Texas Freight Advisory Committee

Meeting starts at 8:15 AM with Roll Call shortly after.
Thank you for attending!!

Help make this is successful webinar:
• Ensure your phone and computer microphone are muted.
• Familiarize yourself with the chat box and participant list.
• If not speaking, periodically check your devices to ensure they are muted.

If you have unmuted your device and are trying to speak but no one is hearing you, touch *6 or send your message to the chat box. If you’re still having difficulty, text Kale Driemeier at 512-649-6825.
<table>
<thead>
<tr>
<th>Agenda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meeting Overview and Introductions</td>
</tr>
<tr>
<td>Review of March 31, 2020 TxFAC Meeting and Ongoing Freight Planning Activities</td>
</tr>
<tr>
<td>Permian Basin Freight and Energy Sector Transportation Plan</td>
</tr>
<tr>
<td>Permian Basin Panel: Local Perspective</td>
</tr>
<tr>
<td>Rio Grande Valley Freight and Trade Transportation Plan</td>
</tr>
<tr>
<td>Next Steps and Wrap Up Discussion</td>
</tr>
</tbody>
</table>
Meeting Recap – March 31, 2020

Review of the Statewide Truck Parking Study

- Why Truck Parking Matters
- The Current State of Truck Parking in Texas
- Truck Parking Needs Assessment
- Addressing Truck Parking Needs in Texas
- TPAS – I-10 Corridor Coalition
Freight Projects - Texas Freight Mobility Plan Implementation

Freight Infrastructure Design Considerations

- Developing Preliminary Minimal and Optimal Design Standards
- Working with Design Division to coordinate on the updated Design Manual.
- Completion Date of April 2021

Freight Network Technology and Operations Plan

- Strategies and Conceptual Framework are under development
- 6 Concepts of Operations will be developed for Implementation
- Completion Date of December 2020

Economic Role of Freight in Texas

- Assessments of Districts, Texas Triangle, and Statewide impacts and modal assessments to be completed in October 2020
- Next Working Group Meeting – September 29, 2020
Permian Basin Freight and Energy Sector Transportation Plan
Permian Basin Freight Plan Foundation

TxFAC and Texas Freight Mobility Plan (TFMP) laid the groundwork for the Permian Basin Freight and Energy Sector Transportation Plan:

- TxFAC Meeting: August 2014
- TFMP Workshop: February and June 2017
- Truck Parking Study Workshop: February 2019

TxFAC Policy and Program Recommendations in the TFMP:

- **Rural Connectivity**: the state should continue to address freight transportation issues critical to the rural areas in Texas that support economic development, including particular emphasis on infrastructure for transporting agricultural and energy sector equipment and products.

- **Energy Sector Development Transportation**: the state should continue to identify and address current and future energy freight transportation needs and impacts.

- **Pipeline Infrastructure**: TxDOT and the Texas Railroad Commission should work with the public and private sectors in support of strategies that address pipeline needs.

- **Institutional Coordination and Collaboration**: TxDOT should coordinate with international, national, state, regional and local agencies and private sector stakeholders.

- **Freight Movement Education and Public Awareness**: the state should develop a Freight Movement Public Education and Awareness Program to educate the public, elected officials, policymakers and other stakeholders on the economic benefits of freight and safety-related issues.

- **Economic Development and Economic Competitiveness**: the state should align investments in the transportation system with the state’s vision for economic growth and global competitiveness.

- **Texas as a Global Trade and Logistics Hub and Gateway**: the state should invest in strategic transportation solutions to ensure Texas is the leader in North American trade and a top international trade gateway and national logistics hub.

- **Multimodal Freight Planning, Programming and Implementation**: TxDOT should implement multimodal freight planning, programming and implementation guidelines for integrating freight into the TxDOT investment decision-making process.

- **Urban Freight Movement**: the state should continue to address freight transportation issues critical to the urban areas in Texas that support mobility and economic growth. The FAST Act placed particular emphasis on addressing congestion and freight bottlenecks which are primarily in the state’s largest urban areas.
Permian Basin Freight Plan Steering Committee

<table>
<thead>
<tr>
<th>Private Sector</th>
<th>Public Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Permian Road Safety Coalition</td>
<td>• Elected Officials (Chair: Ector County Judge Debi Hays)</td>
</tr>
<tr>
<td>• Permian Strategic Partnership</td>
<td>• Permian Basin MPO</td>
</tr>
<tr>
<td>• Permian Basin Petroleum Association</td>
<td>• Permian Basin Regional Planning Commission</td>
</tr>
<tr>
<td>• Midland Odessa Transportation Alliance (MOTRAN)</td>
<td>• Cities and Counties</td>
</tr>
<tr>
<td>• Association of Energy Sector Contractors</td>
<td>• Texas Railroad Commission</td>
</tr>
<tr>
<td>• International Association of Drilling Contractors</td>
<td>• Port Authority Advisory Committee (Freeport)</td>
</tr>
<tr>
<td>• Union Pacific Railroad</td>
<td>• Chambers of Commerce</td>
</tr>
<tr>
<td>• Texas Pacifico</td>
<td>• Economic Development Corporations</td>
</tr>
<tr>
<td>• Atlas Sand</td>
<td>• TxDOT Districts</td>
</tr>
<tr>
<td>• XTO Energy</td>
<td>Non Committee Attendee/Participant</td>
</tr>
<tr>
<td>• Chevron</td>
<td>• Midland EDC</td>
</tr>
<tr>
<td>• Atmos Energy</td>
<td>• Railroad Commission of Texas</td>
</tr>
<tr>
<td>• Charger Services</td>
<td>• Texas A&amp;M Transportation Institute (TTI)</td>
</tr>
<tr>
<td>• Schlumberger</td>
<td>• NMDOT – Roswell District</td>
</tr>
<tr>
<td>• Warren Caterpillar</td>
<td>• Port of Corpus Christi</td>
</tr>
<tr>
<td>• Salazar Trucking</td>
<td></td>
</tr>
<tr>
<td>• Encore Pipe (large truck fleet)</td>
<td></td>
</tr>
<tr>
<td>• Standard Sales (large truck fleet)</td>
<td></td>
</tr>
</tbody>
</table>

Permian Basin MPO is adapting the Steering Committee into the Permian Basin Freight Advisory Committee.
# Permian Basin Freight Plan Overview

## Planning for Freight and Energy Sector Transportation in the Permian Basin

## Permian Basin Freight Network Challenges, Conditions and Opportunities

## Addressing the Freight Needs and Challenges,

## Permian Basin Freight Plan Implementation
Planning for Freight and Energy Sector Transportation in the Permian Basin
Data-Driven Approach

- TxDOT Open GIS Portal
- TxDOT Crash Records Information System
- TxDOT Statewide Analysis Model, Version 4
- TRANSEARCH Commodity Flow
- Enverus Drillinginfo Database
- FracFocus Database
- In Vehicle Monitoring System (IVMS) Data
- New Mexico Energy, Minerals, and Natural Resources Department
- Texas Water Development Board
- Texas Railroad Commission
- U.S. Energy Information Administration
- Moody’s Economic Forecasts and TREDIS Economic Model
- MOTRAN
- Permian Basin Petroleum Association
- Texas Comptroller’s Office
- Texas Department of Motor Vehicles

Over 40 data sources used

Not an exhaustive list
Stakeholder Outreach Approach

- 5 Steering Committee Meetings
- 25 Stakeholder Interviews
- 2 Industry Surveys
- 12 Industry and Community Forums
- Multiple Meetings and Webinars
Technical Reports Supporting the Plan

- Goals and Objectives
- Permian Basin Multimodal Freight Network Designation
- Regional Freight Profile, Issues, Challenges, and Opportunities
- Land Use and Freight Assessment
- Trends, Forecasts, and Needs Assessments
- Economic Role of Permian Basin Energy Sector and Freight Transportation
- Recommendations, Strategies, and Implementation Plan
Permian Basin’s Importance to Energy Production

- Produces more than 4 million barrels of oil per day
- Produces 50% of all natural gas in Texas, 15% in U.S.
- Permian Basin is number 1 in wind energy producing region in U.S.

Permian Basin’s Economic Impact is Larger than the Economies of the Following 12 States (millions $):

- Permian Basin: $89,900
- New Hampshire (NH): $88,595
- Idaho (ID): $80,911
- West Virginia (WV): $78,190
- Delaware (DE): $75,416
- Maine (ME): $67,519
- Rhode Island (RI): $63,541
- North Dakota (ND): $57,037
- Alaska (AK): $55,406
- South Dakota (SD): $53,306
- Montana (MT): $52,169
- Wyoming (WY): $39,646
- Vermont (VT): $34,785

Source: U.S. Bureau of Economic Analysis, 2019
Average per Capita Freight Tonnage, 2018

16 times more freight per capita in Permian Basin relative to statewide average

Source: Cambridge Systematics analysis of the TRANSEARCH dataset
## Total Annual Economic Impact, 2019

### Total Impact of Freight Transportation/Handling Activity in the Permian Basin, 2019

<table>
<thead>
<tr>
<th>Region</th>
<th>Employment</th>
<th>Labor Income (Millions of $2019)</th>
<th>GSP (Millions of $2019)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permian Basin (Texas Counties)</td>
<td>43,235</td>
<td>$3,604</td>
<td>$3,181</td>
</tr>
<tr>
<td>Rest of Texas</td>
<td>28,230</td>
<td>$3,386</td>
<td>$4,465</td>
</tr>
<tr>
<td>Total</td>
<td>71,465</td>
<td>$6,990</td>
<td>$7,646</td>
</tr>
</tbody>
</table>

### Total Impact of Energy Sector and Freight Intensive Activity in the Permian Basin, 2019

<table>
<thead>
<tr>
<th>Region</th>
<th>Employment</th>
<th>Labor Income (Millions of $2019)</th>
<th>GSP (Millions of $2019)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permian Basin (Texas Counties)</td>
<td>354,520</td>
<td>$27,587</td>
<td>$44,373</td>
</tr>
<tr>
<td>Rest of Texas</td>
<td>339,750</td>
<td>$17,495</td>
<td>$38,094</td>
</tr>
<tr>
<td>Total</td>
<td>694,270</td>
<td>$45,082</td>
<td>$82,467</td>
</tr>
</tbody>
</table>

Source: CS analysis using IMPLAN and TREDIS
Tax Revenues Generated by Permian Basin Energy Sector and Freight Intensive Activity

Non-Severance Tax Revenues, 2019

<table>
<thead>
<tr>
<th></th>
<th>Federal Taxes (Millions of $2019)</th>
<th>State /Local Taxes (Millions of $2019)</th>
<th>Total (Millions of $2019)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permian Basin</td>
<td>$4,746</td>
<td>$5,618</td>
<td>$10,364</td>
</tr>
<tr>
<td>Rest of the State</td>
<td>$5,903</td>
<td>$3,650</td>
<td>$9,554</td>
</tr>
<tr>
<td>Total</td>
<td>$10,649</td>
<td>$9,268</td>
<td>$19,919</td>
</tr>
</tbody>
</table>

Source: CS analysis using IMPLAN and TREDIS

Severance Tax and Royalties Revenues, 2019

<table>
<thead>
<tr>
<th></th>
<th>Millions of $2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Severance Taxes</td>
<td>$3,599</td>
</tr>
<tr>
<td>Royalties</td>
<td>$945</td>
</tr>
<tr>
<td>Total</td>
<td>$4,544</td>
</tr>
</tbody>
</table>

Source: The Permian Basin Enriching Texas, Permian Basin Petroleum Association (Spring 2020). Calculated by the Texas Taxpayers and Research Association; CS analysis

In 2019, nearly $25 Billion in Federal, state, and local taxes were generated in the Permian Basin.
Freight and Energy Sector Network Conditions, Challenges, and Opportunities
### Per Well Truck Trip Generation

The process of site preparation, pad construction, rig assembly, drilling/casing, rig disassembly, and follow-up site preparation/clean up, and fracturing can generate approximately **4,000 to 7,000 heavy truck trips** over 45 to 75 days.

Once the site enters its **production phase**, **30 to 50 heavy truck trips** are generated over a 20- to 30-day period.

Once the site enters its **maintenance** phase, **3 to 5 heavy truck trips** are generated per week.

### Well Truck Trip Generation in the Permian Basin: Sand and Water

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Annual Total Truck Trips (Loaded) (millions)</th>
<th>Annual Total Truck Trips (Loaded + Empty) (millions)</th>
<th>Average Daily Truck Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sand</td>
<td>1.60</td>
<td>3.20</td>
<td>8,770</td>
</tr>
<tr>
<td>Fresh Water</td>
<td>1.54</td>
<td>3.08</td>
<td>8,440</td>
</tr>
<tr>
<td>Produced Water</td>
<td>16.32</td>
<td>32.64</td>
<td>89,415</td>
</tr>
<tr>
<td>Total</td>
<td><strong>19.46</strong></td>
<td><strong>38.92</strong></td>
<td><strong>106,625</strong></td>
</tr>
</tbody>
</table>

Source: Cambridge Systematics analysis using Enverus, FracFocus, MOTRAN, Permian Basin Petroleum Assoc., and Steering Committee input.
Overview of Commodity Flows in the Permian Basin: Tonnage and Value

Tonnage and Value, 2018 & 2050

<table>
<thead>
<tr>
<th>Year</th>
<th>Tonnage</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>1,076.9 Mtns</td>
<td>38.3 Bln</td>
</tr>
<tr>
<td>2050</td>
<td>1,627.1 Mtns</td>
<td>76.9 Bln</td>
</tr>
</tbody>
</table>

Source: CS analysis based on Transearch, Enverus, and stakeholder input
Overview of Commodity Flows in the Permian Basin: Modal Split

**Total Tonnage by Mode, 2018**

- **Truck**: 92%
- **Rail**: 7%
- **Air**: <1%
- **Pipeline**: <1%
- **Mixed Modes**: <1%

1,076.9 Million Tons

**Total Value by Mode, 2018**

- **Truck**: $38.3 Billion
- **Rail**: 61%
- **Air**: 30%
- **Pipeline**: <2%
- **Mixed Modes**: .1%

Source: CS analysis based on Transearch, Enverus, and stakeholder input
Overview of Commodity Flows in the Permian Basin: Directional Flows

*Source: CS analysis based on Transearch, Enverus, and stakeholder input*
Permian Basin Highway Freight Network (PBHFN)

- 4,284 miles
- 1,363 Tier 1 miles
- 1,367 Tier 2 miles
- 1,554 Tier 3 miles
Permian Basin Multimodal Freight Network

- PBHFN
- Railroads
  - Union Pacific
  - Texas Pacifico
  - Texas-New Mexico
  - Pecos Valley Southern
- Pipelines
  - Crude oil and refined petroleum
  - Natural gas and natural gas liquids (NGLs)
- Midland International Air and Space Port
## Needs Assessment Criteria

<table>
<thead>
<tr>
<th>Category</th>
<th>Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MOBILITY AND RELIABILITY</strong></td>
<td>Truck counts, Truck travel time reliability, Buffer time index</td>
</tr>
<tr>
<td><strong>SAFETY</strong></td>
<td>Truck involved crashes, Rest areas and truck parking</td>
</tr>
<tr>
<td><strong>FREIGHT ASSET UTILIZATION AND PRESERVATION</strong></td>
<td>Pavement conditions, Bridge load restrictions and conditions, Vertical bridge clearance, Oversize/Overweight permits</td>
</tr>
<tr>
<td><strong>RURAL ROADS</strong></td>
<td>Frontage roads, Number of lanes</td>
</tr>
</tbody>
</table>

**Overlay factors on Freight Network Designation score**

Combined score of factors and relative freight importance to get high, medium, and low needs score.
Innovative Data Analysis

In Vehicle Monitoring System data (IVMS)

Enverus, FracFocus, Land Use
Stakeholder Identified Needs

- Congestion and Mobility
- Access and Connectivity
- Infrastructure
- Economic Competitiveness
- Land Use/Future Development
Combined Needs – Mobility, Safety, Asset Preservation, Rural Roads, and Truck Parking

- High and Medium Needs
- High Needs

Combined Medium and High Freight Needs
- 5 High & Medium Needs
- 4 High & Medium Needs
- 3 High & Medium Needs
- 2 High & Medium Needs
- 1 High & Medium Need
- 0 High & Medium Needs

Combined High Freight Needs
- 5 High Needs
- 4 High Needs
- 3 High Needs
- 2 High Needs
- 1 High Need
- 0 High Needs
Overview of Strategies and Recommendations

- **Operations**
  - Technology
  - Transportation System Management and Operations (TSM&O)

- **Programs**
  - TxDOT led
  - TxDOT supported
  - Freight Data Collection

- **Policies/Outreach/Coordination**
  - TxDOT led
  - TxDOT supported
  - Regional Freight Advisory Committee

- **Infrastructure**
  - Expansion projects
  - Modernization projects
  - Safety projects

Needs Assessment – Stakeholder Identified Strategies – Steering Committee Review – Final Recommendations
Policy, Outreach, and Coordination Strategies

<table>
<thead>
<tr>
<th>TxDOT Led Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop driveway separation and consolidation guidelines for improved access management</td>
</tr>
<tr>
<td>Integrate freight considerations into the Project Development process</td>
</tr>
<tr>
<td>Collaborate with Texas Railroad Commission (TX RRC) on adding transportation information, such as truck volume estimates, to permit applications</td>
</tr>
<tr>
<td>Track TX RRC permits for scheduling/location conflicts with planned projects or projects under construction</td>
</tr>
<tr>
<td>Develop truck traffic impact analysis guidelines to include freight considerations in urban and rural areas</td>
</tr>
</tbody>
</table>
## Policy, Outreach, and Coordination Strategies

<table>
<thead>
<tr>
<th>TxDOT Supported Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conduct research on human factors impacting safety in the Permian Basin to aid in developing training for drivers operating in the region</td>
</tr>
<tr>
<td>Assess the feasibility of off-peak truck operations</td>
</tr>
<tr>
<td>Develop regional land use guidelines for mitigating freight and energy sector conflicts with residential and commercial land uses</td>
</tr>
<tr>
<td>Collaborate with truck stop operators and local stakeholders to develop new or expand existing truck parking</td>
</tr>
<tr>
<td>Collaborate with regional and local stakeholders to encourage truck parking at non-TxDOT public facilities and private commercial and industrial sites</td>
</tr>
<tr>
<td>Collaborate with TxDMV to investigate the feasibility of an OS/OW load reporting program that includes annual permit usage information</td>
</tr>
<tr>
<td>Seek sustainable funding for transportation investments in the Permian Basin</td>
</tr>
<tr>
<td>Explore opportunities for public-private partnerships for projects and programs</td>
</tr>
<tr>
<td>Convene a biennial regional freight and energy sector transportation summit in partnership with regional stakeholders</td>
</tr>
</tbody>
</table>
Advancing Policy, Outreach, and Coordination Strategies

Policy
Short-term Actions

- Repair or replace malfunctioning equipment and deploy additional equipment in locations identified in the TxDOT WIM and VC Strategic Plan
- Develop public outreach materials for use at regional, statewide, and national levels
- Develop a standardized signage program for the Permian Basin
- Incorporate private lease roads and other major energy sector freight generators into access management guidelines for the PBHFN
- Develop a concept of operations for incident management program for the PBHFN
<table>
<thead>
<tr>
<th>TxDOT Led Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop an on-going freight data collection and repository program to address the Permian Basin freight data gap</td>
</tr>
<tr>
<td>Develop a freight transportation public education and awareness program</td>
</tr>
<tr>
<td>Develop a regional technology-based freight safety and operations (TSM&amp;O) Program</td>
</tr>
<tr>
<td>Develop and implement Permian Basin freight-centric design guidelines</td>
</tr>
<tr>
<td>Develop multimodal freight planning, programing, and implementation guidelines for integrating freight into the investment decision-making process</td>
</tr>
<tr>
<td>Integrate private lease roads and major freight generators into existing access management guidelines</td>
</tr>
<tr>
<td>Develop wayfinding and signage guidelines for urban and rural areas to include private leased roads and major freight generators</td>
</tr>
<tr>
<td>Develop a regional Incident Management Program with a focus on commercial vehicles</td>
</tr>
</tbody>
</table>
Program Strategies

TxDOT Supported Strategies

- Establish an on-going Permian Basin Freight Advisory Committee with public and private sector stakeholders
- Implement comprehensive, ongoing multimodal regional freight planning
- Develop regional multimodal thoroughfare plan
- Explore opportunities, regulations, and policies for intraregional mass transit or van-pool program servicing major freight employment sites
Advancing Program Strategies

Program Short-term Actions

- Develop access management guidelines for new driveways and driveway consolidation for existing driveways
- Integrate the freight design considerations for future infrastructure improvements
- Meet with the RRC to discuss incorporating additional data reporting requirements and obtaining drilling data to inform construction work zones
- Undertake research on the human factors associated with the safety challenges
- Develop and share freight land use considerations and mitigation factors
- Meet with TX DMV and users of OS/OW permits to exchange ideas on collecting, submitting, and sharing additional data
Operations and Technology Strategies

Ensure all roadways on the PBHFN have adequate road markings and lighting

Increase signage and wayfinding on the PBHFN including signage for lease roads and mile markers on TxDOT routes

Increase signage and ITS on freight routes for locations of truck parking, safety hotspots, queuing, blocked rail crossings, etc.

Deploy additional regional Weigh-in-Motion and Automated Vehicle Classification/Count systems

Conduct traffic signal timing study for urban arterials on the PBHFN

Establish a regional Traffic Operations Center with a focus on improving truck safety and mobility

Deploy advance warning systems on mission critical PBHFN routes and at safety hotspots

Deploy incident management system

Deploy Truck Parking Availability System along Tier 1 PBHFN
Advancing Technology and Programs

Technology Short-term Actions

- Develop a concept of operations for a Permian Basin regional traffic operations center (TOC)
- Assess and identify the highest priority routes on the PBHFN for deploying advance warning systems
- Assess the feasibility and effectiveness of a truck parking availability system (TPAS) on I-20 and other Tier 1 PBHFN corridors

Operations Short-term Actions

- Develop a plan for ensuring adequate road markings, lighting, and signage on all PBHFN corridors
- Develop a policy for adding increased signage including mile markers and private lease road signing on the PBHFN
- Develop a concept of operation for deploying Intelligent Transportation Systems to address common freight needs on Tier 1 PBHFN corridors
- Develop guidelines for transportation agencies to identify corridors where signal timing synchronization is feasible and processes for measuring its effectiveness
Infrastructure Strategies

Developing the Regional Freight Investment Plan

- Planned projects
  - Unified Transportation Program (UTP)
  - District Projects
- Freight plan stakeholder proposed projects
- Strategic projects

Identify freight and energy sector transportation infrastructure needs on the PBHFN
Map projects from 2021 UTP and TxDOT Districts
Overlay projects on PBHFN needs
Identify gaps with freight needs and no planned projects
Finalize Strategies based on Steering Committee input

Total
920 projects
Estimated cost of $8 billion
## Infrastructure: TxDOT Highway Projects

2021-2031 TxDOT Unified Transportation Program

- Type/Count of Projects and Funding Status

<table>
<thead>
<tr>
<th>Project Category</th>
<th>No. of Projects</th>
<th>Authorized Funding (Millions $)</th>
<th>No. of Projects</th>
<th>Authorized Funding (Millions $)</th>
<th>Funding Gap (Millions $)</th>
<th>No. of Projects</th>
<th>Total Authorized Funding (Millions $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternate Routes</td>
<td>2</td>
<td>$34.8</td>
<td>35</td>
<td>$292.1</td>
<td>$784.1</td>
<td>37</td>
<td>$1,111.0</td>
</tr>
<tr>
<td>Asset Preservation</td>
<td>324</td>
<td>$1,294.4</td>
<td>88</td>
<td>$229.6</td>
<td>$251.2</td>
<td>412</td>
<td>$1,775.2</td>
</tr>
<tr>
<td>Mobility and Reliability</td>
<td>53</td>
<td>$1,241.4</td>
<td>84</td>
<td>$1,330.4</td>
<td>$2,918.0</td>
<td>137</td>
<td>$5,489.8</td>
</tr>
<tr>
<td>Safety</td>
<td>95</td>
<td>$131.3</td>
<td>28</td>
<td>$2.6</td>
<td>$9.9</td>
<td>123</td>
<td>$143.8</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>$24.0</td>
<td>1</td>
<td>$0.4</td>
<td>$39.9</td>
<td>9</td>
<td>$64.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>482</strong></td>
<td><strong>$2,726.0</strong></td>
<td><strong>202</strong></td>
<td><strong>$858.8</strong></td>
<td><strong>$2,072.1</strong></td>
<td><strong>684</strong></td>
<td><strong>$5,656.9</strong></td>
</tr>
</tbody>
</table>
2021 TxDOT Unified Transportation Program

- Funding Status
- Type of Projects
### Infrastructure: TxDOT Highway Projects

#### Additional TxDOT District Projects

<table>
<thead>
<tr>
<th>Project Category</th>
<th>No. of Projects</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternate Routes</td>
<td>6</td>
<td>$215,194,447</td>
</tr>
<tr>
<td>Asset Preservation</td>
<td>170</td>
<td>$1,155,606,343</td>
</tr>
<tr>
<td>Mobility and Reliability</td>
<td>47</td>
<td>$894,339,623</td>
</tr>
<tr>
<td>Safety</td>
<td>13</td>
<td>$69,208,671</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>236</strong></td>
<td><strong>$2,334,349,084</strong></td>
</tr>
</tbody>
</table>

![Pie chart showing project category distribution]
Identifying Gaps
Permian Basin Freight Plan Stakeholder Proposed Projects

Project Type

- Expansion: 17
- Modernization/Design: 5
- Operations: 3
- Safety: 6

Stakeholder Recommendation:
- Expansion Project
- Modernization/Design Project
- Operations Project
- Safety Project

Texas Freight Advisory Committee
September 3, 2020
### Strategic Projects Impacting the Permian Basin

<table>
<thead>
<tr>
<th><strong>Ports-to-Plains Corridor</strong></th>
<th><strong>Reeves County Truck Reliever Route</strong></th>
<th><strong>I-14 Corridor</strong></th>
<th><strong>I-20 Corridor</strong></th>
<th><strong>Permian Promise</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Interstate feasibility study completed June 2020</td>
<td>Alternate route to bypass the Pecos central business district</td>
<td>West Texas to the Texas-Louisiana border generally following US 190</td>
<td>40+ miles from FM 1936 to FM 1208</td>
<td>Upgrades to key energy sector corridors</td>
</tr>
<tr>
<td>Upgrade to interstate standard portions of US 87, US 277, SH 349, and SH 158</td>
<td>Proposed loop bisector that aligns with FM 2119 on the north side of Pecos to SH 17 on the south side</td>
<td>Provide improved access to Beaumont, Port Arthur, and Corpus Christi</td>
<td>Convert frontage roads to one-way, add traffic lanes, and reconstruct interchanges</td>
<td>Add traffic lanes, reconstruct interchanges, relief routes, loops, and passing lanes</td>
</tr>
</tbody>
</table>
Advancing Infrastructure Strategies

- Opportunity to use the Permian Basin Freight Plan prioritization to refocus existing funds into future funding decisions to ensure that all high priority freight projects are fully funded
- 84 high freight priority projects **partially** funded
- 38 low freight priority and 59 medium freight priority projects **fully** funded
- Continued support for strategic projects
- Identify new projects to address unmet needs
Discussion
Permian Basin Panel

Debi Hays
County Judge
Ector County

Cameron Walker, AICP
Executive Director
Permian Basin MPO

John Speed, P.E.
District Engineer
TxDOT Odessa District

Scott Scheffler
Executive Director
Permian Road Safety Coalition
Thank you!

Contact us for more information about the Permian Basin Freight and Energy Sector Transportation Plan

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