The Contract Team will provide the following:

- Engineering services for the development of the Texas-Mexico Transportation Border Master Plan Update (BMP).

- The BMP is a binational comprehensive approach to:
  - coordinate planning, programming, & implementation of projects
    - multi-modal transportation systems
  - border crossings, and
  - support facilities
Selected Consultant Team Composition

- HDR Engineering, Inc.
  - Project Manager: Alejandro Solis, Ph.D.

- Team Members:
  - Jacobs Engineering, Inc.
  - CPCS Transcom, Inc.
  - Blanton & Associates, Inc.
  - B2Z Engineering, Inc.
  - Garver, LLC
  - GUNDA Corporation, LLC
Border Master Plan Update

- Border Trade Advisory Committee will:
  - Guide the effort
  - Provide recommendation to the Texas Transportation Commission
- BMP development through Bi-National Regional Committee structure
  - Regularly scheduled meetings
  - Provide feedback and guidance
  - Assist with stakeholder outreach
- Committees will lead development of the plan
- Partners and stakeholders will lead implementation of the plan
Negotiations ongoing with selected consultant

Meetings with various stakeholders and partners

Presentations at various MPOs, Cities, Counties & Conferences

- Discussed proposed scope of work
- Pro-active Bi-National Public Involvement Process
- Regional and Statewide Bi-National Committee Structure
- Data Collection and Inventory
Scope Development - Input

- Border Trade Advisory Committee
- Mexican Partners:
  - Secretaria de Comunicaciones y Transportes (SCT)
  - Secretaria de Relaciones Exteriores (SRE)
  - Servicio de Administracion Tributaria (SAT)
- U.S. Federal Partners
  - Federal Highway Administration
  - Federal Transit Administration
  - Customs & Border Protection
  - General Services Administration
  - Federal Motor Carrier Safety Administration
- Texas Department of Public Safety
- Texas Department of Motor Vehicles
Next Steps

- Continue with contract negotiations with selected consultant
- Receive input on development of scope of work
  - BTAC
  - Bi-National Stakeholders
  - U.S. Federal Partners
  - TX State Partners
- Provide presentations to various stakeholders and partners
- Execute Contract - no later than February 2018
- Initiate Work Authorization(s) - Spring 2018
Caroline Mays

Director, Freight and International Trade
caroline.mays@txdot.gov
(512) 936-0904

Timoteo “Tim” Juarez, Jr.

International Trade & Border Coordinator
tim.juarez@txdot.gov
512-305-8588
Discussion
KCS Gateways for Refined Products Exports to Mexico

**Origins**
- Beaumont
- Houston
- Brownsville
- Corpus Christi
- Tampico / Altamira
- Veracruz
- Lazaro Cardenas

**Destinations**
- Monterrey [MTY]
- San Luis Potosi [SLP]
- Queretaro [QA]
- Irapuato
- San Jose Iturbide [SJI]
- Tula
- Mexico City [CD MX]
- Toluca
Texas in the NAFTA Era

BORDER TRADE ADVISORY COMMITTEE
Corpus Christi, Dec. 6, 2017

Jesus Cañas
Federal Reserve Bank of Dallas
Texas exports grow faster in post-NAFTA period

Index, 1988 = 100; real values

Sources: WISERTrade; Census Bureau.
Texas: Nation’s biggest exporter

- Texas exports around $250 billion
  - California at $163 billion; Washington state $86 billion
- Census Bureau estimates exports support an estimated 1.1 million jobs in Texas
  - Close to 10 percent of total employment
- 75 percent of U.S.–Mexico land trade (some $350 billion) crosses via a Texas port of entry
Texas exports to Mexico quite diverse

- Computers and electronics, 26%
- Transportation equipment, 12%
- Petroleum & coal products, 11%
- Chemicals, 10%
- Oil & gas, 3%
- Misc. manufactured goods, 2%
- Machinery, ex. electrical, 6%
- Electrical equipment, 8%
- Other, 7%
- Fabricated metal products, 4%
- Plastics & rubber products, 4%
- Primary metal mfg., 4%
- Food & kindred products, 3%

NOTES: Data from 2015. "Other" includes all categories under 2 percent.
SOURCE: U.S. Trade Database, Census Bureau.
Texas gains jobs, income in NAFTA era

- Job growth a percentage point higher than nation
  - Over 4 million jobs gained between 1994-2015

- Per capita income growth faster than the nation
  - Rose from $30,000 to $47,000
  - Household income has caught up to the nation ($56,000)
U.S. Exports highly correlated with Intermediate Imports from Mexico

Billions of dollars

- Consumer goods imports from Mexico
- Intermediate goods imports from Mexico
- U.S. total exports

SOURCES: Bureau of Economic Analysis and Haver Analytics.
Cross border manufacturing boosts employment in Texas border cities

<table>
<thead>
<tr>
<th>Estimation method: IV</th>
<th>El Paso</th>
<th>Laredo</th>
<th>McAllen</th>
<th>Brownsville</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>2.77*</td>
<td>4.62</td>
<td>6.58*</td>
<td>2.21</td>
</tr>
<tr>
<td>Construction</td>
<td>0.20</td>
<td>3.19</td>
<td>4.04*</td>
<td>1.29*</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>-1.28</td>
<td>1.02</td>
<td>1.64</td>
<td>0.66</td>
</tr>
<tr>
<td>Transportation</td>
<td>5.30*</td>
<td>7.21*</td>
<td>6.63*</td>
<td>4.6*</td>
</tr>
<tr>
<td>Wholesale</td>
<td>0.43</td>
<td>1.96</td>
<td>4.01*</td>
<td>0.84</td>
</tr>
<tr>
<td>Retail</td>
<td>1.31</td>
<td>0.66</td>
<td>3.21*</td>
<td>1.34*</td>
</tr>
<tr>
<td>FIRE</td>
<td>2.12*</td>
<td>8.23*</td>
<td>4.63*</td>
<td>0.64</td>
</tr>
<tr>
<td>Services</td>
<td>1.84*</td>
<td>5.93*</td>
<td>7.38*</td>
<td>3.89*</td>
</tr>
</tbody>
</table>

NOTES: This table shows elasticity estimates. That is the table shows the percentage increase in local employment from a 10 percent increase in maquiladora production for each Texas Border Cities. * indicates significant at the 10% level.

Unemployment rates declined along the border after NAFTA.


Federal Reserve Bank of Dallas
Texas border cities narrowing the income gap with nation

(income as a share of U.S. total)

<table>
<thead>
<tr>
<th>City</th>
<th>1990</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>El Paso</td>
<td>64.6</td>
<td>67.8</td>
</tr>
<tr>
<td>Laredo</td>
<td>49.3</td>
<td>61.9</td>
</tr>
<tr>
<td>McAllen</td>
<td>48.1</td>
<td>51.1</td>
</tr>
<tr>
<td>Brownsville</td>
<td>51.2</td>
<td>55.8</td>
</tr>
</tbody>
</table>

SOURCE: Bureau of Economic Analysis.
US-Mexico energy connection

- Infrastructure development
  - Upstream, downstream
  - **Midstream**: transportation, storage, and wholesale marketing

- Already taking place in gas

- Potential issues
  - Labor supply
  - Security
Mexico’s Energy Reform Ties Electricity Prices to Natural Gas Export Prices

NOTE: Black line indicates date of reform, Aug. 2014.
SOURCES: U.S. Energy Information Administration; Sistema de Información Energética (Energy Information System); authors’ calculations.

*CPI-deflated; seasonally adjusted; 3-month centered moving average.
Are you having problems finding qualified workers when hiring?

Share responding ‘Yes’

Note: The number of responding firms is shown in parenthesis.
If you are having problems finding workers, in which categories are you experiencing difficulty?

Share of firms

<table>
<thead>
<tr>
<th>Category</th>
<th>Share of Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-skill positions</td>
<td>47%</td>
</tr>
<tr>
<td>Mid-skill positions</td>
<td>60%</td>
</tr>
<tr>
<td>High-skill positions</td>
<td>38%</td>
</tr>
</tbody>
</table>

Notes: Data were collected Nov. 13-21 and 250 firms answered this question. On the survey form we defined low-skill positions as typically requiring a high school diploma or less and minimal work experience, mid-skill positions as typically requiring some college or technical schooling, and high-skill positions as typically requiring a college degree or higher.
Labor market tightness in Texas increasing

- Most acute for mid-skill positions
- Lack of applicants is now #1 hiring impediment
  - SB4, really?
- Half of firms are increasing wages to recruit/retain workers
- More than 40% of firms are able to pass increased labor costs on in the way of price increases
Security

– Theft from PEMEX > $1 billion per year

Source: Associate Press
TEXAS-MEXICO BORDER STRATEGIC TRANSPORTATION BLUEPRINT

Border Trade Advisory Committee
Blueprint Purpose

- The **Texas Border Strategic Transportation Blueprint** is the framework for addressing Texas-Mexico border and serving trade corridor needs.

- The Blueprint is the first planning effort that outlines a single vision for the state’s border crossings and the trade transportation network that serves the Texas-Mexico border.

- The Blueprint is a coordinated effort of the BTAC and the Texas Department of Transportation to develop a framework for addressing Texas-Mexico border crossings and trade transportation corridor needs.
The overall development of the Blueprint has followed three steps:

1. Development of the Blueprint Mission, Vision, Goals, and Objectives,
2. Identify the key challenges that are related to the Blueprint Goals, and
3. Identify recommendations to address those challenges.

The Blueprint is being developed in close coordination with the BTAC. The BTAC provides a forum for the exchange of communications between the Secretary of State, TxDOT, and committee members representing border trade interests.
Vision Statement:

- To collaboratively foster integrated and efficient binational/global trade across the Texas-Mexico border and to promote economic development that benefits the border region, Texas, and the United States.

Mission Statement:

- To develop and implement a trade, economic development, and transportation strategy and public policy that facilitates U.S.-Mexico border trade, creates efficient corridors, and enhances the economies of the Texas border region, the state, and the nation.
Develop a Comprehensive and Unified Vision for the Texas Border among Members of the Border Community

- No unified vision, goals, and objectives for the border region
- Uncoordinated public and private sector goals along the border
- Lack of integration of individual community goals and objectives into border-wide ones

Increase Public Awareness and Education

- Lack of awareness and understanding of trade and border region’s contribution to state and national economies
- Lack of awareness and understanding of border issues outside border region

Improve the Operation, Efficiency, and Capacity of Texas’s Trade Gateways (Border Crossings)

- Policy and regulatory impediments
- Capacity constraints/congestion
- Operational constraints
- Lack of funding to invest in infrastructure and operations
Blueprint Goals and Challenges

Improve Transportation Network Connections to Texas’s Trade Gateways, Within the Texas Border Regions, and Between Texas Border Regions and the Rest of the State and the Nation

- Insufficient connectivity and capacity of network linking to border crossings (last mile)
- Limited connectivity and capacity of transportation network linking border regions
- Limited connectivity and capacity of key trade corridors
- Inadequate robust data for appropriate decision making

Enhance Binational Communication, Coordination, Collaboration, and Cooperation on Gateways and Transportation Corridors

- Lack of understanding of institutions and institutional frameworks in the U.S. and Mexico
- Insufficient binational dialogue and coordination
- Insufficient coordination between public and private sectors
- Limited knowledge of Mexican investments that can impact trade
Texas Border Strategic Transportation Blueprint Recommendations

- Develop Texas Border Strategic Transportation Blueprint
- Provide forum for public and private sector stakeholders to provide input on border and trade related transportation issues
- Outline investment strategies that link investments to state’s economic goals
- Continue working with BTAC members, border stakeholders, and general public to identify local interests and goals

Develop a comprehensive and unified vision for the Texas border among members of the border community
Increase Public Awareness and Education

- Prepare material communicating importance of trade with Mexico to Texas and national economy
- BTAC members to speak about benefits of trade with Mexico to constituents, colleagues, and at public venues
- Prepare case studies to illustrate how inland (away from border) businesses benefit from investments in border infrastructure
Texas Border Strategic Transportation Blueprint Recommendations

- Promote federal adoption of streamlined procedures
- Evaluate opportunities to standardize systems, processes, and capabilities
- Promote pre-clearance of appropriate goods
- Work with CBP and Mexican authorities to combine locomotive inspections
- Analyze border crossing capacity and needs, and identify infrastructure constraints
- Construct commercial truck parking/staging areas within border regions
- Identity new technologies for deployment
- Develop comprehensive border investment plan
- Document processes to effectively compete for federal, state, and local funding
- Promote dedicated funding source and identify for innovative alternatives for border infrastructure

Improve the operation, efficiency, and capacity of Texas’s border crossings
Texas Border Strategic Transportation Blueprint Recommendations

- Eliminate or minimize at-grade crossings in urbanized areas
- Evaluate impacts and benefits of OS/OW corridors along border
- Secure funding for local last-mile connections to border crossings
- Identify intra-border freight transportation needs and promote cooperation through BTAC
- Support and encourage multistate planning for key trade corridors serving U.S.-Mexico trade
- Identify opportunities to improve existing highway and rail corridors
- Widen interstate highway between border and major Texas cities
- Support development of new corridors
- Develop a robust and integrated binational freight and trade database

Improve transportation network connections to Texas’s border crossings, within the Texas border regions, and between Texas border regions and the rest of the state and the nation.
Texas Border Strategic Transportation Blueprint Recommendations

- Develop framework for binational coordination and collaboration
- Establish a Texas-Mexico Trade Transportation Task Force
- Develop binational transportation and border crossing master plan
- Invite Mexican agencies and firms to attend BTAC meetings
- Develop binational agreement on strategic trade transportation issues/needs
- Encourage binational participation on border and trade transportation priorities and investments
- Outline roles and responsibilities of U.S. and Mexican federal, state, regional, and local government agencies
- Engage both Texas and Mexico public and private stakeholders on border, trade, and transportation issues
- Assess potential impact of Mexican investments on trade flows in Texas

Enhance Binational Communication, Coordination, Collaboration, and Cooperation on Border Crossings and Transportation Corridors
Key early wins recommendations based on input from Secretary of State:

1. Establish a Texas-Mexico Trade Transportation Task Force
2. Develop a Trade Lanes Program
3. Develop a Public Awareness and Education Program
4. Implement Technology and Innovative Binational Border Strategies
5. Foster Private Sector Involvement
1. Establish a Texas-Mexico Trade Transportation Task Force

Implementation Strategy

1. Execute a Memorandum of Understanding
2. Develop Work Plan
3. Hold Quarterly Meetings

Champions:

Subcommittee Meetings

Lower Rio Grande Valley-Tamaulipas Region Stakeholders
Laredo-Tamaulipas-Coahuila Region Stakeholders
El Paso-Chihuahua Region Stakeholders

Topic Subcommittee Meetings
Participants based on issue to be discussed. Could include members and invited stakeholders
2. Develop a Trade Lanes Program

Implementation Strategy Steps

1. Formalize the Program
2. Review Projects and Investments
3. Identify Critical Trade Gateways and Corridors
4. Identify System Gaps
5. Develop Analysis Criteria
6. Review and Identify Funding
7. Develop Recommendations

**Texas Border Trade Lanes Program for FY 2017–FY 2020 (in Millions of Dollars).**

<table>
<thead>
<tr>
<th>Project Category</th>
<th>El Paso District</th>
<th>Laredo District</th>
<th>Pharr District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridge rehabilitation</td>
<td>$25.11</td>
<td>$0.72</td>
<td>$0.00*</td>
</tr>
<tr>
<td>Congestion mitigation</td>
<td>$341.62</td>
<td>$205.17</td>
<td>$0.00*</td>
</tr>
<tr>
<td>Mobility</td>
<td>$471.17</td>
<td>$192.77</td>
<td>$1,353.40</td>
</tr>
<tr>
<td>Rail</td>
<td>$12.55</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Rehabilitation/maintenance</td>
<td>$73.82</td>
<td>$100.00</td>
<td>$134.57</td>
</tr>
<tr>
<td>Safety</td>
<td>$37.11</td>
<td>$7.69</td>
<td>$0.00*</td>
</tr>
<tr>
<td>Technology improvements</td>
<td>$1.47</td>
<td>$0.60</td>
<td>$0.00*</td>
</tr>
<tr>
<td>Total</td>
<td>$961.39</td>
<td>$506.75</td>
<td>$1,487.98</td>
</tr>
</tbody>
</table>
3. Develop a Public Awareness and Education Program

Implementation Strategy Steps

1. Develop a Public Awareness and Education Program
2. Develop education and outreach materials
3. Conduct Stakeholder and Public Outreach Efforts
4. Disseminate Education and Outreach Materials
5. Assess Outreach and Dissemination Effectiveness

Champions:

- Texas Farm Bureau.
- Texas International Produce Association.
- Texas Oil and Gas Association.
- Texas Ports Association.
- Texas Retailers Association.
- Chambers of commerce.

Supporting agencies may include, but are not limited to:

- Border Trade Alliance.
- Borderplex Alliance.
- Laredo Development Foundation.
- Pharr Economic Development Corporation.
- Texas Association of Manufacturers.
- Texas Economic Development Council of commerce.
### Implementation Strategy Steps

**Piloting Unified Cargo Processing (UCP)**

1. Review Lessons Learned from UCP Pilots in Arizona and California
2. Identify Stakeholders and Stakeholder Roles in Piloting UCP
3. Develop UCP Pilot(s) at Texas-Mexico Border Crossings
4. Develop a Detailed Technology/Strategy Implementation Monitoring System
5. Report to the BTAC and the Texas-Mexico Trade Transportation Task Force

**Champions:**

- [ ]
- [ ]
- [ ]
- [ ]
- [ ]
4. Implement Technology and Innovative Binational Border Strategies

**Implementation Strategy Steps**

**Champions:**

*Piloting Shipment Tracking Technology*

1. Review Lessons Learned from the Secure Origins Pilot
2. Identify Stakeholders and Stakeholder Roles in Evaluating and Piloting Shipment Tracking Technologies
3. Determine Industry Support
4. Develop a Pilot Deployment Plan
5. Determine Pilot Effectiveness and Implementation Recommendations
6. Develop a Detailed Technology/Strategy Implementation Monitoring System
7. Report to BTAC and the Texas-Mexico Trade Transportation Task Force
4. Implement Technology and Innovative Binational Border Strategies

Implementation Strategy Steps

Implementing Binational Traffic Management Centers

1. Identify Stakeholders and Stakeholder
2. Assess Existing Systems and Needs, Develop a Concept of Operations, and Prepare the System Security Design
3. Develop a Binational TMC Communications Architecture
4. Develop a Binational TMC Deployment Plan
5. Develop a Detailed Technology/Strategy Implementation Monitoring System
6. Report to BTAC and the Texas-Mexico Trade Transportation Task Force
5. Foster Private Sector Involvement

Implementation Strategy Steps

**Form Bilateral Private-Sector Stakeholder Networks**
1. Identify Private-Sector Stakeholders
2. Form the Stakeholder Network
3. Conduct Stakeholder and Public Outreach Events

**Develop an Information-Sharing Platform with the Stakeholder Networks**
1. Create an Information Subcommittee
2. Information Gathering, Sharing, and Presentation

**Facilitate Communication and Coordination between Public and Private Sector Stakeholders**
1. Coordinate with Private Sector Stakeholders on Needs Identification and Strategy Development
2. Communicate Public-Sector Project Development Progress
QUESTIONS OR COMMENTS