Welcome & Introductions

Opening Remarks & Recap of Past Steering Committee Rounds
### Recap of Recent Steering Committee Rounds

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<tr>
<th>BNRSC Round 1</th>
<th>BTAC</th>
<th>BNRSC Round 2</th>
</tr>
</thead>
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<tr>
<td>April 2019</td>
<td>May 2019</td>
<td>June 2019</td>
</tr>
<tr>
<td>• BTMP Overview</td>
<td>• Summary of Round 1</td>
<td>• Refinement of Goals &amp; Objectives</td>
</tr>
<tr>
<td>• Primer on Goals &amp; Objectives</td>
<td>• Refinement of Goals</td>
<td>• Data Collection: Methodology, Inventory &amp; Analysis</td>
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<tr>
<td>• Issues, Needs, Challenges &amp; Opportunities</td>
<td>• Data Collection: Methodology, Inventory &amp; Analysis</td>
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</tr>
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<td></td>
<td>• Corridor Designation Process</td>
<td>• Needs Assessment Process</td>
</tr>
<tr>
<td></td>
<td>• Needs Assessment Process</td>
<td>• Needs Assessment Methodology</td>
</tr>
</tbody>
</table>

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**Texas-Mexico Border Transportation Master Plan**

**Task 3: Goals & Objectives**

*See Handout 1*
## BTMP Goals

<table>
<thead>
<tr>
<th>Goal</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety &amp; Security</td>
<td>Improve binational, multimodal transportation safety &amp; security</td>
</tr>
<tr>
<td>Economic Competitiveness</td>
<td>Improve the contribution of the binational transportation system for economic competitiveness, productivity, and development in the border regions and beyond</td>
</tr>
<tr>
<td>Mobility &amp; Reliability</td>
<td>Reduce congestion and improve system efficiency &amp; performance on the binational transportation system</td>
</tr>
<tr>
<td>Multimodal Connectivity</td>
<td>Provide binational transportation choices &amp; improved system connectivity for all modes</td>
</tr>
<tr>
<td>Sustainable Funding</td>
<td>Identify and sustain funding sources for the binational transportation system</td>
</tr>
<tr>
<td>Stewardship</td>
<td>Manage environmental and agency resources responsibly and foster accountability and transparency in decision-making</td>
</tr>
<tr>
<td>Customer Service</td>
<td>Understand and incorporate customer feedback in decision-making processes and be transparent in all agency communications</td>
</tr>
<tr>
<td>Cross-Border Resiliency</td>
<td>Capacity of the system to continue operations after disasters/emergency events</td>
</tr>
<tr>
<td>Asset Preservation</td>
<td>Maintain and preserve infrastructure that supports multimodal, binational movement of goods &amp; people</td>
</tr>
</tbody>
</table>
Preliminary Data Analysis: Border Region Trends

- Population
- Employment
- Vehicle Ownership
- Movement of People
- Movement of Goods
- Value of Trade

- The 60 mile border region grew by approximately **2.9 million** from 1990 to 2017
  - Mexico border municipios added 1.7 million
  - Texas border counties added 1.2 million
Texas-Mexico Border Region: Total Population (2017)

Approximately **7.3 million** people live in counties located within 60 miles of the Texas-Mexico border (2017)

- **3 million** U.S. side
- **4.3 million** Mexico side

The regional population has grown by approximately **67%** since 1990

Total population by County (U.S.)/Municipio (MX)

Texas-Mexico Border Region: Change in Total Population (1990-2017)

Population grew by approximately **2.9 million** within 60 miles of the border region since 1990

Border region growth is concentrated in metropolitan areas

Highest-growth jurisdictions:
- Ciudad Juarez: +620,000
- Hidalgo County: +470,000
- Reynosa: + 378,000
- El Paso: + 254,000
- Matamoros: +229,000
- Nuevo Laredo: +186,000
- Cameron County: +164,000
- Webb County: +144,000
Texas-Mexico Border Region: Percent Change in Population (1990-2017)

Population grew by approximately **67%** within 60 miles of the border region since 1990

Highest population growth in metropolitan areas
- 4 counties represent 87% of growth in TX border counties
- 4 municipios account for 81% of growth in Mexico border region

Highest-percentage growth jurisdictions:
- Salinas Victoria: +560%
- Ciudad Acuña: +170%
- Reynosa: +133%
- Hidalgo County: +122%
- Webb County: +107%

Approximately **3 million** people live in counties located within the Rio Grande Valley/Tamaulipas region (2017)

<table>
<thead>
<tr>
<th></th>
<th>U.S. side</th>
<th>Mexico side</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.4 million</td>
<td>1.6 million</td>
</tr>
</tbody>
</table>

Total population by County (U.S.)/Municipio (MX)
Regional population grew by **1.3 million** people in the Rio Grande Valley/Tamaulipas region since 1990:
- Hidalgo County: +471,958
- Reynosa: +378,459
- Matamoros: +229,544
- Cameron County: +164,126
- Rio Bravo: +36,329
- Starr: +23,303

Regional Population Growth

Regional population grew by **80%** within the Rio Grande Valley/Tamaulipas region since 1990:
- Reynosa: +134
- Hidalgo County: +122%
- Matamoros: +76%
- Cameron County: +63%
- Starr: +57%
- Zapata: +52%
There are approximately **2.8 million** jobs within 60 miles of the Texas-Mexico border.

1.14 million **U.S. side (2017)**

1.64 million **Mexico side (2015)**

Sources: U.S. Census Bureau General Social and Economic Characteristics 1990, U.S. ACS Economic Characteristics 2017 CONABIO 1990, INAFED 2015. TX employed defined as 16 years+, MX employed defined as 12 years+. 

**Total Employment (2017)**

- Less than 1,000
- 1,001 - 3,000
- 3,001 - 7,000
- 7,001 - 15,000
- 15,001 - 40,000
- 45,001 - 100,000
- 100,001 - 250,000
- 250,001 - 500,000
- More than 500,000
Texas-Mexico Border Region: Change in Total Employment (1990-2017 TX; 1990-2015 MX)

Employment has grown by approximately **1.3 million** within 60 miles of the Texas-Mexico border since 1990

- **U.S. side (2017)**: +479 thousand
- **Mexico side (2015)**: +808 thousand

Sources: U.S. Census Bureau General Social and Economic Characteristics 1990, U.S. ACS Economic Characteristics 2017, CONABIO 1990, INAFED 2015. TX employed defined as 16 years+, MX employed defined as 12 years+

Texas-Mexico Border Region: Percent Change in Employment (1990-2017 TX; 1990-2015 MX)

Total employment has grown by **86%** within the 60 miles of the Texas-Mexico border since 1990

- Ciudad Acuña: +201%
- Reynosa: +185%
- Hidalgo County: +144%
- Salinas Victoria: +516%

Sources: U.S. Census Bureau General Social and Economic Characteristics 1990, U.S. ACS Economic Characteristics 2017, CONABIO 1990, INAFED 2015. TX employed defined as 16 years+, MX employed defined as 12 years+.
There are approximately **1.08 million** jobs in the Rio Grande Valley/Tamaulipas region

504 thousand  
U.S. side (2017)  

578 thousand  
Mexico side (2015)

Regional employment has grown by **554 thousand** jobs in the Rio Grande Valley/Tamaulipas region since 1990

- Hidalgo County: +185,083
- Cameron County: +63,050
- Starr: +10,398
- Reynosa: +167,575
- Matamoros: +93,306

Sources: U.S. Census Bureau General Social and Economic Characteristics 1990, U.S. ACS Economic Characteristics 2017 CONABIO 1990, INAFED 2015. TX employed defined as 16 years+, MX employed defined as 12 years+

Regional employment has grown by **105%** in the Rio Grande Valley/Tamaulipas region since 1990

- Hidalgo County: +131.7%
- Cameron County: +63%
- Starr: +90.5%
- Reynosa: +185%
- Matamoros: +88.8%

Texas-Mexico Border Region: Household Income (2017)

In Texas, the 60 mile border region median household income is $39,787 (U.S. is $60,000)

24% of households in Texas border counties live under the federal poverty level (compared to 12% nationally)

Data for the Median household income is shown at a county level in the United States and state level in Mexico.
Regional median household income has grown by **121%** from $19,473 to $43,038 within the Rio Grande Valley/Tamaulipas region from 1990 to 2017:
- Cameron County: +117%
- Hidalgo County: +126%
- Starr: +163%
- Zapata: +131%

Median Household Income by County (U.S.)

---


In Texas...

<table>
<thead>
<tr>
<th>Education Level</th>
<th>1990</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less Than HS Graduate</td>
<td>44%</td>
<td>22%</td>
</tr>
<tr>
<td>HS Graduate</td>
<td>22%</td>
<td>31%</td>
</tr>
<tr>
<td>Some College</td>
<td>17%</td>
<td>19%</td>
</tr>
<tr>
<td>Associate Degree</td>
<td>9%</td>
<td>6%</td>
</tr>
<tr>
<td>Bachelor Degree</td>
<td>4%</td>
<td>6%</td>
</tr>
</tbody>
</table>

In Mexico...

<table>
<thead>
<tr>
<th>Education Level</th>
<th>1990</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than Primary</td>
<td>8%</td>
<td>25%</td>
</tr>
<tr>
<td>Completed Primary</td>
<td>25%</td>
<td>29%</td>
</tr>
<tr>
<td>Less than Secondary</td>
<td>2%</td>
<td>14%</td>
</tr>
<tr>
<td>Completed Secondary</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Completed Upper Middle</td>
<td>16%</td>
<td>22%</td>
</tr>
</tbody>
</table>

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INEGI Population and Housing Census Counts, 1990-2015
BNRSC Discussion

Do the employment, income, and education trends make sense?

Texas-Mexico Border Region: Vehicle Ownership Trends

In Texas...

In Mexico...

Source: Texas Department of Motor Vehicles, 2013-2017
INEGI Vehicle Ownership Database, 1990-2016

### Mode Modal Share Change Since 1996

<table>
<thead>
<tr>
<th>Mode</th>
<th>Modal Share</th>
<th>Change Since 1996</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bus</strong></td>
<td>1.5%</td>
<td>-23.0%</td>
</tr>
<tr>
<td>86,369 Buses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,266,879 Passengers</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bicyclists/Pedestrians</strong></td>
<td>20%</td>
<td>+1.6%</td>
</tr>
<tr>
<td>17,200,200</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Car</strong></td>
<td>78.6%</td>
<td>-42.7%</td>
</tr>
<tr>
<td>34,580,524 Cars</td>
<td></td>
<td></td>
</tr>
<tr>
<td>67,721,768 Passengers</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

BTS border crossing data only provides border entry information.
Texas-Mexico Border Region: Cross-Border Movement of People by POE (2017)

- Laredo ranks 1st for bus passengers
- El Paso is 1st for pedestrians, bicycles, passengers in vehicles
- Eagle Pass is 4th in number of passengers in vehicles and Del Rio is 5th

<table>
<thead>
<tr>
<th>POE</th>
<th>Bus</th>
<th>Pedestrians</th>
<th>Bikes</th>
<th>Passengers in Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boquillas</td>
<td>-</td>
<td>10,965</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Brownsville</td>
<td>43,733</td>
<td>2,761,819</td>
<td>10,047,891</td>
<td></td>
</tr>
<tr>
<td>Del Rio</td>
<td>-</td>
<td>147,800</td>
<td>3,262,388</td>
<td></td>
</tr>
<tr>
<td>Eagle Pass</td>
<td>37,790</td>
<td>858,701</td>
<td>5,520,345</td>
<td></td>
</tr>
<tr>
<td>El Paso</td>
<td>193,419</td>
<td>6,883,755</td>
<td>22,046,772</td>
<td></td>
</tr>
<tr>
<td>Hidalgo</td>
<td>249,524</td>
<td>2,185,335</td>
<td>9,177,083</td>
<td></td>
</tr>
<tr>
<td>Laredo</td>
<td>728,177</td>
<td>3,016,801</td>
<td>10,488,748</td>
<td></td>
</tr>
<tr>
<td>Presidio</td>
<td>5,727</td>
<td>94,944</td>
<td>1,447,041</td>
<td></td>
</tr>
<tr>
<td>Progreso</td>
<td>-</td>
<td>899,201</td>
<td>2,712,778</td>
<td></td>
</tr>
<tr>
<td>Rio Grande City</td>
<td>-</td>
<td>60,649</td>
<td>814,300</td>
<td></td>
</tr>
<tr>
<td>Roma</td>
<td>8,509</td>
<td>245,594</td>
<td>1,541,662</td>
<td></td>
</tr>
<tr>
<td>Tornillo-Fabens</td>
<td>-</td>
<td>34,636</td>
<td>662,760</td>
<td></td>
</tr>
</tbody>
</table>


Bicycle and pedestrian data is not available for the entire time period. The earliest data available is 2015 from the Bureau of Transportation Statistics (BTS) border crossing activity data for 1996-2017.


**Brownsville POE**
- 1996: 4 million
- 2017: 3 million
- 2017 percentage change: -27%

**Hidalgo POE**
- 1996: 3 million
- 2017: 1 million
- 2017 percentage change: -16%

**Progreso POE**
- 1996: 1 million
- 2017: 0.8 million
- 2017 percentage change: -18%

**Rio Grande City POE**
- 1996: 1 million
- 2017: 0.8 million
- 2017 percentage change: -33%

**Roma POE**
- 1996: 2 million
- 2017: 0.5 million
- 2017 percentage change: -46%

**Bus Passengers**

**Brownsville POE**
- 1996: 700 thousand
- 2017: 0 thousand
- 2017 percentage change: -100%

**Hidalgo POE**
- 1996: 9 million
- 2017: 0 thousand
- 2017 percentage change: -100%

**Progreso POE**
- 1996: 2 million
- 2017: 0 thousand
- 2017 percentage change: -100%

**Roma POE**
- 1996: 1 million
- 2017: 0 thousand
- 2017 percentage change: -100%

The number of northbound trains increased by 3,447 or 53% since 1996


BTS border crossing data only provides border entry information.


Brownsville POE

Hidalgo POE


The number of northbound trucks increased by 2 million or 93% since 1996

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Trucks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>2.2 Million</td>
</tr>
<tr>
<td>2017</td>
<td>4.2 Million</td>
</tr>
</tbody>
</table>

BTS border crossing data only provides border entry information.


<table>
<thead>
<tr>
<th>POE</th>
<th>Number of Trucks (Northbound)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brownsville</td>
<td>250,000</td>
</tr>
<tr>
<td>Hidalgo POE</td>
<td>700,000 +203%</td>
</tr>
<tr>
<td>Progreso POE</td>
<td>60,000 +123%</td>
</tr>
<tr>
<td>Rio Grande City POE</td>
<td>50,000 +166%</td>
</tr>
<tr>
<td>Roma POE</td>
<td>14,000 -40%</td>
</tr>
</tbody>
</table>


BTS border crossing only provides border entry information.
BNRSC Discussion

Do the trends in vehicle ownership and movement of goods and people make sense?


Total: $362.6B
- Southbound: $153.9B
- Northbound: $208.7B

<table>
<thead>
<tr>
<th>Region</th>
<th>Value (2017)</th>
</tr>
</thead>
<tbody>
<tr>
<td>El Paso Region</td>
<td>$41.5B</td>
</tr>
<tr>
<td>Laredo Region</td>
<td>$139.5B</td>
</tr>
<tr>
<td>Rio Grande Valley Region</td>
<td>$27.7B</td>
</tr>
<tr>
<td>Southbound: Total</td>
<td>$153.9B</td>
</tr>
<tr>
<td>Northbound: Total</td>
<td>$208.7B</td>
</tr>
</tbody>
</table>

BTS Transborder Freight Data, 2017

Total: $48.6B
- Southbound: $20.9B
- Northbound: $27.7B

- Brownsville POE: $6.5B
- Hidalgo POE: $20.8B
- Progreso POE: $11.7B
- Rio Grande City POE: $209M
- Roma POE: $5.2M

Southbound: $20.9B
- Brownsville POE: $5.8B
- Hidalgo POE: $11.8B
- Progreso POE: $8.3B
- Roma POE: $5.2M

Northbound: $27.7B
- Brownsville POE: $6.5B
- Hidalgo POE: $20.8B
- Progreso POE: $11.7B
- Roma POE: $5.2M


Brownsville POE

Hidalgo POE

Progreso POE

<table>
<thead>
<tr>
<th>Mode</th>
<th>Rio Grande City POE</th>
<th>Roma POE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Northbound</td>
<td>Northbound</td>
</tr>
<tr>
<td></td>
<td>2017: $298.7M</td>
<td>2017: $5.2M</td>
</tr>
<tr>
<td>Southbound</td>
<td>2006: $157.7M</td>
<td>2006: $130.9M</td>
</tr>
<tr>
<td></td>
<td>2017: $72.3M</td>
<td>2017: $50M</td>
</tr>
</tbody>
</table>


**BNRSC Discussion**

Anything surprising with respect to the trends on international trade?
Task 5 Overview

- Goal
  - Identify and designate corridors and determine corridor needs
  - Apply data-driven needs analysis approach to inform development of recommendations

- Task includes two elements:
  1. Corridor & POE Identification & Designation
  2. Needs Assessment for Corridors & POEs
Corridor Identification, Designation, & Needs Assessment

- Primary elements of Corridor & POE Identification & Designation:
  - Identify areas of analysis
    - Capture different aspects of transportation system
  - Develop criteria for designation
    - Classify components of transportation system for analysis & comparison
  - Identify modal profiles
    - Present multimodal transportation system characteristics

- Characteristics of Needs Assessment for Corridors & POEs:
  - Data-driven
  - Indicators that reflect Goals & Objectives

Corridor Designation Strategy

Database/Inventory → Goals & Objectives, Multi-Criteria Analysis Framework → Forecasts → Economic Analysis

- Stakeholder Workshops & Discussions
- Analytical Input
- Define Analysis Areas/Spheres of Influence
- Multimodal Cross-Border Network Designation Criteria & Analysis Framework
- Develop Current Multi-Modal Profiles (Policies, Economics, Land Use)
- Develop Future Multi-Modal Profiles
- Identify & Designate Future Cross-Border Multimodal Corridors

Corridor Designation Report

To Needs Assessment Strategy
Binational, Multimodal Corridor & System Identification & Designation

Areas of Analysis (Preliminary DRAFT)

DRAFT Geographical Scope of BTMP

- BTMP Focus
  - Binational, multimodal corridors that are connected by border crossings
  - Movement of people and goods

- “Spheres of Influence”
  - Sphere 1: 100 km/60 miles north and south of border
  - Sphere 2: Key population and goods production centers in Border States
  - Sphere 3: Five Border States
  - Sphere 4: U.S. and Mexico
  - Sphere 5: U.S., Mexico, and Canada (NAFTA/USMCA)

See Handout 4
Breakdown of Sphere 1 into Sub-Areas of Analysis

B & M Bridge Crossing

- Focus inside the border crossing (Federal complex)
- Border crossing and auxiliary infrastructure

1 mile/1.5 km

- Focus at the crossing
- Connectivity to border crossing
- Multimodal

60 mile/100 km

- Focus once outside high density urban areas
- Major highways
- Multimodal
BNRSC Discussion

Is the breakdown of Sphere 1 into sub-areas of analysis logical?

Sphere 2: Key Population & Goods Production Centers in Border States
Sphere 3: Five Border States

Sphere 4: U.S. & Mexico
Sphere 5: NAFTA/USMCA

Sphere 5 Roadway Infrastructure  
Sphere 5 Railroad Infrastructure

BNRSC Discussion
Is the progression of spheres logical?
BNRSC Discussion

Does using this framework to analyze all existing transportation systems seem logical?

Binational, Multimodal Corridor & System Identification & Designation

Designation Process (Preliminary DRAFT)

See Handouts 5 & 7
The Texas Highway Freight Network is designated by TxDOT, and it is not constrained by mileage limits or inclusion criteria set forth at the federal level.

The National Highway System (NHS) consists of roadways important to the nation's economy, defense, and mobility.

National Highway Freight Network

National Highway Freight Network (NHFN) to strategically direct Federal resources & policies toward improved performance of highway portions of the U.S. freight transportation system.

Texas Highway Freight Network

The Texas Highway Freight Network is designated by TxDOT, and it is not constrained by mileage limits or inclusion criteria set forth at the federal level.

Texas Trunk System

The minimal design criteria for this network specify that each highway should be at least a four-lane divided facility. That includes routes which are not yet made of four lanes, but ideally will be.

INEGI Red Nacional de Caminos Roadway Network

The INEGI Red Nacional de Caminos Roadway Network integrates the roadway networks between urban & rural areas of Mexico.

Mexico World Street View

World Roads from ESRI represents the roads of the world including highways, major roads, primary roads, secondary roads and local roads.
Existing Highway Trade Corridors: Round 1 Stakeholder Input

- Primary Trade Corridors
- Emerging Trade Corridors
- Ports-to-Plains
- Manzanillo - Tampico
- Veracruz – Monterrey – Matamoros
- Mazatlan - Matamoros
- Topolobampo - Chihuahua - Presidio - Fort Worth
- Mexico City – Nuevo Laredo

Existing Highway Trade Corridors: Round 2 Stakeholder Input

- Primary Trade Corridors
- Emerging Trade Corridors
- Ports-to-Plains
- Manzanillo - Tampico
- Veracruz – Monterrey – Matamoros
- Mazatlan - Matamoros
- Topolobampo - Chihuahua - Presidio - Fort Worth
- Mexico City – Nuevo Laredo
- Queretaro – Ciudad Juarez
- Badiraguato - Chihuahua
- Mexico City – Nuevo Laredo & Piedras Negras
Preliminary Highway Corridor Identification: U.S. & Mexico

- Stakeholder Corridor Input
- National Highway System
- National Highway Freight Network
- Texas Highway Freight Network
- Texas Trunk System
- Mexico World Street View
- INEGI Red Nacional de Caminos Roadway Network

Preliminary Highway Corridor Identification: Binational

- International Corridor
- Emerging International Corridor
- Regional Corridor
- Local Corridor
Preliminary Highway Corridor Identification: Rio Grande Valley/Tamaulipas Region

- International Corridor
- Emerging International Corridor
- Regional Corridor
- Local Corridor

Preliminary Highway Corridor Identification: POE & Sphere 1

- B & M Bridge Crossing
- 60 mile/100 km

- International Corridor
- Regional Corridor
- Local Corridor
Other Potential Criteria to Support Roadway Corridor Designation

- Additional options to designate roadway corridors for analysis for consideration
  - Based on readily available data sources
  - Use criteria to identify corridor usage and designate corridors from Spheres 1 to 5

<table>
<thead>
<tr>
<th>Roadway Criteria</th>
<th>Linked to Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume to Capacity Ratio</td>
<td>Mobility &amp; Reliability</td>
</tr>
<tr>
<td>Person Miles Traveled</td>
<td>Mobility &amp; Reliability</td>
</tr>
<tr>
<td>Freight Ton-Miles Traveled</td>
<td>Mobility &amp; Reliability</td>
</tr>
<tr>
<td>Average Annual Daily Traffic</td>
<td>Mobility &amp; Reliability</td>
</tr>
<tr>
<td>Vehicle Miles Traveled</td>
<td>Mobility &amp; Reliability</td>
</tr>
<tr>
<td>International Trade Flows by Dollar Value and Weight</td>
<td>Economic Competitiveness</td>
</tr>
<tr>
<td>Annual Number of Crashes</td>
<td>Safety &amp; Security</td>
</tr>
<tr>
<td>Percentage of Pavement Lane Miles in Good Repair</td>
<td>Asset Preservation</td>
</tr>
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</table>

BNRSC Discussion

Anything missing on the Criteria & Analysis framework?
BNRSC Discussion

Are we missing any corridors? If so, please identify which one(s).

DRAFT Considerations to Support POE Designation

- Use same process to designate 29 POEs by small, medium, and large
  - By total commercial truck movements by border crossing (i.e., annual trucks)
  - By total passenger vehicle movements by border crossing (i.e., annual passenger cars)
  - By total pedestrian movements by border crossing (i.e., annual pedestrians and bus riders)
- Link POEs with the designated corridors identified previously
- Selected POEs for each Border Region
- Draft large, medium, and small designations by mode types and purposes (commercial trucks, passenger vehicles, pedestrians movements)
DRAFT Preliminary Designation for POEs by Commercial Trucks

- Commercial Truck Movements
  - 14 border crossings where commercial truck volume was recorded

- Total volume of crossing for commercial trucks

<table>
<thead>
<tr>
<th>Designation</th>
<th>Volume Threshold</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>VL</td>
<td>1,500,000 +</td>
<td>1</td>
</tr>
<tr>
<td>L</td>
<td>500,000 – 1,499,999</td>
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<tr>
<td>M</td>
<td>75,000 – 499,999</td>
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</tr>
<tr>
<td>S</td>
<td>1 – 74,999</td>
<td>5</td>
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</table>

*Designation: VL = Very Large; L = Large; M = Medium; S = Small

DRAFT Preliminary Designation for POEs by Passenger Vehicles

- Passenger Vehicle Movements
  - 28 border crossings where passenger vehicle volume was recorded

- Total volume of crossing for passenger vehicles

<table>
<thead>
<tr>
<th>Designation</th>
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</thead>
<tbody>
<tr>
<td>L</td>
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<td>M</td>
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<td>S</td>
<td>1 – 499,999</td>
<td>7</td>
</tr>
</tbody>
</table>

*Designation: L = Large; M = Medium; S = Small
### DRAFT Preliminary Designation for POEs by Pedestrian

- **Pedestrian Movements**
  - 23 border crossings where pedestrian volume was recorded

<table>
<thead>
<tr>
<th>Designation</th>
<th>Volume Threshold</th>
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<tr>
<td>M</td>
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<tr>
<td>S</td>
<td>1 – 99,999</td>
<td>7</td>
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</tbody>
</table>

*Designation: L = Large; M = Medium; S = Small*

### DRAFT Preliminary Designation for POEs by Bus

- **Bus Movements**
  - 11 border crossings where bus volume was recorded

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<thead>
<tr>
<th>Designation</th>
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<tbody>
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<td>S</td>
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*Designation: L = Large; M = Medium; S = Small*
## DRAFT Preliminary POE Designation, Commercial Trucks

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<th>Small (Class I)</th>
<th>Medium (Class II)</th>
<th>Large (Class III)</th>
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<tbody>
<tr>
<td>Presidio</td>
<td>Santa Teresa</td>
<td>Ysleta-Zaragoza</td>
<td>World Trade</td>
</tr>
<tr>
<td>Roma-Ciudad Miguel Aleman</td>
<td>Bridge of the Americas</td>
<td>Pharr-Reynosa Intl.</td>
<td></td>
</tr>
<tr>
<td>Rio Grande City-Camargo</td>
<td>Del Rio-Ciudad Acuña Intl.</td>
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<tr>
<td>Weslaco-Progreso</td>
<td>Camino Real Intl.</td>
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<tr>
<td>Free Trade</td>
<td>Laredo-Colombia Solidarity</td>
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<td></td>
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<td></td>
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<td></td>
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## DRAFT Preliminary POE Designation, Passenger Vehicles

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<td>Paso del Norte</td>
</tr>
<tr>
<td>Fort Hancock-El Porvenir</td>
<td>Good Neighbor</td>
<td>Bridge of the Americas</td>
</tr>
<tr>
<td>Lake Amistad Dam Crossing</td>
<td>Presidio</td>
<td>Ysleta-Zaragoza</td>
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<td>Laredo-Colombia Solidarity</td>
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<td>Juarez-Lincoln</td>
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<tr>
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<td>Eagle Pass I</td>
<td>McAllen-Hidalgo</td>
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<tr>
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<td>Gateway to the Americas</td>
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<td>Free Trade</td>
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<td>B &amp; M</td>
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### DRAFT Preliminary POE Designation, Pedestrians

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| • Tornillo-Guadalupe Intl.  
• Fort Hancock-El Porvenir  
• Laredo-Colombia Solidarity  
• Rio Grande City-Camargo  
• Los Ebanos Ferry  
• Free Trade  
• Veterans Intl. (Los Tomates) | • Santa Teresa  
• Presidio  
• Del Rio-Ciudad Acuña Intl.  
• Eagle Pass I  
• Camino Real Intl.  
• World Trade  
• Juarez-Lincoln  
• Roma-Ciudad Miguel Aleman  
• B & M | • Paso del Norte  
• Bridge of the Americas  
• Ysleta-Zaragoza  
• Gateway to the Americas  
• McAllen-Hidalgo  
• Weslaco-Progreso  
• Gateway Intl. |

### DRAFT Preliminary POE Designation, Busses

<table>
<thead>
<tr>
<th>Small (Class I)</th>
<th>Medium (Class II)</th>
<th>Large (Class III)</th>
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</table>
| • Santa Teresa  
• Laredo-Colombia Solidarity  
• Lake Falcon Dam Crossing  
• Roma-Ciudad Miguel Aleman | • Paso del Norte  
• Bridge of the Americas  
• Presidio  
• Camino Real Intl.  
• Veterans Intl. (Los Tomates) | • Juarez-Lincoln  
• McAllen-Hidalgo |
### DRAFT POE Designation Summary

<table>
<thead>
<tr>
<th>Border Region</th>
<th>Border Crossing</th>
<th>Commercial Truck</th>
<th>Passenger Vehicle</th>
<th>Pedestrian</th>
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<td>Paso del Norte</td>
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<td>Ysleta-Zaragoza</td>
<td>S</td>
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<td>Fort Hancock-BP Pioneer</td>
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<td>Juarez-Lincoln</td>
<td>S</td>
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<td>M</td>
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<td>Rio Grande City – Camargo</td>
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<tr>
<td></td>
<td>Los Ebanos Ferry</td>
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<td>Anzalduas Int.</td>
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<tr>
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<td>Pharr – Reynosa Intl.</td>
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<tr>
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<td>Donna Intl.</td>
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<td></td>
<td>Weslaco – Progreso</td>
<td>M</td>
<td>M</td>
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<td>L</td>
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<td></td>
<td>Gateway Intl.</td>
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<td>M</td>
<td>L</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Veterans Intl. (Los Tomates)</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
</tbody>
</table>

### DRAFT Considerations on POE Designation Criteria

- **Additional options to designate POE sizes for Multimodal Corridor Designation & Analysis**
  - Combined vehicle (car, truck) cross-border movements
  - Combined vehicle (car, truck) with pedestrian cross-border movements
  - Weighted total combined vehicle & pedestrian cross-border movements using a ratio of vehicles to pedestrians
  - Weighted trucks to develop combined vehicle with pedestrian crossing border movements
  - Value of goods
  - Weighted value of goods, and volume of trucks, vehicles, & pedestrians
BNRSC Discussion

Other suggestions to classify/designate POEs?

Binational & Multimodal Corridor & System Preliminary Needs Assessment

Preliminary DRAFT Needs Assessment
Preliminary Needs Assessment: Approach

Strengths
Opportunities
Weaknesses
Threats

Internal Factors

External Factors

Issues

Current & Future Demand → Current & Future Capacity → Current & Future Needs → Investment Priorities

Needs Assessment from Corridor Perspective

- Data-driven process to validate stakeholder input
- Using metrics linked to Goals & Objectives

- Highways & Roadways
  - Daily Traffic and Capacity
  - Vehicle Miles Traveled
  - Congestion
  - Speed

- Transit (Bus)
  - Service Areas
  - Ridership
  - Passenger Miles and Fleet Sizes

- Pedestrian
  - Availability of Modes

- Aviation & Maritime
  - Connectivity to Other Modes

- Pipelines
  - Peak Demand

See Handout 6
Mobility & Reliability: Demand (AADT) (2017)

- Rio Grande Valley

Mobility & Reliability: Congestion (2017)

- Rio Grande Valley
Mobility & Reliability: Truck AADT Percentage (2017)

Truck AADT Percentage:
- 0-5%
- 5-10%
- 10-15%
- 15-35%
- 35-85%

<table>
<thead>
<tr>
<th>Benefits, Weaknesses, Opportunities, Threats (SWOT)</th>
<th>Field visit of each POE location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify needs by POE locations &amp; mode</td>
<td>Clarifying: issues, trends, &amp; needs</td>
</tr>
<tr>
<td>– Safety hotspot</td>
<td>Link to corridor needs</td>
</tr>
<tr>
<td>– Mobility bottlenecks</td>
<td>Link to Goals &amp; Objectives</td>
</tr>
<tr>
<td>– Intermodal connectivity</td>
<td></td>
</tr>
<tr>
<td>– Seasonal</td>
<td></td>
</tr>
<tr>
<td>– Economic development</td>
<td></td>
</tr>
<tr>
<td>– Workforce mobility</td>
<td></td>
</tr>
<tr>
<td>– Future capacity</td>
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</tbody>
</table>

**BNRSC Discussion**

Are there any comments about the Needs Assessment framework?
# Texas-Mexico Border Transportation Master Plan

## Summary of Today’s Discussion

### Study Tasks/Three Month Look-Ahead

<table>
<thead>
<tr>
<th>Goals &amp; Objectives</th>
<th>Data Collection</th>
<th>Corridor Analysis</th>
<th>Forecasting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop weights for the BTMP Objectives</td>
<td>Develop Baseline Conditions Report</td>
<td>Refine existing conditions by mode/system &amp; spheres</td>
<td>Identify Key Drivers to develop future scenarios</td>
</tr>
<tr>
<td>Refinements to high-level project prioritization framework</td>
<td>Develop Knowledge Clearinghouse</td>
<td>Populate corridor-level performance metrics</td>
<td>Sketch future scenarios based on Stakeholder Input</td>
</tr>
</tbody>
</table>

### Next BTAC Meeting
- **January 2020**

### Next BNRSC Meeting: TBD
- Report on baseline data analytics
- Review of existing profiles and conditions along multimodal corridors
- Input from BNRSC to inform SWOT analysis
- Input from BNRSC on preliminary future scenarios
Closing Remarks

Stay Engaged

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512-685-2955

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