TEXAS FREIGHT MOBILITY PLAN UPDATE
Stakeholder Workshops- Round 1

TFMP OVERVIEW AND THE FAST ACT (CAROLINE’S SLIDES)
DEVELOPING A FAST ACT COMPLIANT PLAN

Update Assessment

- Data refresh and new elements
- Enhancements and expansions
- Balance with expedited schedule

FAST Act Requirements

TxDOT and TxFAC Priorities

Update Work Plan & Outreach
Overview of Process

Consultant Team Review
- Chapter by chapter review
- Data inventory and review
- Assessment matrix development

TxDOT Review
- Draft assessment matrix review
- Final review and work plan approval

TxFAC Input
- Review of previous meeting minutes
- Discussion of draft assessment

Initial Assessment Priorities

- Data refresh
  - 2015 TRANSEARCH commodity flow
  - Rail Way-bill data
  - Economic data refresh
  - TxDOT data refresh – traffic, crash statistics, HPMS, recent plans and reports, etc.
- New FAST Act requirements
- Enhancements and expansions
New FAST Act Elements

**Designate Critical Corridors**
- Urban (373.78 miles)
- Rural (745.55 miles)

**Develop Performance Measures**
- Meet Federal requirements
- TxDOT specific measures

**Develop Freight Investment Plan (FIP)**
- Examine TMFP for projects on NPFN
- Examine UTP projects
- Coordinate with FAC, districts, MPOs and stakeholders

Texas FIP Eligible Miles
- PFHN - 3652.59 miles
- PFHN Intermodal Connectors – 75.18 miles
- Critical urban and rural corridors
TFMP Enhancements and Expansions

- Integration with supply chains throughout
- In-depth look at trade policies and implications (upside and downside)
- Update freight network
- Performance measures and performance based planning
- Communicate role of Texas freight in state and national economy
- Account for technology changes in forecasts and solutions
- SWOT analysis of mode share by commodity for key supply chains
- Refresh policies, program and project recommendations

FAST Act Plan Timeline

<table>
<thead>
<tr>
<th>Months</th>
<th>Dec 16</th>
<th>Jan 17</th>
<th>Feb 17</th>
<th>Mar 17</th>
<th>Apr 17</th>
<th>May 17</th>
<th>Jun 17</th>
<th>July 17</th>
<th>Aug 17</th>
<th>Sep 17</th>
<th>Oct 17</th>
<th>Nov 17</th>
<th>Dec 17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1: Stakeholder outreach</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Regional workshops</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Stakeholder interviews</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2: Designate corridors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Draft corridors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Final corridors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 3: Performance measures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Develop measures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Implement calculations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 4: Freight Investment Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 5: FAST Compliant Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Draft plan for review</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Final Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Stakeholder Input

- Trends and Policies Affecting Freight Flows
  - Economic and trade
  - Technology
  - Business and consumer practices
  - Regulations and institutional setting

To Participate in Poll

http://Camsys.participoll.com/
Economic Trends

Over the next 5 years, do you think the economy in the region will:

A. Decline
B. Stay about the same
C. Grow slower than the rest of the state
D. Grow faster than the rest of the state
E. Grow about the same as the rest of the state
F. Not sure

Economic Trends

What do you think will have the largest impact on region’s economy:

A. Population growth
B. Trade dynamics and policy
C. Energy dynamics and policy
D. Tax policy
E. Other
**Economic Trends**

How are proposed changes in trade dynamics and policy likely to impact freight in your region over the next 10 years:

A. Decline  
B. Stay about the same  
C. Grow slower than in the past 5 years  
D. Grow faster than in the past 5 years  
E. Grow about the same as the past five years  
F. Not sure

**Economic Trends**

How are proposed changes in energy dynamic and policy likely to impact freight in your region over the next 10 years:

A. Decline  
B. Stay about the same  
C. Grow slower than in the past 5 years  
D. Grow faster than in the past 5 years  
E. Grow about the same as the past five years  
F. Not sure
Economic Trends

How are proposed changes in tax policy likely to impact freight in your region over the next 10 years:

A. Decline
B. Stay about the same
C. Grow slower than in the past 5 years
D. Grow faster than in the past 5 years
E. Grow about the same as the past five years
F. Not sure

Economic Trends

How are proposed changes in immigration policy likely to impact freight in your region over the next 10 years:

A. Decline
B. Stay about the same
C. Grow slower than in the past 5 years
D. Grow faster than in the past 5 years
E. Grow about the same as the past five years
F. Not sure
Technology

What technologies do you think will have the greatest impact on freight movements in your region in the next 10 years:

A. Autonomous and connected trucks
B. Alternative delivery systems (drones, freight shuttles, etc.)
C. Advances in manufacturing
D. “Uber-like” cargo shipping
E. Warehouse and factory automation
F. Other

Business and Consumer Practices

What changes in business practices will have the greatest impact on freight movements in your region in the next 10 years:

A. Near-shoring
B. Off-shoring
C. Supply chain traceability and identity preservation
D. Omni-channel marketing and distribution
E. Transloading
F. Other
### Business and Consumer Practices

**How will changes in business practices impact growth in freight movements in your region in the next 10 years:**

- A. Decline
- B. Stay about the same
- C. Grow slower than in the past 5 years
- D. Grow faster than in the past 5 years
- E. Grow about the same as the past five years
- F. Not sure

### Business and Consumer Practices

**What changes in consumer practices will have the greatest impact on freight movements in your region in the next 10 years:**

- A. E-Commerce
- B. Sharing economy
- C. Same day/next day delivery expectations
- D. Changing consumer attitudes (socially-based consumption)
- E. Changing consumer demographics and tastes
- F. Other
How will changes in consumer practices impact growth in freight movements in your region in the next 10 years:

A. Decline
B. Stay about the same
C. Grow slower than in the past 5 years
D. Grow faster than in the past 5 years
E. Grow about the same as the past five years
F. Not sure

What change in shipping patterns do you think will most impact freight movements in your region:

A. Truck to rail diversions
B. Rail to truck diversions
C. Containerization of bulk commodities
D. Substitution of all-water routes over land bridges
E. Other
What regulations and/or institutional settings do you think will most impact freight movements in your region:

A. Environmental
B. Carrier industry (trucking, rail, waterborne)
C. Labor agreements
D. Security measures
E. Foreign Trade Zones (FTZs)
F. Other
Defining Critical Urban Corridors

- Connects an intermodal facility to:
  - the PHFS
  - the Interstate System
  - an intermodal freight facility
- Located within a corridor of a route on the PHFS and provides an alternative highway option important to goods movement
- Serves a major freight generator, logistic center, or manufacturing and warehouse industrial land
- Important to the movement of freight within the region, as determined by the MPO or the State.

Defining A Critical Rural Corridor

One or more of the following seven elements:

- Minimum of 25 percent of the AADT from trucks
- Provides access to energy exploration, development, installation, or production areas
- Connects the PHFS or the Interstate System to facilities that handle more than:
  - 50,000 20-foot equivalent units per year; or
  - 500,000 tons per year of bulk commodities;
- Provides access to:
  - a grain elevator;
  - an agricultural facility;
  - a mining facility;
  - a forestry facility; or
  - an intermodal facility
- Connects to an international port of entry
- Provides access to significant air, rail, water, or other freight facilities in the State
- Vital to efficient movement of freight of importance to the State’s economy
Objective

- Develop systematic process for designating critical network and corridors
  - Tied to national and TFMP goals, objectives and performance measures
  - Readily available data
  - Replicable
  - Transparent
  - Stakeholder informed
- Accomplished using GIS based tool for efficiency and objectivity

System Designation Process

TFMP Goals

- Economic Growth and Prosperity
  - Safe and efficient freight movement
  - Maintain and enhance state of good repair
  - Multimodal connectivity
  - Embrace environmental stewardship and technological innovations

Analysis

- General economic analysis
- Goods movement analysis
- Supply chain analysis for targeted industries
- Market connectivity & accessibility analysis

Modal designation

- Highways
- Intermodal connectors
- Marine
- Rail
- Aviation
- Pipeline
General Economic Analysis Metrics

- Demographic preparedness index – workforce quality and quantity
- Export support – support businesses serving areas beyond local market and provides access to gateways
- Freight intensity index – employment and number of establishments in transportation dependent industries
- Supporting facilities/infrastructure – serves regional economic generators that also require significant freight such as military, education and medical facilities
- Equity – supports/serves economically emerging areas

Goods Movement Analysis Metrics

- Truck volumes
- Truck percentages
- Truck travel time
- Change in Truck VMTs/VHTs
- Commodity tonnage and value
## Supply Chain Analysis Metrics

- Number of targeted supply chain industries
- Number/size of establishments in each supply chain supported

<table>
<thead>
<tr>
<th>Aerospace, Aviation and Military/Defense</th>
<th>Advanced technology and manufacturing (i.e., automotive, electronics)</th>
<th>Biotechnology and Life Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information and Communications Technology</td>
<td>Chemicals, Plastics and Rubber</td>
<td>Trade and Distribution/Logistics</td>
</tr>
<tr>
<td>Agriculture and Food Processing and Distribution</td>
<td>Energy</td>
<td>Petroleum refining and chemicals</td>
</tr>
</tbody>
</table>

## Market Access and Connectivity Metrics

- Connectivity to major North American trading partners
- Access to international gateways
  - Gateway volumes
  - Markets served
  - Number and schedule of vessel calls/international flights/trains/BPOE
DISCUSSION

Break-out Groups

- System designation process
  - What are key metrics that should be considered?
  - How should metrics be weighted?

- Defining the critical freight network for Texas
  - What are the key existing multimodal freight facilities in your region?
  - What are future key freight facilities for your region?
Regional Workshops – Round 1

**Week 1**
- Jan. 31 – Laredo, Feb. 1 – Brownsville, Feb 2 - Corpus Christi

**Week 2**
- Feb. 8 –Dallas/Fort Worth, Feb. 9 –Atlanta/Texarkana

**Week 3**

**Week 4**
- Feb. 28 – Beaumont, March 2 – San Antonio, March 3- Houston

Second Round of Workshops

- June, 2017
- Key topics
  - Overview of revised freight data and forecasts
  - Economic and supply chain analysis
  - Focused input on:
    - Key supply chain challenges and opportunities
    - Project, policy and program recommendations
**FAST Act Plan Timeline**

<table>
<thead>
<tr>
<th>Months</th>
<th>Dec 16</th>
<th>Jan 17</th>
<th>Feb 17</th>
<th>Mar 17</th>
<th>Apr 17</th>
<th>May 17</th>
<th>Jun 17</th>
<th>Jul 17</th>
<th>Aug 17</th>
<th>Sep 17</th>
<th>Oct 17</th>
<th>Nov 17</th>
<th>Dec 17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1: Stakeholder outreach</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Regional workshops</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Stakeholder interviews</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2: Designate corridors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Draft corridors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Final corridors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 3: Performance measures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Develop measures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Implement calculations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 4: Freight Investment Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 5: FAST Compliant Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Draft plan for review</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Final Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>