Overview of Texas Freight Mobility Plan

The Freight Plan is TxDOT's first multimodal transportation plan that focuses on freight needs:

- Identifies freight transportation challenges and outlines investment strategies needed to address them
- Provides a vision for a safe, reliable, and efficient freight transportation system
- Identifies freight transportation investments critical to Texas’ economic growth and competitiveness
Texas Freight Mobility Plan Stakeholder Engagement

- Twelve TxFAC meetings to-date
- Freight Leadership Summit: April 3, 2014
- Two-rounds of listening/dialogue sessions
- Over 20 speaking engagements
What is Driving Freight Transportation Demand?

NAFTA Trade
- Mexico is Texas’ largest trading partner
- 80% of goods from Mexico to US cross at the Texas Mexico Border

Population Growth
- Freight is driven by demand. More people = more freight

Industry Growth
- Texas is a leader in manufacturing, agriculture, exports

Energy Sector Growth
- Texas is the leading producer of oil and gas in the nation

As Texas’ population increases and goods are consumed, congestion will increase on highways, borders, seaports, railroads, intermodal yards, and other freight facilities.
Texas’ Freight Transportation Challenges

- **CAPACITY/CONGESTION**: Cost $1 billion, 7 freight bottlenecks
- **SYSTEM OPERATIONS**: freight network, traffic management center
- **SAFETY**: truck parking, at-grade rail crossings
- **CONNECTIVITY**: between modes, urban/rural
- **INSTITUTIONAL COORDINATION**: collaboration and partnerships
- **BORDER/PORTS – OF-ENTRY**: congestion, wait times, coordination
- **PUBLIC AWARENESS/EDUCATION**: economic impact of freight
- **FUNDING**: invest in freight, alternative funding
Freight Plan Recommendations

- Three key recommendation categories:
  - Policies – enhance freight investment decision making
  - Programs – advance freight policies and address challenges
  - Projects – support policy goals and programs
Texas as a North American Trade and Logistics Hub and Gateway

The state should continue to invest in strategic transportation solutions that enable Texas to maintain its position as the nation’s leader in North American trade and a top international trade gateway and national logistics hub.

Economic Development and Economic Competitiveness

TxDOT should align investments in the transportation system with the state’s vision for economic growth and global competitiveness.
Key Policy Recommendation: Adopt the Texas Freight Network

- Invest in corridors that provide the greatest gains
- Link modal networks and key freight nodes
- Design and maintain the Freight Network for future freight needs

The Texas Freight Network provides a strategic framework for statewide transportation investment decisions.
Freight Plan – Border/Port-of-Entry Recommendations

- Invest in and facilitate international border coordination strategies to improve freight mobility and efficiency

- Invest in a comprehensive integration of security and cross-border efficiency to improve cross-border trade and the movement of people and goods in order to facilitate Texas’ economic competitiveness

  - Maintain security while increasing trade throughput
  - Implement advanced ITS for border trade commercial shipments
  - Implement a CMV Safety Data Exchange
  - Increase use of Electronic Credentialing
  - Establish Virtual Weigh Stations at appropriate locations

- Work with federal, state, local, and private sector to develop a program to analyze current efficiencies at international freight border crossings
Freight Plan – Program Recommendations—Border

- Work with federal, state, local, and private sector to develop a dedicated International Border Freight Movement Coordination Program between industry and international, national, state, regional, local agencies

- Expand the FAST (Free and Secure Trade) program, and the proposed express lane at the Department of Public Safety (DPS) inspection stations

- Pursue one-stop permitting and inspection between US Customs and Border Protection (CBP), FMCSA, TxDMV, and DPS

- Improve coordination between all appropriate state, national, and international agencies to define and collect data and information necessary to understand issues and develop solutions

- Consider funding partnerships with US and Mexican agencies and industry partners

- Develop and implement a matrix for measuring efficiencies and benefits

- Collaborate to expand trusted shipper programs/ prescreening
Integrating Border Master Plans into the Freight Plan

- **Project Identification: Border/Ports-of-Entry Projects**
  - Stakeholder Input
  - Three Texas Border Master Plans:
    - El Paso/Santa Teresa- Chihuahua Regional Border Master Plan
    - Lower Rio Grande Valley- Tamaulipas Border Master Plan
    - Laredo District Coahuila/Nuevo Leon/Tamaulipas Border Master Plan

- **Border/POE Projects focus on:**
  - Port-of-Entry projects related to facilities crossing between Mexico and the U.S.
  - Road and intersection projects related to increasing mobility and accessibility in border areas
  - Rail projects related to increasing rail capacity and mobility between Mexico and the U.S.

- **140 border projects totaling approximately $2 billion:**
  - 41 Port-of-Entry Projects with an estimated cost of more than $600 million
  - 94 road and interchange projects with an estimated cost of over $1 billion
  - 5 rail projects with an estimated cost of more than $400 million
Freight Plan Project Recommendations

- 1,225 projects under development
- Estimated total cost of $44.8 billion

Number of Projects

- Highway: 878, 72%
- Rail: 34, 3%
- Ports and Waterways: 129, 10%
- Air Cargo: 140, 11%
- Border/POE: 44, 4%

Estimated Cost (in millions)

- Highway: $36,585, 82%
- Rail: $2,743, 6%
- Ports and Waterways: $549, 1%
- Air Cargo: $2,794, 6%
- Border/POE: $2,166, 5%
Questions?

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Director, Freight and International Trade Section
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(C) 512-658-2436
Caroline.mays@txdot.gov

www.MoveTexasFreight.com
LAREDO DISTRICT PROJECTS

Pedro R. Alvarez, P.E.
Laredo District Engineer
Safety: Mission

ZERO

Safety Never Stops!
April is National Distracted Driving Awareness Month and TxDOT is continuing its TALK. TEXT. CRASH. Campaign to raise awareness of the dangers associated with distracted driving and to encourage Texans to put down their cell phones while driving. People are dying on Texas roadways because drivers are diverting their attention from the road to talk on a phone, send a text, message with their music player or something else that’s distracting.

What is distracted driving? Distracted driving is any activity that could divert a person’s attention away from the primary task of driving. All distractions endanger driver, passenger, and bystander safety. While mobile phone use is the most recognizable driving distraction, TxDOT also urges drivers to avoid the following high-risk behind-the-wheel activities.
Three Major Freight Corridors: 
One Major Destination
Border Crossings in the Laredo District (2014):

The Laredo Ports-of-Entry (POEs) Combined Are The 3rd Busiest Commercial Crossings of any Ports in the U.S. Based On:

- **Number of Commercial Vehicles** (~14,000 Trucks/day & 3 Million/year) and Trains (over 400 Thousand Rail Cars/year);
- **Trade Value of the Cargos** ($280 Billion = 7% of the U.S. International Trade)
Important Future (Un-Funded) Border Freight Projects In The Laredo District
Future Freight Corridor Projects – Webb County & Laredo:

On TxDOT Roadways:

- IH 35
  - Mile Marker 13-18
  - Mile Marker 18 to US 83 & U-P Railroad Underpass
  - Mile Marker 26 to 30 (CBP Checkpoint)
  - Shiloh Interchange to US 59 Loop (Milo) Interchange
- US 59 Loop / Future I-69W
- FM 1472 (Mines Road) Upgrades
- FM 3338 (Las Tiendas Road) Upgrade
- US 59 Lengthen Intermittent Passing Lanes in Webb & Duval Counties
- Cuatro Vientos Road Southern Extension
Other Future Freight Corridor Projects in Laredo & Webb County:

Projects by Others:

- Vallecillo Road  
  *(WC-CL RMA)*
- Hachar Road  
  *(City of Laredo & Webb County)*
- Other Arterial Streets  
  *(e.g. Sara & United)*  
  *(City Laredo)*
- Integrate the Functions, Capacity & Efficiency of the northern IH 35 Interchanges & Connecting City Streets
- International Bridge V & Southern Loop Extension
Important Recent & Near-Term Border/Freight Projects In The Laredo District
Recent/Near-Term TxDOT Spending On FM 1472 (Mines Road):

**Total Spending On FM 1472:**
$12.9 million

- **Under Construction Contract**
  - FM 1472 Overlays (At Various Locations)
    - $4.3 Million

- **Under Construction Contract**
  - FM 1472 Traffic Signal Improvement (At I-69W)
    - $77,074

- **Construction Complete**
  - FM 1472 Raised Median (Pellegrino to Killam/Riverbank Rd.)
    - $137,712

- **Existing Interchanges @ I-69W & IH 35**

- **Recent/Near-Term TxDOT Spending On FM 1472:**
  - **Under Construction Contract**
    - FM 1472 Concrete Pavement on Southbound Lanes & Concrete Intersections (Killam to Interamerica)
      - $3.6 Million
  - **Under Construction Contract**
    - FM 1472 Concrete Pavement on Northbound Lanes & Add Travel Lane (Killam Industrial to 0.3-mi. N. Muller Blvd.)
      - $4.8 Million (Aug. 2016)
  - **Total Spending On FM 1472:**
    - $12.9 million
Recent / Near-Term TxDOT Spending On Northern US 59 Loop (Loop 20/Future I-69):

Total Spending On Northern US 59 Loop (Future I-69):
$75.4 million
US 59 (Loop 20) / I-69W Project

From International Blvd. To Saunders (Business US 59):

- Interchanges: Shiloh; Del Mar; University (TAMIU*); Jacaman; Airport
- Status: Under Preliminary Engineering (Schematic) & Environmental Studies; Environmental Clearance Target Date = December 2016

- Estimated Additional ROW: 182-acres
- Construction Cost Estimate: $171 Million (Unfunded for Construction)

Note: This Is A Candidate for Innovative Construction Financing w/ Local Funds

* TAMIU = Texas A&M International University
Recent TxDOT Spending On Loop 20 – From US 59 to SH 359:

- **Overpass at US 59** - Completed in November 2008 ($20.5 million)
- **SL 20/SH 359 Interchange** - Completed in January 2014 ($18.1 million)
- **SL 20/Spur 400 (Clark) Interchange Project** - Construction is Underway ($33.8 million)
- **SL 20 Bridge Widening Over KCS RR** - Construction is Underway ($25.5 million)

**Total Spending On This Segment of Loop 20:**

$97.9 million
Proposed Rider 11b*
Border Projects In The Laredo District

*An Amendment to the Coordinated Border Infrastructure Program
Proposed Rider 11b Border Projects In The Laredo District:

<table>
<thead>
<tr>
<th>Proposed Rider 11b Border Projects &amp; General Project Locations</th>
<th>Included in the 2012 Laredo Border Master Plan</th>
<th>Project Value</th>
<th>Ready to Let Date</th>
<th>Projected Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>US 277 Super-2 Intermittent Passings Lanes: Eagle Pass to Del Rio (SL 480 to SL 79)</td>
<td>Yes</td>
<td>A viable intermediate step to improve traffic efficiency for local and heavy/NAFTA truck. All work would be within the existing right-of-way.</td>
<td>Aug. 2017</td>
<td>$7.6M</td>
</tr>
</tbody>
</table>
**Proposed Rider 11b Border Projects In The Laredo District:**

<table>
<thead>
<tr>
<th>Proposed Rider 11b Border Projects &amp; General Project Locations</th>
<th>Project Value</th>
<th>Ready to Let Date</th>
<th>Projected Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>US 277 5-lane Urban Section:</strong> Eastern Eagle Pass (US 57 to SL 480)</td>
<td>Increasing developments are occurring at a rapid pace on this portion of US 277 in eastern Eagle Pass. (i.e. EPISD Sports Complex/New Regional Hospital/etc.)</td>
<td>June 2017</td>
<td>$12.4M</td>
</tr>
</tbody>
</table>
FAST* Act Application For Projects In The Laredo District

*Fixing America’s Surface Transportation Act
## TxDOT FAST Act Application for Funding Border Projects:

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Included in the 2012 Laredo Border Master Plan</th>
<th>Project Value</th>
<th>Ready to Let Date</th>
<th>Projected Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IH 35/US 59 Loop Interchange Direct Connectors:</strong> Complete the 1 of last 5 DC’s (Northern Laredo)</td>
<td>Yes</td>
<td>To complete one of the remaining five IH 35/US 59 Loop Direct Connectors to improve cross-border NAFTA traffic efficiency in the vicinity of the World Trade International Bridge.</td>
<td>Aug. 2017</td>
<td>$19.5M</td>
</tr>
<tr>
<td><strong>US 59 Loop Overpass Over IH 35/ U-P Railroad:</strong> Construct Mainlanes between the existing frontage roads</td>
<td>Yes</td>
<td>To complete another segment of I-69W to improve cross-border NAFTA traffic efficiency in the vicinity of the World Trade International Bridge.</td>
<td>Aug. 2016</td>
<td>$39.1M</td>
</tr>
</tbody>
</table>

### Map:
- **Existing DCs 1 & 2**
- **Existing DC 7**
- **US 59 Loop Mainlanes Over IH 35**
- **Future WB US 59 Loop To SB IH 35**

### Location:
- Laredo
### TxDOT FAST Act Application Projects & General Project Locations

<table>
<thead>
<tr>
<th>Project Location</th>
<th>Project Description</th>
<th>Project Value</th>
<th>Ready to Let Date</th>
<th>Projected Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>US 59 Loop Interchange At Jacaman Road:</td>
<td>Construct an Urban Interstate Interchange</td>
<td>To complete one of the six remaining US 59 Loop Interchanges to improve local and cross-border NAFTA traffic efficiency in north-eastern Laredo.</td>
<td>Aug. 2018</td>
<td>$39M</td>
</tr>
</tbody>
</table>
# City Laredo FAST Act Application Project:

<table>
<thead>
<tr>
<th>TxDOT FAST Act Application Projects &amp; General Project Locations</th>
<th>Project Value</th>
<th>Ready to Let Date</th>
<th>Projected Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construct 4 Additional Exit Lanes/Booths in the World Trade International Bridge IV:</strong> Increase the exit lanes/booths from 4 to 8.</td>
<td>To improve the efficiency of cross-border NAFTA truck traffic efficiency inside of the GSA/CBP World Trade Bridge facility.</td>
<td>Aug. 2018</td>
<td>$9M</td>
</tr>
</tbody>
</table>

[Map of World Trade Bridge IV Facility with additional exit lanes/booths marked]
Questions / Comments?

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TxDOT – Laredo District Engineer
1817 Bob Bullock Loop, Laredo TX 78043
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Phone: (956) 712-7456
RMAs in PHARR DISTRICT
Hidalgo County Regional Mobility Authority Projects

Project List

1. SH 365 (Segments 1, 2, 3 and 4)
2. International Bridge Trade Corridor (IBTC)
3. Hidalgo County Loop Project (Section A)
4. Hidalgo County Loop Project (Section C)
Cameron County Regional Mobility Authority Projects

Project List

1. South Padre Island 2nd Access
2. SH 550/ I-169
3. SH 32 West and SH 32 East
4. Outer Parkway
5. FM 1925 Extension
6. US 281 Connector
7. West Boulevard (formerly known as West Parkway)
Project Scope: Develop a project to provide a second point of access between South Padre Island and the mainland.

- Address peak travel periods
- Emergency evacuations
- Support economic development
- Enhance safety and mobility
- Environmental decision expected early 2017
- Industry workshops conducted
Cameron County Transportation Reinvestment Zone

- Agreement between Cameron County and CCRMA was executed on December 29, 2105
- Estimated to generate over $1.6 Billion over 50 years
- Maximum Annual Tax Increment Transfer will not exceed 25% of Tax Increment annually
- Over 50 projects are listed in the agreement as future development
MEXICO’S NORTHERN ECONOMIC TRADE CORRIDOR

IMPACT ON TEXAS’S TRANSPORTATION INFRASTRUCTURE

Legend
- Port of Entry
- Study Area Border
- Major Highway in Study Area
- International Boundary
- Major Cities
- Mazatlán-Durango Highway
- Major Roads

Map showing key locations and bridges:
- Anzalduas International Bridge
- Pharr International Bridge
- Donna-Rio Bravo International Bridge
- Progreso International Bridge
- Los Indios Bridge
- Veterans International Bridge at Los Tomates
- Nogales-Mariposa Port of Entry
- El Paso Bridges
- Laredo World Trade Bridge
- Saltillo-Monterrey Cuota Extension
- Libramiento Sur II de Reynosa

Map showing major cities and highways, including:
- Phoenix
- Phoenix
- Hermosillo
- Chihuahua
- Mazatlán
- Durango
- Torreon
- Saltillo
- Monterrey
- Mazatlán
- Durango
- Zacatecas
- Nuevo León
- Tamaulipas
- Coahuila
- Texas
- Arizona
- New Mexico
- USA

Route highlights:
- Study Area Border
- Major Highway
- International Boundary
- Major Roads

Scale: 0 40 80 160 Miles
QUESTIONS?
The Texas-Mexico Automotive SuperCluster (TMASC)

David Marquez, Executive Director
Bexar County Economic Development
April 21, 2016
Changing Geography of Automotive Assembly
The TMASC Region

Year of Production Start

- 1919 - 1949
- 1950 - 1989
- 1990 - 2010

400-mile radius of I-35 Corridor*

The TMASC Region
Figures from 2008 TMASC Market Study

<table>
<thead>
<tr>
<th>Type</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive assembly and parts plants</td>
<td>6</td>
</tr>
<tr>
<td>Commercial and military vehicle manufacturing plants</td>
<td>7</td>
</tr>
<tr>
<td>Heavy equipment manufacturers</td>
<td>4</td>
</tr>
<tr>
<td>Specialty vehicle manufacturers</td>
<td>3</td>
</tr>
<tr>
<td>TOTAL PLANTS</td>
<td>20</td>
</tr>
</tbody>
</table>

# The TMAASC Region

## Change from 2008 to 2012

<table>
<thead>
<tr>
<th>TYPE</th>
<th>QTY</th>
<th>NET CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive assembly and parts plants</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Commercial and military vehicle manufacturing plants</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Heavy equipment manufacturers</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Specialty vehicle manufacturers</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL PLANTS</strong></td>
<td><strong>27</strong></td>
<td><strong>7</strong></td>
</tr>
</tbody>
</table>

**NEW INVESTMENT** ~ $2.7 B

TMASC States:
Texas, Coahuila, Tamaulipas, San Luis Potosi, and Nuevo Leon
TMASC: Assembly Plants 2015

TMASC States: Texas, Coahuila, Tamaulipas, San Luis Potosi, and Nuevo Leon
TMASC States: Texas, Coahuila, Tamaulipas, San Luis Potosi, and Nuevo Leon
Bi-national integration provides
for competitive advantage

- Home to 29 automotive assembly and parts assembly plants
- Production capacity of over 800,000 1,000,000 units
- Over 230 OEM supplier plants
- Labor pool of over 17 million workers; average age of 34 years; favorable labor costs
- Robust infrastructure: road, rail, seaports, airports, and intermodal connections
- Global reach: preferential trade agreements with key markets
Vehicle Production Trends

NAFTA REGION 2005-2015
Regional Collaboration for Shared Success

- Economic Development
- Regional Image
- Workforce
- Logistics Infrastructure
- Industry-Friendly Border
- Security
- Energy
- Water
- National Policies
- Trade Policies
The Texas-Mexico Automotive SuperCluster (TMASC)

Thank you.

David Marquez
Executive Director
Bexar County Economic Development

T: (210) 335-0667
dmarquez@bexar.org
www.bexar.org
The Ties that Bind a Nation

Border Trade Advisory Committee

Ivan Jaime
Director – Public Affairs
Strength of a Unique Franchise

Revenue: $21.8 B
Route Miles: 32,100 in 23 States
Employees*: 44,500
Annual Payroll: $4.6 B
Customers: 10,000
Locomotives: 8,500

12/31/2015
2015 Union Pacific in Texas

Miles of Track: 6,304
Annual Payroll: $765.6 M
In-State Purchases: $1.8 B
Capital Investment: $800 M
Employees*: 7,700
U.S. Jobs Supported**: 34,650
Community Giving: $1.47 M
Charitable Organizations: 384

*Fourth quarter 2015 average
**Each American freight rail job supports 4.5 jobs elsewhere in the U.S. economy. (Association of American Railroads)

$3.3+ Billion of Total Economic Impact
UP and Mexico

Gateway Access

<table>
<thead>
<tr>
<th></th>
<th>UP</th>
<th>BN</th>
<th>KCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Brownsville</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Laredo</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Eagle Pass</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>El Paso</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Nogales</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Calexico</td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

*BN has haulage rights over UP at Brownsville
Mexican Border Operations

- Only railroad with access to all six rail ports of entry
- Ports of Entry: Brownsville, Laredo, Eagle Pass, El Paso, Nogales & Calexico
- Train Traffic: Estimated 50-60+ Per Day
- Employees: Estimated 650+
- Major Commodities: Automotive, Grain, Industrial Products, Intermodal
- Customers: Ford, General Motors, Altos Hornos de Mexico, Delphi, Constellation Brands, Unilever, Whirlpool
Brownsville West Rail Bridge – Inaugurated August 2015

- Local, state & federal U.S./Mexico governments funded the $100+ million project

- UP’s contribution included deeding 8-mile, 100-foot strip of right-of-way south of Olmito Yard to Cameron County

- Eliminated half a dozen major grade crossings (enhancing safety)

- First new rail bridge between the U.S. & Mexico since 1911 (B&M Bridge)
Port Laredo Intermodal Terminal Expansion
Improve Safety, Service and Capacity

• $90 million investment in 2 phases; Phase 1 Underway

• 37+ new acres acquired

• New entrance via Port Drive, Automated Gate System, new buildings

• Phase 2 will include new track & expanded parking – start date pending

• Only intermodal terminal on the Texas – Mexico border

• The support of City of Laredo & Laredo Development Foundation contributed to success – Thank You!
Eagle Pass Terminal Improvements

- Fastest growing rail port of entry in the country; 300 daily rail cars in 2004 to 1,500 in 2014
- Over $80 million invested on Eagle Pass Subdivision (26 miles) since 2009 to include:
  - New customs building and rail inspection portal (e.g. bullet proof glass, fencing & camera inspection capabilities)
  - Centralized traffic control
  - Constructed south slot (compatible with 2\textsuperscript{nd} main track)
  - Expanded Clark’s Park Yard from 3-5,000 foot tracks, to 4-10,000 foot tracks
  - Further expanding Clark’s Park Yard to include secondary inspection station (reduced blocked xings)
Kinney County Railport

$40 million investment in 470 acre facility; inaugurated November 2015

Facility employment totals 120

Purpose of facility is to prepare (clean and repair) rail box cars prior to delivery to manufacturer location for loading

Facility located along Union Pacific main track about 1 mile southeast of Spofford
El Paso County

- In addition to $400 million investment in new Santa Teresa terminal:
  - Rail yard rehab & expansion
    - $11 million investment
    - New track at international river yard
    - Extension of 3 tracks at Alfalfa yard
    - Customs investments and rail inspection portal (e.g. new building, fencing & camera inspection capabilities)
- Planned double track 44 miles in 4 phases from El Paso to Sierra Blanca
  - Total investment of $140 million ($35 million/phase)
  - Designed to add capacity & enhance fluidity for trains entering and leaving the El Paso terminal from the east
“It is important to note that growing congestion levels on Texas highways could inhibit freight movement and increase the importance of alternative modal options in order for Texas to remain economically competitive in the future.”
Since 2009, UP has invested $2.8 billion in Texas including $200+ million on border subdivisions & Yards.
Bi-National and Interagency Cooperation at the El Paso Port of Entry

P3 Program

BTAC

April 2016

“Delivering Outstanding Services”
Presentation Outline

• Regional economic linkages

• P3 background, funding, expenditures, and coverage

• Northbound/southbound crossings and revenues, and CBP northbound wait times for bridges covered by P3
  • Cargo Trucks
  • Passenger Vehicles
  • Pedestrians

• Metropia and Lean Six Sigma
Regional Economic Linkages

- Maquiladora and trade activities in Cd. Juarez-El Paso driven by U.S. industrial production

Source: Federal Reserve, INEGI, and U.S. ITC  
Note: Data seasonally adjusted. Maquila figures reflect Jan. 1990 to Dec. 2006 extrapolated to IMMEX data (Jul. 2007 to present)
Retail Sales and Crossings

- Periods of economic stability illustrate the positive relationship (e.g., from 2010 to 2015 $\rho = 0.6$)
- External shocks complicate the relationship

Source: CBP and TCPA  
Note: Data are seasonally adjusted.
Trends in Retail Sales

- US and MX economic shocks impact retail trade sales, overall and in zip codes where primary shopping is located.
- El Paso Fed estimated that MX nationals account for 10-15% of retail sales.

Source: TCPA – Quarterly data interpolated using Denton routine and TCPA allocations monthly trend.
Benefits of Facilitating Crossings and Reduced Wait Times

• Wait times and bridge infrastructure/staffing influence business location decisions.

• Facilitating cargo and personal crossings has a direct impact on the regional economy – output, wages, taxes, and jobs.

• Wait times influence personal crossing decisions and, thus, the social and economic integration and performance of the region.

• According to CBP and the GAO, (lack of) staffing is the biggest obstacle towards improving the cross-border flow of goods and people.
P3 Revenues and Expenditures

Cargo Trucks
Drivers
Crossings and Revenues
Wait Times
Commercial Traffic Drivers

Cargo traffic (at Ysleta and BOTA) driven by Cd. Juarez maquila activities and, hence, U.S. industrial production

Source: Federal Reserve, INEGI, and CBP.

Note: Data seasonally adjusted. Maquila figures reflect Jan. 1990 to Dec. 2006 extrapolated to IMMEX data (Jul. 2007 to present).
Cargo Crossings and Revenues

- Northbound crossings affected by Zaragoza construction
  - Started March 2015 and reopened February 2016
- Upward trend for southbound crossings and revenues since end of Great Recession

Source: El Paso Intl. Bridges Dept. and CBP
Note: Northbound crossings include standard and FAST cargo lanes
Standard Cargo Daily Wait Times
(northbound in minutes)

- Volume is demand-based so some variance in times unavoidable

All days/hours of operation

- Trend is shorter wait times on P3 days/hours since Oct. 2014

P3 days/hours only

Source: CBP
Note: FAST cargo not shown but has similar trend with much shorter wait times
Standard Cargo Hourly Wait Times
(northbound in minutes)

➢ Lower times for weekdays before construction (blue vs. red bars)

Source: CBP Note: Pre-P3 times 01/01/10 to 01/25/14; post-P3 to construction times 01/26/14 to 03/22/15; post-construction times 03/23/15 to 12/16/15 (Saturdays closed). FAST cargo not shown but has similar trend w/ shorter wait times.
Benefits of reduced wait times
Ysleta bridge example for cargo

- Expediting trucks just 6 minutes faster produces direct savings to manufacturers and carriers that exceeds P3 expenditures.

- If carriers can add round trip deliveries during the day:
  - Manufacturers can increase current production (up to) full capacity
  - Produces spillover effects across the economy (jobs, wages, output, spending, taxes, etc.)

- Transportation efficiencies induce businesses to move/expand operations

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Trucks per hour estimate</td>
<td>85</td>
</tr>
<tr>
<td>Yearly trucks during P3 hours</td>
<td>69,000</td>
</tr>
<tr>
<td>2016 projected P3 expenditures</td>
<td>$305,000</td>
</tr>
<tr>
<td>Hourly cost of truck delay estimate</td>
<td>$45</td>
</tr>
<tr>
<td>Minutes reduction per truck to break even</td>
<td>5.9</td>
</tr>
<tr>
<td>Yearly $ savings for 1 minute per truck reduced</td>
<td>$52,000</td>
</tr>
<tr>
<td>Yearly $ savings for 10 minutes per truck reduced</td>
<td>$520,000</td>
</tr>
</tbody>
</table>
Passenger Vehicles
Crossings and Revenues
Wait Times
Vehicle Crossings and Revenues

- Driven by regional social and economic integration and shocks
- Upward trend for crossings and revenues since drop in violence

**Stanton-PDN Vehicles**

**Ysleta-Zaragoza Vehicles**

Source: El Paso IBD and CBP

Note: Northbound crossings include standard and Ready vehicle lanes
Pass. Vehicle Daily Wait Times
(northbound in minutes)

- Times fall and stabilize after ALOI and more so after P3

Standard PVs – P3 days/hours only

Source: El Paso CBP
Note: Non-P3 bridge BOTA not shown but wait times trends similar
Standard Vehicle Hourly Wait Times (northbound in minutes)

- P3 helped lower wait times for Standard PVs at PDN

Source: El Paso CBP
Note: Pre-P3 times from 01/01/10 to 01/25/14; post-P3 times from 01/26/14 to 12/16/15
Standard Vehicle Hourly Wait Times
(northbound in minutes)

P3 helped lower wait times for Standard PVs at Ysleta

Source: El Paso CBP
Note: Pre-P3 times from 01/01/10 to 01/25/14; post-P3 times from 01/26/14 to 12/16/15
Pedestrians
Crossings and Revenues
Wait Times
Pedestrian Crossings and Revenues

- Driven by regional social and economic integration and shocks
- PDN accounts for majority of pedestrian traffic
- Upward trend for PDN crossings/revenues since drop in violence

PDN Pedestrians

Source: El Paso IBD and CBP

Note: Northbound crossings include standard and Ready pedestrian lanes
Standard Pedestrian Wait Times
(northbound in minutes)

- Highest wait times at PDN due to volume
- Wait times fall and stabilize after ALOI and more so after P3

P3 days/hours only

- P3 has helped lower pedestrian wait times

Source: El Paso CBP
Note: Ready pedestrians not shown but have similar trend w/ much shorter wait times
Summary

- Cargo crossings and revenues have risen since the end of the Great Recession
- Vehicle and pedestrian crossings and revenues have risen since the drop in violence in Mexico
- P3 is helping reduce wait times during critical peak hours, in particular for pedestrian and standard vehicle traffic.

<table>
<thead>
<tr>
<th>Period</th>
<th>Ysleta Bridge</th>
<th>PDN Bridge</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cargo Trucks</td>
<td>Passenger Vehicles</td>
</tr>
<tr>
<td></td>
<td>P3 Hrs Avg</td>
<td>P3 Hrs Avg</td>
</tr>
<tr>
<td></td>
<td>Wait Times</td>
<td>Wait Times</td>
</tr>
<tr>
<td></td>
<td>(thousands)</td>
<td>(millions)</td>
</tr>
<tr>
<td>No Overtime</td>
<td>10.3</td>
<td>44.1</td>
</tr>
<tr>
<td>01/26/11 to 01/25/12</td>
<td>381</td>
<td>1.88</td>
</tr>
<tr>
<td>Partial ALOI</td>
<td>11.4</td>
<td>40.2</td>
</tr>
<tr>
<td>01/26/12 to 01/25/13</td>
<td>412</td>
<td>2.24</td>
</tr>
<tr>
<td>ALOI</td>
<td>11.3</td>
<td>30.9</td>
</tr>
<tr>
<td>01/26/13 to 01/25/14</td>
<td>426</td>
<td>2.87</td>
</tr>
<tr>
<td>P3 &amp; ALOI</td>
<td>11.3</td>
<td>19.7</td>
</tr>
<tr>
<td>01/26/14 to 01/25/15</td>
<td>437</td>
<td>3.25</td>
</tr>
</tbody>
</table>

Source: El Paso CBP
Note: Times are for standard cargo and vehicles, excludes FAST and Ready which are lower
Moving Forward Short Term

- To better assess the influence of P3 we are awaiting from CBP
  - Hourly/daily crossings and lanes open since 01/01/10

- Use GPS tracking to segment wait times by components of the crossing process
  - K-9 inspection, aduana queue, aduana exit, aduana inspection, CBP queue, CBP inspection, DPS inspection, etc.

- Statistical modeling to better understand economic impacts
Example: Ysleta-Zaragoza Bridge Average Segment Times by Hour, August 2015 (in minutes)
Metropia
and
Lean Six Sigma
Metropia Mobile® App
Demand management and data analytics platform

- Enter route and app shows you best times to leave
  - Avoid traffic
  - Spend less time on the road
  - Reduce CO2 emissions

- Real-time wait times - predictive algorithms forecast traffic patterns in 15-minute intervals
- Applicable to cargo, vehicle and pedestrian traffic

- Choose departure times to avoid congestion and earn points

- User-based incentives, e.g., Amazon, Starbucks, Target, restaurants…
Ysleta-Zaragoza LSS Projects
Commercial Wait Time Reduction

September 2015 kick-off with Value Stream Mapping
# Ysleta-Zaragoza LSS Projects

**LSS Steering Committee Participants**

<table>
<thead>
<tr>
<th>Public Sector</th>
<th>Private Sector or Nonprofit</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of El Paso</td>
<td>Transportistas (Sotelo, Tracso)</td>
</tr>
<tr>
<td>Municipio de Cd. Juarez</td>
<td>Maquiladoras (MFI, Electrolux, Toro)</td>
</tr>
<tr>
<td>District 16 Congressional Office</td>
<td>INDEX (Maquiladoras Associations)</td>
</tr>
<tr>
<td>U.S. Customs and Border Protection</td>
<td>Customs Brokers (Pedraza Inc., BAB inc.)</td>
</tr>
<tr>
<td>Aduanas Mexico</td>
<td>Desarrollo Economico de Cd. Juarez</td>
</tr>
<tr>
<td>Texas Department of Transportation</td>
<td>Promofront</td>
</tr>
<tr>
<td>U.S. Department of Public Safety</td>
<td></td>
</tr>
<tr>
<td>Metropolitan Planning Organization</td>
<td></td>
</tr>
<tr>
<td>Instituto Municipal de Investigacion y Planeacion</td>
<td></td>
</tr>
</tbody>
</table>
Ysleta-Zaragoza LSS Projects
Commercial Wait Time Reduction

- 22 potential improvement projects identified during 3 events
- Two LSS Steering Committee Projects currently underway

1. Pilot Program, led by maquiladora industry in Cd. Juarez, for scheduling truck arrivals during off peak hours
2. Multi-Generational Project, led by City of El Paso, for several infrastructure enhancements to help expedite the flow of traffic
   - Intelligent transportation systems signage and traffic control improvements on both sides of the border
   - Expand electronic tolling usage
   - Engineering designs started to make them eligible for state and federal funding
Regional Ports of Entry Border Crossings - Northbound (2015)

1. Santa Teresa – New Mexico
   - Trucks: 102,771
   - Private Vehicles: 527,411
   - Pedestrians: 160,560

2. Paso Del Norte
   - Private Vehicles: 2,871,979
   - Pedestrians: 4,792,745

3. Stanton Dedicated Commuter Lane
   - Private Vehicles: 1,203,746
   - Pedestrians: 160,560

4. Bridge of the Americas - BOTA
   - Trucks: 496,802
   - Private Vehicles: 3,859,726
   - Pedestrians: 939,519

5. Zaragoza (Ysleta)
   - Trucks: 261,272
   - Private Vehicles & DCL: 1,115,425
   - Pedestrians: 4,322,744

Regional Ports of Entry
1. Santa Teresa – New Mexico
2. Paso del Norte – Northbound
3. Stanton Dedicated Commuter Lane
4. Bridge of the Americas
5. Zaragoza (Ysleta)
El Paso to 8 Major Cities—Team Driver

- **12 hours:**
  - Portland (1,652 mi / 27.5 hrs)
  - San Francisco (1,182 mi / 20 hrs)
  - Los Angeles (803 mi / 13 hrs)
  - Guadalajara
  - Mazatlán
  - Torreón

- **24 hours:**
  - New York City (2,184 mi / 36.5 hrs)
  - Charlotte (1,666 mi / 28 hrs)
  - Miami (1,936 mi / 32 hrs)
  -Veracruz
  - Querétaro
  - Mexico City
  - La Zar Cardenas

Central Location . . .
Interstate Connectivity . . .
CORPORATE PRESENCE IN THE REGION

DELPHI
GE Healthcare
Cardinal Health
Schneider Electric
ADP
Prudential
Charles Schwab
HGS
SWEDISH GLOBAL SOLUTIONS
Electrolux
CNWIRE Corporation
Johnson & Johnson
Tenet
BD
BOSCH
LEAR Corporation
Johnson Controls
Visteon
FLEXTRONICS
YAZAKI
Valeo
Federal Mogul
LEXMARK
PHILIPS
Honeywell
3M
LEGAL
MAGNET NARELLI
FOXCONN
2.5 M Population

$91.1 B in U.S.-Mexico trade crossed through ports in EP region in 2014

Top 7 Mfg Locations in North America

- 320 “maquila” plants
- 70+ Fortune 500 companies
- 252,000+ employees
- $8 billion annual purchases
- Minimum 69 related facilities in EP

More than 50,000 jobs in El Paso tied to Mexico

- 3,500 live in El Paso and work in Juarez
El Paso/Juarez Trade Impact

• El Paso represents almost 20% of the US/MX trade

• El Paso processed more than 32M inspections last year. 1 out of every 12 legal visitors to the U.S. entered at an El Paso area crossings.

• Reducing wait times will increase the flow of trucks, hence the importance of state-of-the-art transportation infrastructure.

• 1 out of every 4 jobs in ELP depend on trade and manufacturing jobs in Juarez.

• Approximately 6 million U.S. jobs depend on trade with Mexico.

• Cooperation is needed.
TEXAS BORDER STRATEGIC TRANSPORTATION INITIATIVES

Border Trade Advisory Committee

April 21, 2016
Plan Objectives

• Develop Texas Border Strategic Transportation Initiatives Plan
  – Outline border/trade transportation vision and strategies

• Overall objectives are
  – Efficient trade flows
  – Connectivity
  – Economic growth
  – Texas’s economic competitiveness
Game Plan

- Support BTAC meetings and program development
- Develop White Papers and other meeting materials for BTAC
- Seek BTAC input and Consensus on Development of Strategic Transportation Initiatives
- Document Strategic Trade Transportation Needs and Recommendations
- Develop the Texas Border Strategic Transportation Initiatives Plan
- Coordinate with Texas Border Transportation Master Plan consultant
Border/Trade Transportation White Papers

- Role of a border coordination group
- Innovative funding sources for border infrastructure
- Heavy weight truck corridors
- Status and development potential of the la Entrada al Pacifico proposal
- Historic and current impacts of NAFTA on the Texas economy
- U.S./Canada border infrastructure development practices
- Texas-Mexico maritime trade trends implications
Border/Trade Transportation White Papers

- Potential impacts of the Trans-Pacific Partnership (TPP) in Texas
- New regulations impacting the southbound flow of goods
- Mexico’s energy reforms and their impacts on Texas’s energy industry
- Cross-border manufacturing in Texas and Mexico
- Mexico’s automotive industry cluster and linkages to/opportunities for Texas
- Potential economic impacts of cross border traffic delays
Development of Texas Border Strategic Transportation Initiative Plan

• Obtain input and direction on
  – Plan Objectives
  – Scope of work
  – Proposed deliverables

• Identify specific concerns
Strategic Trade Transportation Needs and Recommendations

- Analysis of International POE Projects on the US-Mexico Border
- Texas’s Border Master Plans
- Texas Freight Mobility Plan/Texas Transportation Plan 2040 Plan
- TxDOT’s NAFTA Update Study
- Mexico’s Energy Sector Reform
- Mexico’s Economic Trade Corridor
- Panama Canal Stakeholder Working Group
- Competitive Border Communities: Mapping and Developing US-Mexico Transborder Industries
- El Paso Regional Ports of Entry Operations Plan
- Border Corridor and Trade Report
- 2012 International Trade Corridor Plan
- Economic Impacts of Border Wait Times
Develop the Texas Border Strategic Transportation Initiatives Plan

• Develop Plan that documents BTAC’s vision
  – Integrate trade, economic development, and trade transportation infrastructure
  – Facilitate trade and enhances economic competitiveness

• Develop Plan that summarize strategic transportation priority needs and proposed actions, investments, and strategies
  – Texas-Mexico border
  – Trade corridors serving the Texas-Mexico border
Texas Border Transportation Master Plan

• Coordinate with Texas Border Transportation Master Plan consultant
  – Literature/information
  – Data
  – Border needs
  – Border strategies

• Ensure implementation of proposed actions/investments/strategies in Texas Border Transportation Master Plan
Questions?