | - 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

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

### Commercial (COV) Standard Border Crossing Peak Wait Times (2017)

<table>
<thead>
<tr>
<th>Bridge</th>
<th>Peak Wait Time (Minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridge of The Americas</td>
<td>23</td>
</tr>
<tr>
<td>Ysleta</td>
<td>21</td>
</tr>
<tr>
<td>Presidio</td>
<td>0.05</td>
</tr>
<tr>
<td>Santa Teresa</td>
<td>13</td>
</tr>
<tr>
<td>Del Rio</td>
<td>2</td>
</tr>
<tr>
<td>Eagle Pass Bridge II</td>
<td>5</td>
</tr>
<tr>
<td>Columbia Solidarity</td>
<td>7</td>
</tr>
<tr>
<td>World Trade Bridge</td>
<td>25</td>
</tr>
<tr>
<td>Progresso Intl Bridge</td>
<td>1</td>
</tr>
<tr>
<td>Rio Grande City</td>
<td>1</td>
</tr>
<tr>
<td>Roma</td>
<td>2</td>
</tr>
<tr>
<td>Pharr Intl Bridge</td>
<td>44</td>
</tr>
<tr>
<td>Brownsville Los Indios</td>
<td>1</td>
</tr>
<tr>
<td>Brownsville Veterans Intl</td>
<td>25</td>
</tr>
</tbody>
</table>

### Source:
U.S. CBP Northbound Hourly Border Wait Times

### El Paso

### Laredo

### RGV
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

Additional needs:

- Diversify and spread out the crossing activities; seek more equilibrium and balance: majority of cross-border truck freight movement is concentrated at a small number of crossing locations
- Transition freight movements from urban area crossings to bypass routes to alleviate lack of sufficient space to add physical capacity and new technology at urban border crossings
- Expand hours of operation to enhance trucks crossing during non-peak periods
- Allow Mexico based trucks & drivers to transport shipments further into Texas to “inland port” locations
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

Passenger (POV) Standard Border Crossing Peak Wait Times (2017)

Peak Wait Times

<table>
<thead>
<tr>
<th>Location</th>
<th>El Paso</th>
<th>Laredo</th>
<th>RGV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridge of the Americas</td>
<td>23</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>Paso Del Norte</td>
<td>33</td>
<td>27</td>
<td>34</td>
</tr>
<tr>
<td>Stanton DCL</td>
<td>32</td>
<td>28</td>
<td>39</td>
</tr>
<tr>
<td>Ysleta</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fabens Tornillo</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fort Hancock</td>
<td>2</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Presidio</td>
<td>16</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Santa Teresa</td>
<td>18</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>Del Rio Ciudad Acuna</td>
<td>16</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>Eagle Pass Bridge I</td>
<td>27</td>
<td>27</td>
<td>21</td>
</tr>
<tr>
<td>Eagle Pass Bridge II</td>
<td>28</td>
<td>28</td>
<td>34</td>
</tr>
<tr>
<td>Laredo Bridge I</td>
<td>55</td>
<td>0</td>
<td>39</td>
</tr>
<tr>
<td>Laredo Bridge II</td>
<td>0</td>
<td>12</td>
<td>32</td>
</tr>
<tr>
<td>Columbia Solidarity</td>
<td>0</td>
<td>14</td>
<td>26</td>
</tr>
<tr>
<td>Donna Rio Bravo Intl</td>
<td>14</td>
<td>21</td>
<td>36</td>
</tr>
<tr>
<td>Progreso Intl Bridge</td>
<td>21</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Rio Grande City</td>
<td>6</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Brownsville B&amp;M</td>
<td>34</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Brownsville Gateway</td>
<td>39</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Brownsville Los Indios</td>
<td>11</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Brownsville Veterans Intl</td>
<td>32</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Anzalduas Intl Bridge</td>
<td>26</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Hidalgo-Reynosa Intl</td>
<td>36</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Pharr Intl Bridge</td>
<td>25</td>
<td>6</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: U.S. CBP Northbound Hourly Border Wait Times
Texas-Mexico Border Wait Times

Pedestrian (PED) Standard Border Crossing Peak Wait Times (2017)

<table>
<thead>
<tr>
<th>Location</th>
<th>Peak Wait Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridge of The Americas</td>
<td>3</td>
</tr>
<tr>
<td>Del Norte</td>
<td>9</td>
</tr>
<tr>
<td>Ysleta</td>
<td>7</td>
</tr>
<tr>
<td>Fabens Tornillo</td>
<td>1</td>
</tr>
<tr>
<td>Santa Teresa</td>
<td>1</td>
</tr>
<tr>
<td>Laredo Bridge I</td>
<td>25</td>
</tr>
<tr>
<td>Brownsville B&amp;M</td>
<td>4</td>
</tr>
<tr>
<td>Brownsville Gateway</td>
<td>17</td>
</tr>
<tr>
<td>McAllen-Hidalgo Intl</td>
<td>24</td>
</tr>
<tr>
<td>Donna-Rio Bravo Intl</td>
<td>0.1</td>
</tr>
<tr>
<td>Progresso Intl Bridge</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: U.S. CBP Northbound Hourly Border Wait Times
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

Additional needs:
- Need better security and lighting on the bridge crossings and in the immediate areas to encourage and provide safe passage for pedestrians
- Need to design pedestrian walkways on the border crossing bridges to allow large numbers of pedestrians to cross efficiently and safely
- Transition urban freight crossing activities to new bypass locations to allow urban crossing locations to better serve pedestrians
- Diversify/spread out the crossing activities, seeking more equilibrium and balance
Strengths, Weaknesses, Opportunities and Threats Analysis of the Binational Border: Overview

**STRENGTHS**
- Border crossing elements or areas working well, providing advantages

**WEAKNESSES**
- Border crossing elements or areas needing improvement

**OPPORTUNITIES**
- Factors contributing to ways to improve elements or areas of the border crossings

**THREATS**
- Problems, issues, and risks impacting the elements, areas, or operations of the border crossings
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

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

Border Crossing - Hazardous Material

Sphere 3

United States

Mexico

Hazardous Material
Border Crossing
International Corridor
Emerging International Corridor
Regional Corridor
Local Corridor

Commercial Trucks

- Very Large
- Large
- Medium
- Small

El Paso Border Region
Laredo Border Region
RGV Border Region

See Handout 2
## Truck and Highway Freight Opportunities and Threats

### Opportunities

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

### 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
BTAC Feedback

1. Did we frame Chapter 5 appropriately?
2. Is there any other information that needs to be included in Chapter 5?
Future Forecasts for the Border Region

Primer to Chapter 6
## Future Forecasts for the Border Region Overview

<table>
<thead>
<tr>
<th>Chapter Purpose</th>
<th>Key Messages</th>
<th>Support Messages</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Provide future forecasts of the movements of people and goods</td>
<td>- Forecast methodology accounts for historical trends and future factors</td>
<td>- Demand for the border is expected to provide economic opportunities</td>
</tr>
<tr>
<td>- Assess demand for the binational transportation systems serving the Texas-Mexico border</td>
<td>- Future factors include social, technical, environmental, economic, and political considerations</td>
<td>- Future scenarios include a 2050 baseline and high/low case alternative scenarios</td>
</tr>
<tr>
<td></td>
<td>- Movement of people and goods will be forecasted by mode, POE, sphere of influence, and for future scenarios:</td>
<td>- Future forecasts support the prioritization of investments</td>
</tr>
</tbody>
</table>
|                                                                                  |     - Population  
|                                                                                  |     - Employment  
|                                                                                  |     - Movement of people and goods by mode, POE, and sphere of influence        |
### Future Forecasts for the Border Region: Key Questions

<table>
<thead>
<tr>
<th>Key Chapter Questions</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>What socioeconomic variables help to predict transport across the Texas-Mexico border?</td>
<td>Baseline forecasts by mode, POE, and sphere of influence</td>
</tr>
<tr>
<td>What factors impact the forecasts?</td>
<td>Alternative future forecasts</td>
</tr>
<tr>
<td>How can forecasts be translated into impacts on transportation measures?</td>
<td>Input into investment plan</td>
</tr>
</tbody>
</table>
Factors Will Help Define Alternative Future Scenarios

Baseline Trends & Forecast

Factors

Social
Technical
Environmental
Economic
Political

High Case
Low Case
## What Are the Factors that Influence Future Forecasts?

<table>
<thead>
<tr>
<th>Factors</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td>Based on broad factors such as demographics, incomes, consumption patterns, population location, and density</td>
</tr>
<tr>
<td>Technological</td>
<td>Lead to alternative products or transportation services, increase availability, or lower costs</td>
</tr>
<tr>
<td>Economic</td>
<td>Influence the ability to invest or purchase goods and services (e.g., global/regional economic growth, distribution of economic growth, commodity prices, exchange rates)</td>
</tr>
<tr>
<td>Environmental</td>
<td>Impact the demand for goods and services, production, or movement of goods</td>
</tr>
<tr>
<td>Political</td>
<td>Affect production, sourcing, flow or trade of goods (e.g., trade agreements), or investments in public infrastructure</td>
</tr>
</tbody>
</table>
Border region grew rapidly between 1996 and 2017
- Rate of growth is slowing

The region’s annual natural increase declined between 2010 and 2017

The border region is projected to grow annually by:
- **Texas**: 0.7% from 2017 to 2030
  - (0.28% from 2030 to 2050)
- **Mexico**: 0.71% from 2017 to 2030

Source: Texas Demographic Center, 2018 Population Projections (2010-2050); CONAPO, Projections of the Population of the Municipalities of Mexico (2015-2030)
Preliminary Findings: Employment at the Border Forecast to 2050

- Increasing trade and industry growth in manufacturing, transportation, and logistics will continue to impact regional employment
  - Local economic development agencies and corporations continue to recruit international companies along the border in Mexico
  - Industrial development demand remains high
  - New company investments in maquilas generate manufacturing and associated jobs in several municipios
  - New transportation and logistics investments bolster trade and associated industry

The net effect of NAFTA on the U.S. economy was positive:
- At signing, U.S. trade with Mexico and Canada was less than 5% of GDP.

Much of the increase in U.S.-Mexico trade can be attributed to specialization in manufacturing:
- Work is increasingly performed wherever it is most efficient.
- Increasing border crossing movements.

NAFTA has brought economic and social benefits:
- Stimulating productivity of Mexican plants.
- Increasing movements across the Texas-Mexico border.
Preliminary Findings: USMCA

- Agreement yet to be ratified in Canada (as of March 2020)
- Encourages investment in infrastructure, facilities, and operations along the border region
- Adds increased content requirements in North America and automobile industry minimum wage
  - Expected to keep current automobile manufacturing in the U.S. and Canada
  - May shift some high-value processes to Mexico, given shortages in American automobile engineering and design skills
- Companies have begun establishing and expanding operations along the border
  - Examples: cold storage facilities, warehousing facilities, logistics companies, and manufacturing and processing facilities
## Defining Future Scenario and Alternative Future Scenarios: Freight

Future scenarios developed by altering assumptions

<table>
<thead>
<tr>
<th>Factors</th>
<th>Baseline</th>
<th>Low Case</th>
<th>High Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td>An extension of current conditions: consensus outlook for economic projections</td>
<td>Increase in safety concerns in northern Mexico depresses manufacturing</td>
<td>Decrease in safety concerns in northern Mexico spurs manufacturing</td>
</tr>
<tr>
<td>Technological</td>
<td></td>
<td>Lack of funding for technology enhancements</td>
<td>Greater use of technology for border processing</td>
</tr>
<tr>
<td>Economic</td>
<td></td>
<td>Slower GDP growth</td>
<td>Faster GDP growth</td>
</tr>
<tr>
<td>Environmental</td>
<td></td>
<td>Higher transportation costs due to climate change</td>
<td>Climate change progression slows</td>
</tr>
<tr>
<td>Political</td>
<td></td>
<td>Post COVID-19 restrictions on cross-border freight shipments for some commodities</td>
<td>Post COVID-19, migration of Asia goods production to North America</td>
</tr>
</tbody>
</table>
## Defining Future Scenario and Alternative Future Scenarios: Personal

Future scenarios developed by altering assumptions

<table>
<thead>
<tr>
<th>Factors</th>
<th>Baseline</th>
<th>Low Case</th>
<th>High Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social</td>
<td>An extension of current conditions: consensus outlook for economic projections</td>
<td>Slowing population growth in border regions</td>
<td>Faster population growth at border regions</td>
</tr>
<tr>
<td>Technological</td>
<td></td>
<td>Lack of funding for technology enhancements</td>
<td>Greater use of technology for border processing</td>
</tr>
<tr>
<td>Economic</td>
<td></td>
<td>Slower employment growth Peso devaluation</td>
<td>Faster employment growth Peso appreciation</td>
</tr>
<tr>
<td>Environmental</td>
<td></td>
<td>Concern over queuing leads to throughput restrictions at border</td>
<td>Similar to baseline conditions</td>
</tr>
<tr>
<td>Political</td>
<td></td>
<td>Post COVID-19 restrictions on international people movements</td>
<td>Decreased in restrictions on cross-border people movements</td>
</tr>
</tbody>
</table>
BTAC Feedback

1. Did we frame Chapter 6 appropriately?
2. What other factors should we consider for the definition of future scenarios?
Economic Importance of the Border

Primer for Chapter 7
## Economic Importance of the Border

<table>
<thead>
<tr>
<th>Chapter Purpose</th>
<th>Key Messages</th>
<th>Support Messages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Demonstrate the economic importance of the border</td>
<td>• The Texas-Mexico border supports the economies of the border region in</td>
<td>• Key industries located along the border contribute to local economies</td>
</tr>
<tr>
<td>• Highlight the economic impacts of border delays</td>
<td>Mexico, Texas, and the U.S.</td>
<td>• NAFTA and USMCA facilitate the specialization of industries</td>
</tr>
<tr>
<td>• Provide input into the investment plan</td>
<td>• The benefit of trade extends to U.S. and Mexican states beyond the border</td>
<td>• Twelve key supply chains dominate the Texas-Mexico trade</td>
</tr>
<tr>
<td></td>
<td>• Current delays at the border represent missed economic opportunities</td>
<td>• The percent of GDP impacted by Texas-Mexico trade varies by state with larger</td>
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<td></td>
<td>• Future delays will grow as a result of increased demand</td>
<td>impacts in Mexico</td>
</tr>
<tr>
<td></td>
<td>• Future investments can reduce delays and capitalize on the economic</td>
<td>• Delays of people and goods impact employment, wages, and production costs</td>
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<tr>
<td></td>
<td>opportunities</td>
<td></td>
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</tbody>
</table>
## Key Chapter Questions

<table>
<thead>
<tr>
<th>Key Chapter Questions</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the economic importance of the Texas-Mexico border?</td>
<td>Contribution of Texas-Mexico border to economy by sphere of influence</td>
</tr>
<tr>
<td>What is the economic impact of border delays/wait times?</td>
<td>Changes in economic measures due to difference in demand for movement of people and goods</td>
</tr>
<tr>
<td>What is the economic impact of the alternative scenarios?</td>
<td>Changes in economic measure due to infrastructure investments</td>
</tr>
</tbody>
</table>
Preliminary Findings: Importance of the Border

- Trade through the Texas-Mexico border contributes to the GDP of all U.S. and Mexican states
- Map shows exports across the Texas-Mexico border as a percent of the total state GDP
- In the U.S.:
  - #1 Texas
  - #2 Michigan
- In Mexico:
  - #1 Aguascalientes
  - #2 Coahuila de Zaragoza
Preliminary Findings: Importance of the Border

- 2018 study* on trade and competitiveness in North America
  - 5 million U.S. jobs supported by trade with Mexico
  - 40% of U.S. imports from Mexico originally sourced in the U.S.
  - 28 U.S. states identify Mexico as either their #1 or #2 trading partner

- Mexico and the U.S. are partners in manufacturing through a process known as production sharing
  - 40% of the content the U.S. imports from Mexico is produced in the U.S.

*Source: 2018 UC San Diego study, Trade and Competitiveness in North America
Preliminary Findings: Economic Impact of Border Delays

- 2018 study* found that delays at the California/Mexico border resulted in an annual loss of $3.4 billion in output to the U.S. and Mexico
  - The impact of delays in Texas is likely much bigger

- Recent research showed that adding one customs officer per crossing increased GDP by $65 million annually in California**
  - The impacts in Texas are likely to be similar

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*Source: 2018 HDR study for SANDAG, Impacts of Border Delays at the California- Baja Land Ports of Entry
BTAC Feedback

1. Did we frame Chapter 7 appropriately?
2. Are there additional topics you would like to see in Chapter 7?
## Study Tasks/Three Month Look-Ahead

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

### Next BNRSC Meetings
- ELP: April 21, 2020
- LRD: April 22, 2020
- RGV: April 23, 2020

### Next BTAC Meeting
- June 2020

### Next BTAC Meeting Content
- 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
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