



Welcome to TxDOT webinar: Rio Grande Valley Freight Plan Steering Committee.

**Roll call at 8:30 AM.**

At this time, please ensure your phone and computer microphone are muted.

Please take a moment to visit the chat box and say hello to others who have joined.

To minimize background noise, please periodically check your devices when you are not speaking to ensure they are muted.

If you wish to share a comment or ask a question, please speak up or add it to the chat box on the right side of the screen.

If you wish to share a comment or ask a question but are having audio issues, please add it to the chat box or text Kale Driemeier at 512-649-6825.

This morning there will be several opportunities for participant feedback, however, Steering Committee comments and questions will be prioritized.

We will be using [www.menti.com](http://www.menti.com) (code 89 74 94) to survey the Steering Committee. You can open this website in your internet browser, either on your mobile device or computer.

Time	Topic	Facilitator
8:15 – 8:30	Login to WebEx	All participants
8:30 – 8:45	<b>Welcome and Introduction</b> <ul style="list-style-type: none"> <li>Steering Committee Roll Call</li> <li>Opening remarks</li> <li>Recap of last meeting</li> <li>Objectives of this meeting</li> </ul>	Casey Wells (TxDOT) Caroline Mays (TxDOT) Andrew Canon (RGV MPO) Commissioner Alvin New (Texas Transportation Commission)
8:45 – 9:00	<b>Regional Freight Network Review</b> <ul style="list-style-type: none"> <li>Designation process and results</li> <li>Web-based comment map</li> </ul>	Lizzie Welch (Cambridge Systematics)
9:00 – 9:30	<b>Commodity Flows and Forecast</b> <ul style="list-style-type: none"> <li>Current commodity flows</li> <li>Forecasted growth</li> </ul>	Alexander King (WSP)
9:30 – 10:00	<b>Freight Infrastructure Performance</b> <ul style="list-style-type: none"> <li>Highway performance</li> <li>Other mode performance</li> </ul>	Lizzie Welch
10:00 – 10:15	<b>Stakeholder Engagement Update</b> <ul style="list-style-type: none"> <li>Summary of activities</li> <li>Major findings</li> </ul>	Lizzie Welch
10:15 – 10:30	<b>Closing</b> <ul style="list-style-type: none"> <li>Next steps</li> <li>Closing remarks</li> </ul>	Casey Wells Andrew Canon



# Rio Grande Valley Freight and Trade Transportation Plan

Steering Committee Webinar



June 4, 2020



- 1 Welcome and Introduction
- 2 Regional Multimodal Freight Network Review
- 3 Commodity Flows and Forecast
- 4 Freight Infrastructure and Performance
- 5 Stakeholder Engagement Update
- 6 Next Steps and Wrap-up



- **Project Team**
  - Casey Wells, TxDOT Project Manager
  - Consultant Team: Cambridge Systematics, WSP
  
- **Committee Roll Call**
  
- **Welcome Remarks**
  - Caroline Mays, Section Director, TxDOT Freight, Trade, and Connectivity
  - Andrew Canon, Executive Director, RGV MPO
  - Commissioner Alvin New, Texas Transportation Commission



## PURPOSE

Develop a Rio Grande Valley Freight and Trade Transportation Plan that identifies freight and trade transportation activities, opportunities, challenges, and strategies in the region

## GOALS

Identify the region's specific freight and trade-related transportation opportunities, challenges, and strategies impacting the Texas Multimodal Freight Network and statewide economic competitiveness

Integrate multimodal regional and statewide international freight transportation considerations into the local and regional transportation planning, programming, and implementation processes

# Freight Transportation Goals and Objectives for Rio Grande Valley



	Safety	Improve the <b>safety</b> of the multimodal freight system
	Economic Competitiveness	Enhance <b>economic competitiveness, productivity, and development</b> in the region and beyond
	Mobility and Reliability	Enhance <b>mobility</b> and improve system <b>efficiency</b> and <b>performance</b> of the transportation system
	Connectivity	Improve local, regional, and cross-border highway <b>connectivity</b> as well as connectivity between <b>freight modes</b>
	Sustainable Funding	Identify <b>sustainable funding</b> sources for the region's transportation system.
	Stewardship	Manage resources <b>responsibly</b> and foster <b>accountability</b> and <b>transparency</b> in decision-making.
	Customer Service	Encourage <b>local ownership of and coordination</b> by engaging <b>public and private sector stakeholders</b>
	Asset Preservation	<b>Maintain and preserve</b> transportation infrastructure that supports movement of freight.



- Confirm the process for designating the Regional Multimodal Freight Network, specifically the highway network scoring approach

**Process** Communicate and refine the process for designating the regional freight network

**Criteria** Confirm relevant criteria for freight and trade transportation in the RGV

**Scoring** Determine importance of each factor in final network designation

# Objectives of this Meeting



## Multimodal Freight Network Review

- Did the designation process miss anything?

## Commodity Flow Forecasts

- Does this analysis match your expectations?

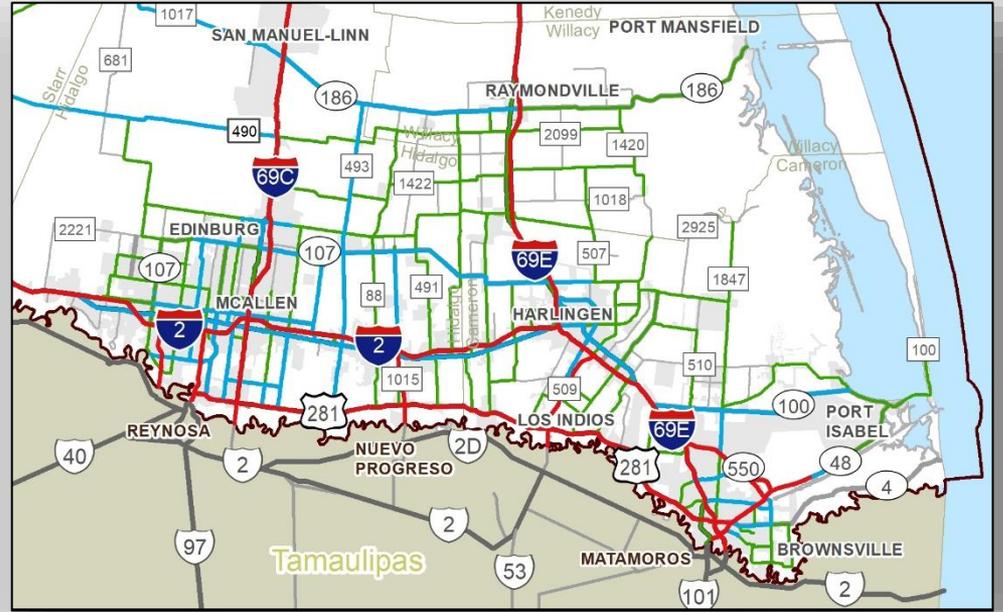
## Infrastructure and Performance

- What areas of performance are most important to address?
- What multimodal challenges are a barrier to freight movement?

## Stakeholder Engagement Update

- Are we missing important industries or groups?
- Are there specific companies or people we should reach?

# Regional Multimodal Freight Network





- Include all freight modes:
  - Highway, rail, port, waterway, airport, and pipeline
- Start with a data-driven approach to highway designation:
  - 30% goods movement
  - 25% market access
  - 25% economic preparedness
  - 20% supply chain support
- Refine with stakeholder input:
  - Specific locations
  - Types of locations

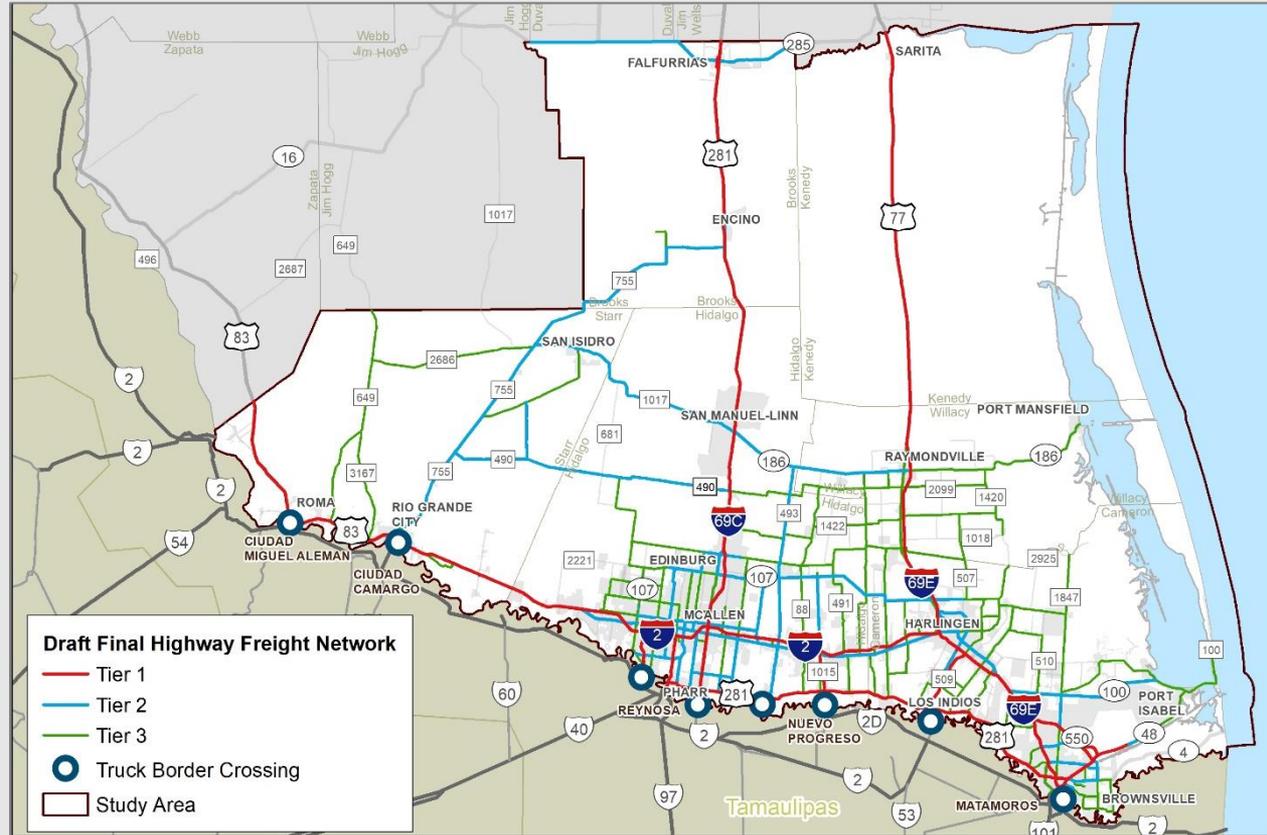
## Highway Designation:

- Current trucks, tonnage, and value
- Future trucks, tonnage, and value
- Oversize/overweight corridors
- Employment in freight industries
- Freight business locations
- Population growth
- Travel time to ports-of-entry
- Travel time to intermodal facilities
- Proximity to Foreign Trade Zones
- Stakeholder input

# Draft Regional Multimodal Freight Network: Highway



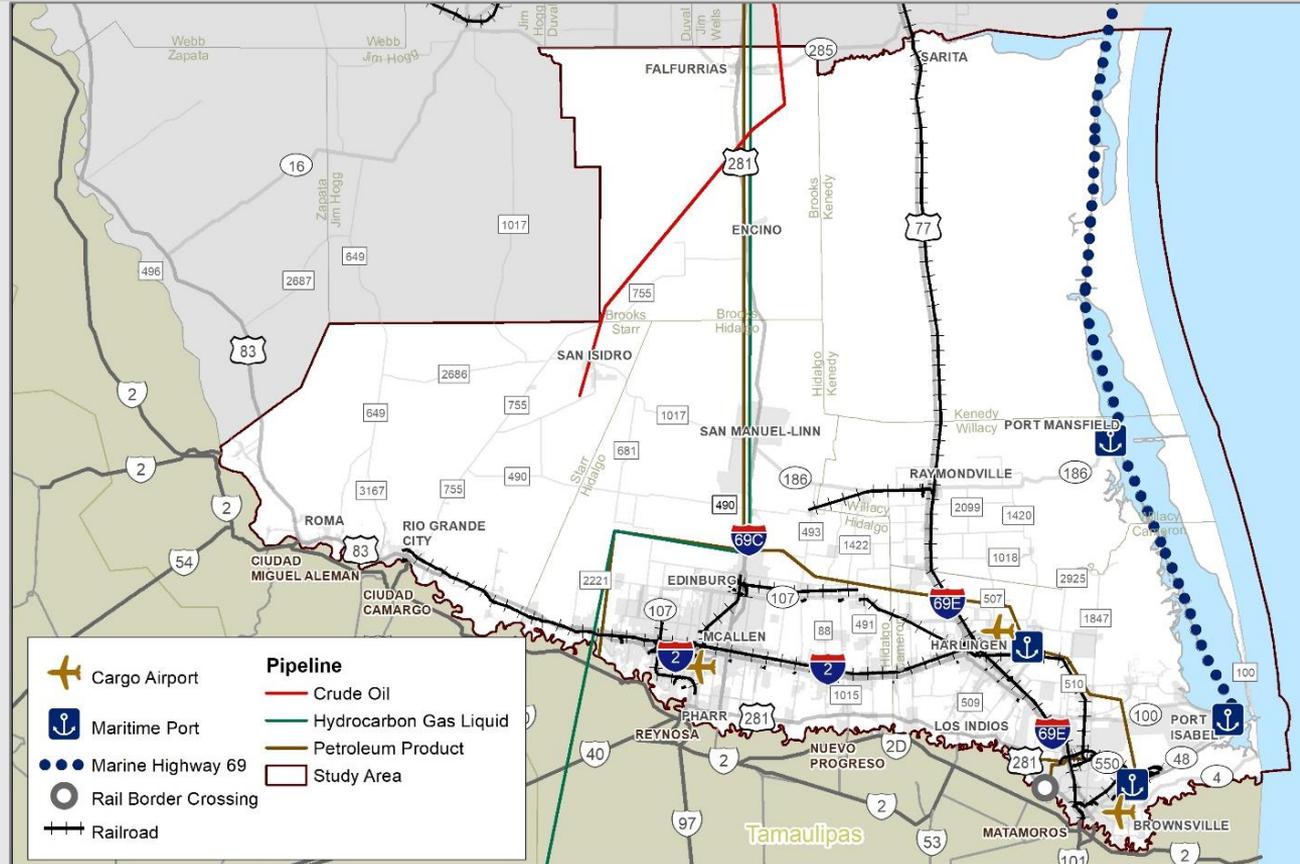
- Three highway tiers:
  - Major freight highways
  - Regional connectors
  - Local connectors
- Truck POEs
  - Including Donna and Anzalduas



# Draft Regional Multimodal Freight Network: Non-Highway



- All freight railroads
- Rail POE
- Maritime ports
- Waterways
- Cargo airports
- Pipelines



# How to View and Comment on the Network



1. Zoom or search to find a location as you would on Google Maps

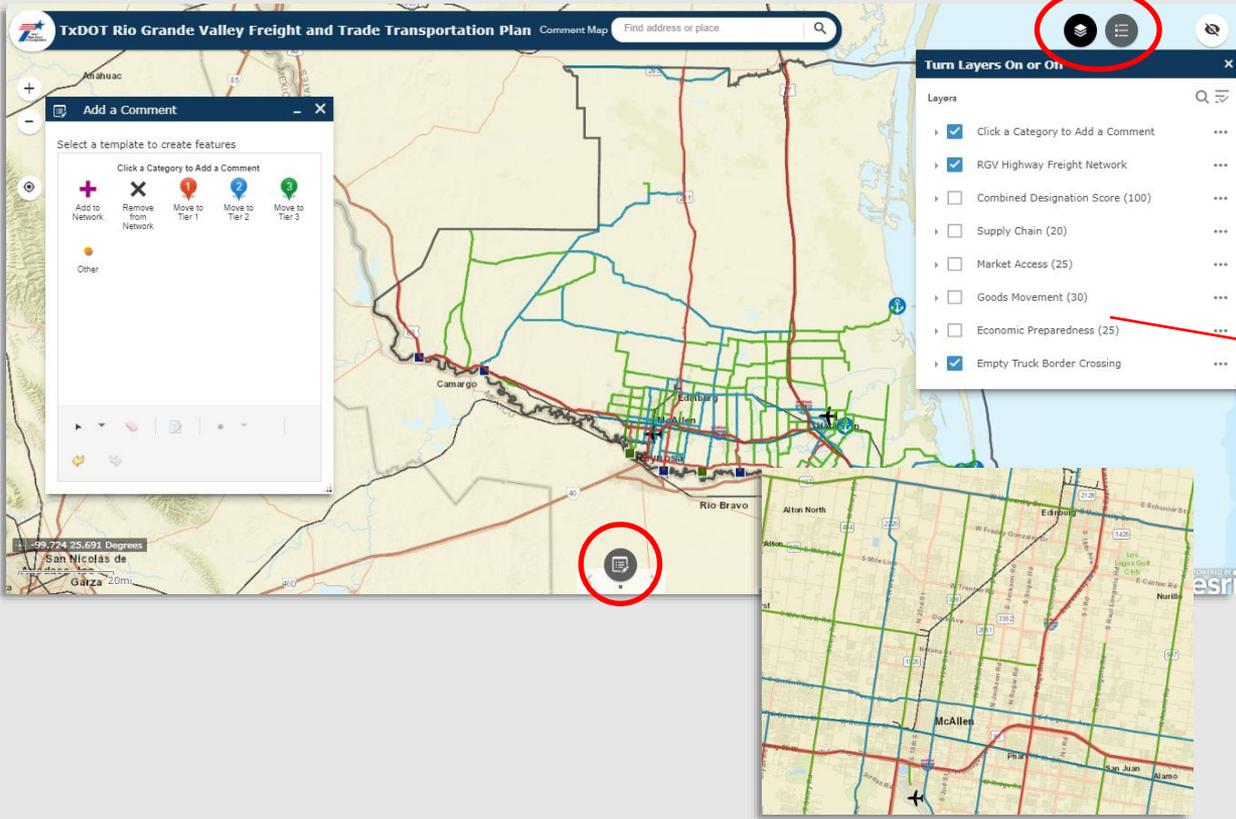
2. Click the type of comment you want to leave

3. Click on the map wherever you would like to leave a comment

4. Add an optional text comment with the facility name or other note

5. Click "Close"  
Comments save automatically

# How to View and Comment on the Network: More Tips



- Panels can be re-opened using the circled buttons
- Additional information can be turned on or off using the Layers panel
- More detail is visible as you zoom

# Commodity Flows and Forecasts



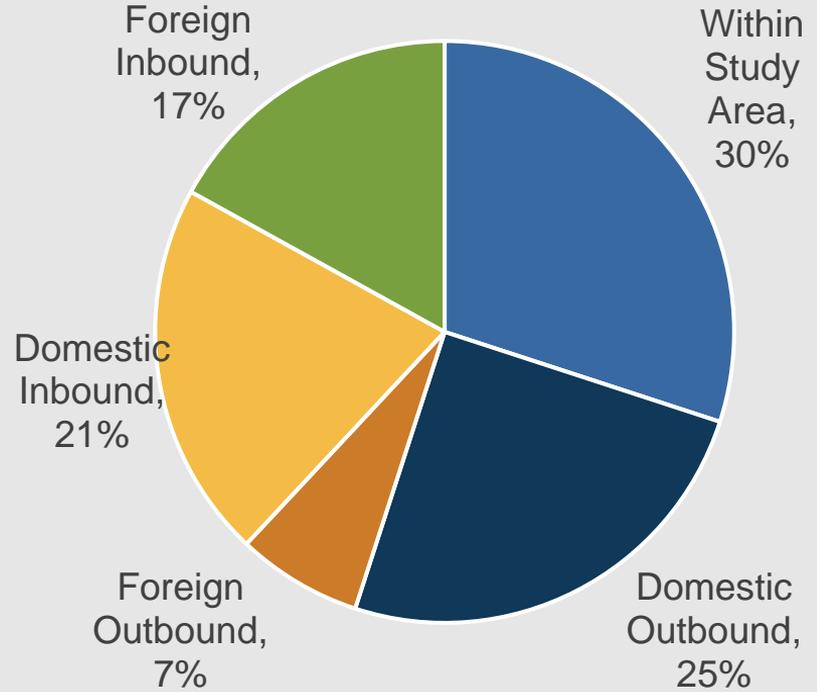


- Base year: 2018
- Forecast year: 2050
- Data sources:
  - Transearch: Basis of analysis for highway, waterway, and air
  - STB Waybill: Rail flows
  - Enverus drilling data for the Permian Basin: enhancement to Transearch
  - TTI border crossing statistics: enhancement to Transearch
- **Tonnage and value may not be directly comparable across modes due to different data sources.**

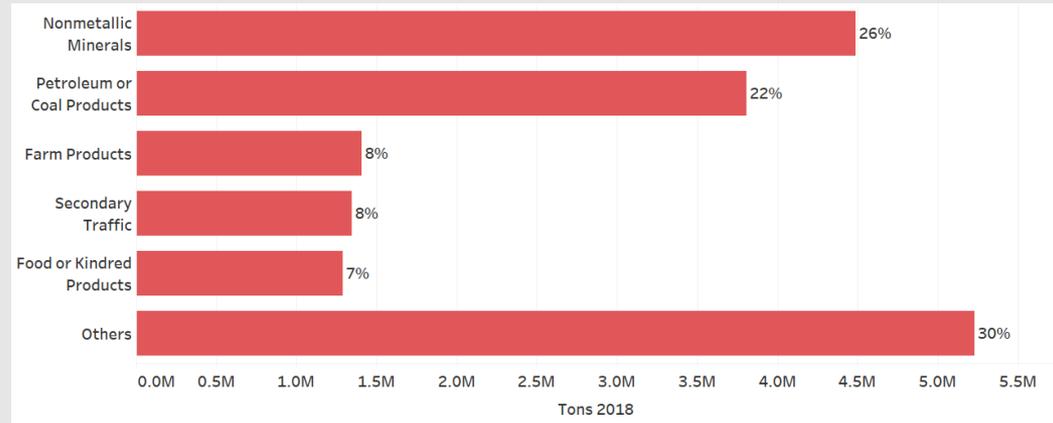
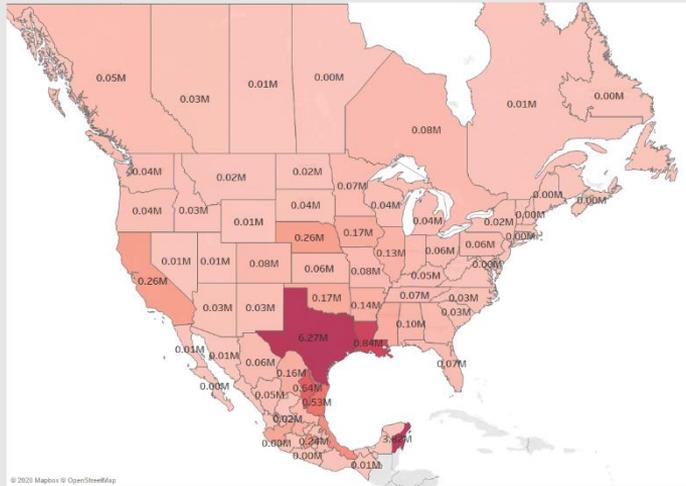


Tonnage: 46.0M  
Value: \$46.1B

2018 Tons by Direction

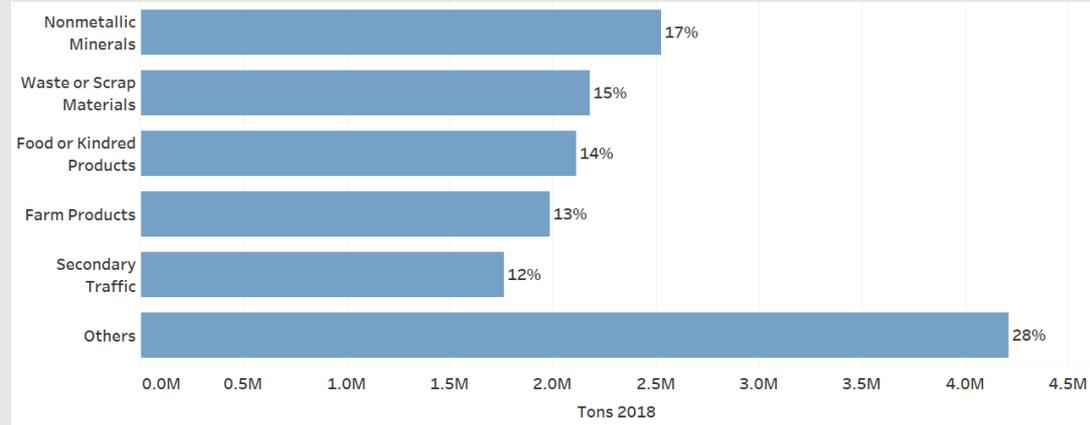
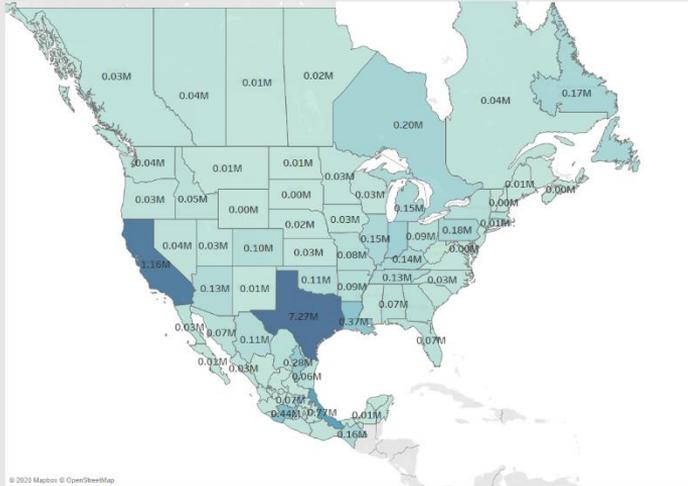


# All Modes: Inbound Freight



- Other Texas: 36% of inbound traffic
- Mexican origins: 44% of inbound traffic
- Nonmetallic minerals/Petroleum and coal products: 48% of inbound traffic

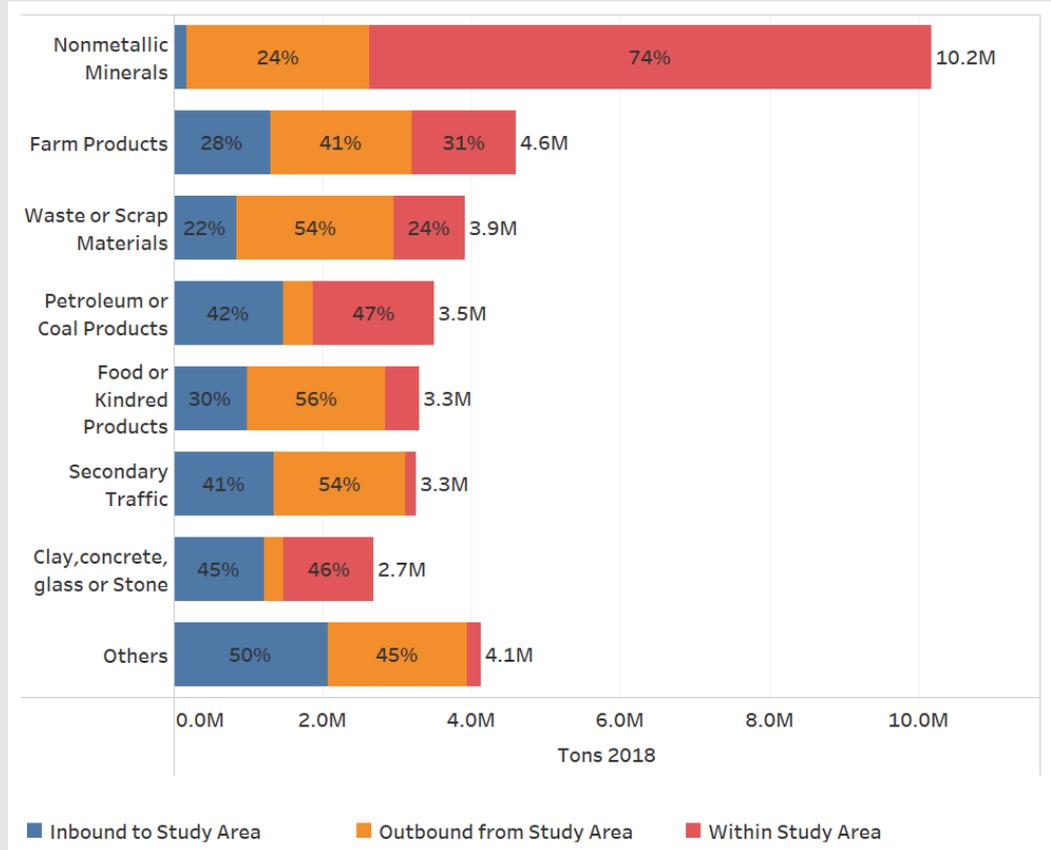
# All Modes: Outbound Freight



- Other Texas: 49% of outbound traffic
- Mexican destinations: 20% of outbound traffic
- California: 8% of outbound traffic
- Outbound commodities more evenly distributed than inbound



# Top Commodities: Truck



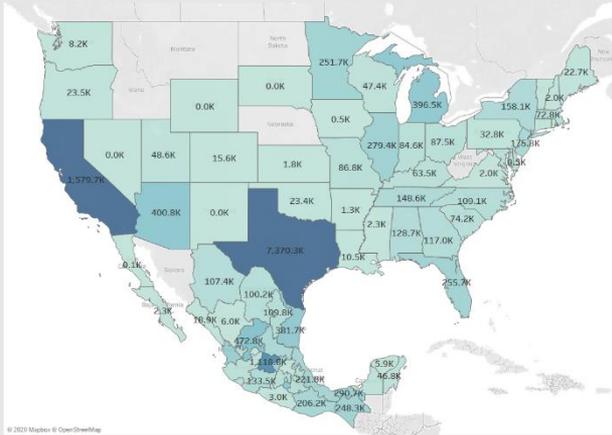
# Base Year: Passthrough Traffic - Truck



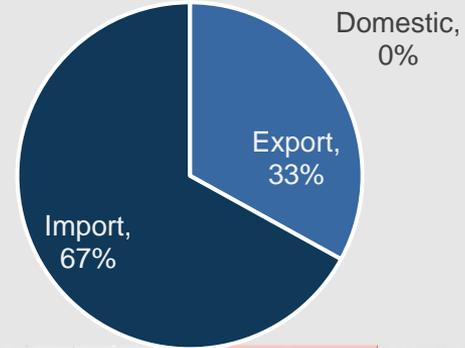
Tonnage: 18.1M

Value: \$38.1B

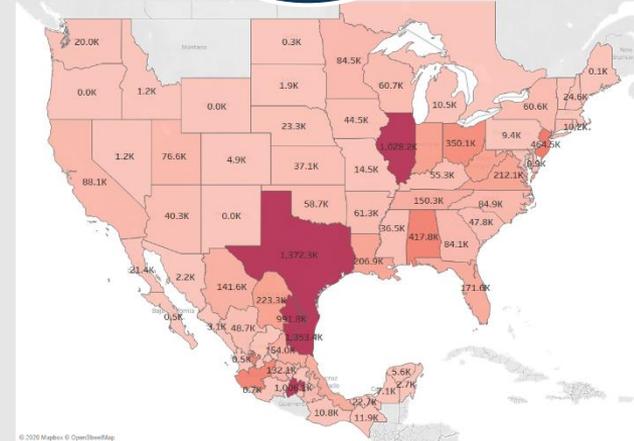
Final Termination States



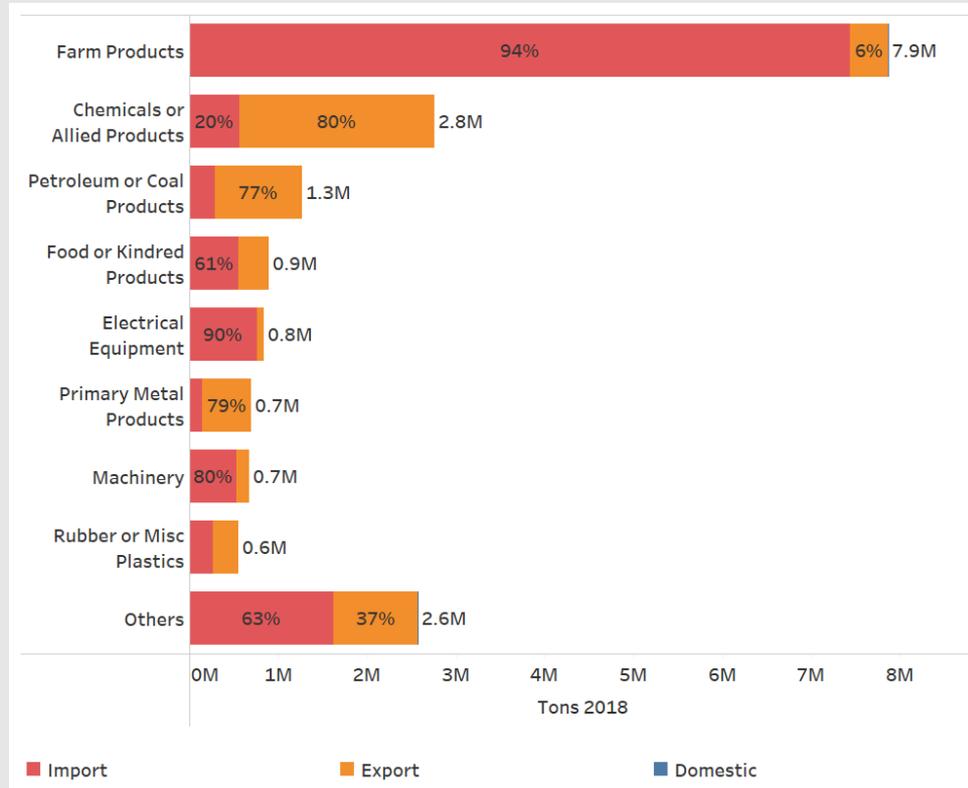
## 2018 Tons by Direction



Initial Origin States



# Top Commodities: Passthrough Traffic - Truck



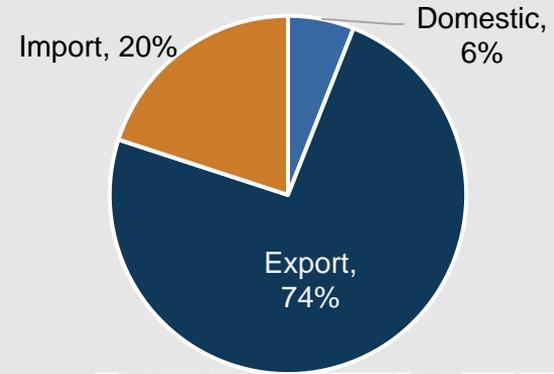
# Base Year: Passthrough Traffic - Rail



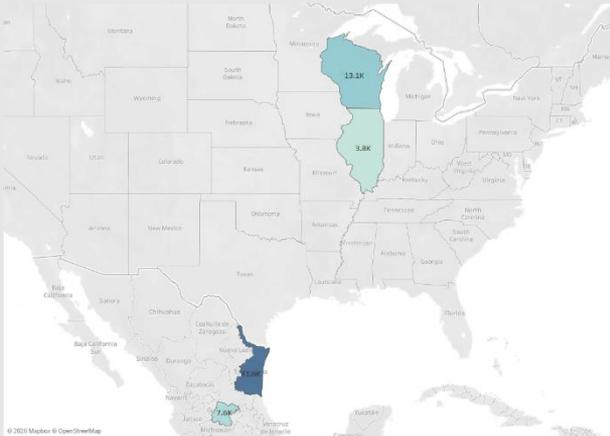
Tonnage: 67k

Value: Not available

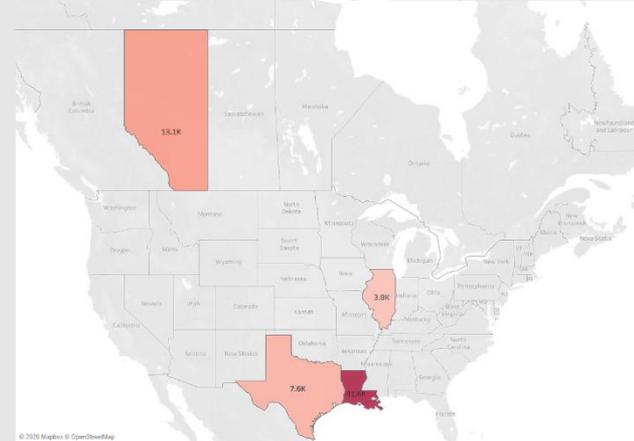
## 2018 Tons by Direction



Passthrough - Termination States

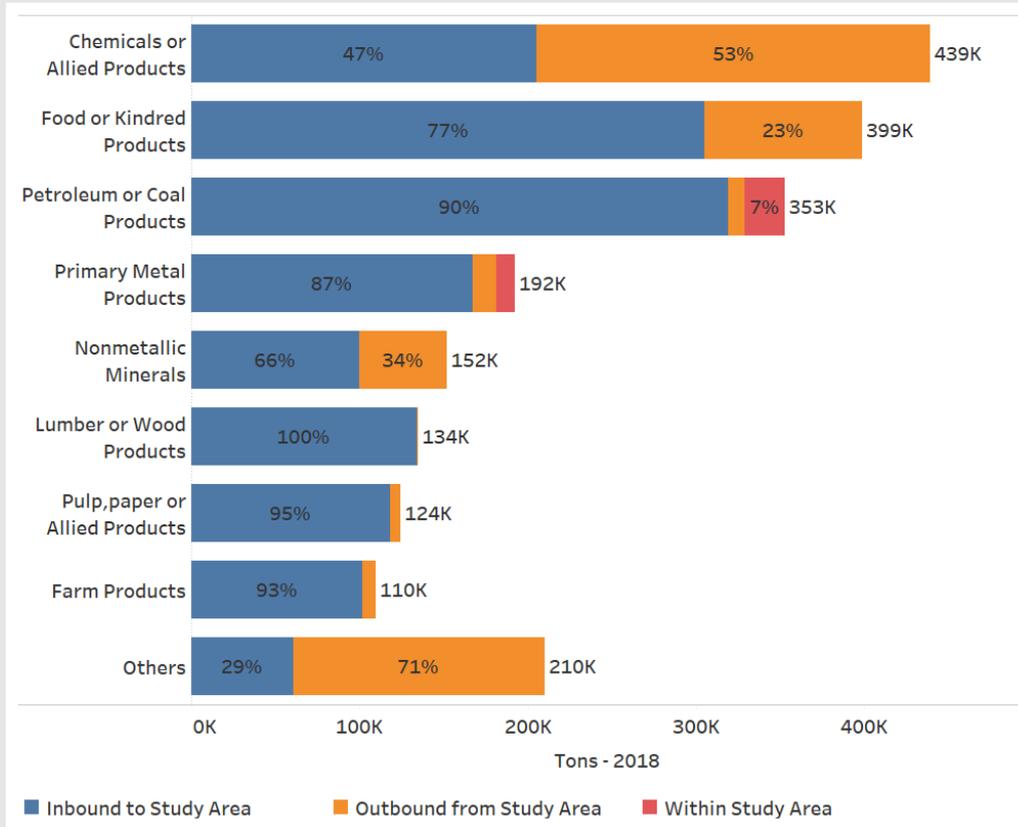


Passthrough - Origin States



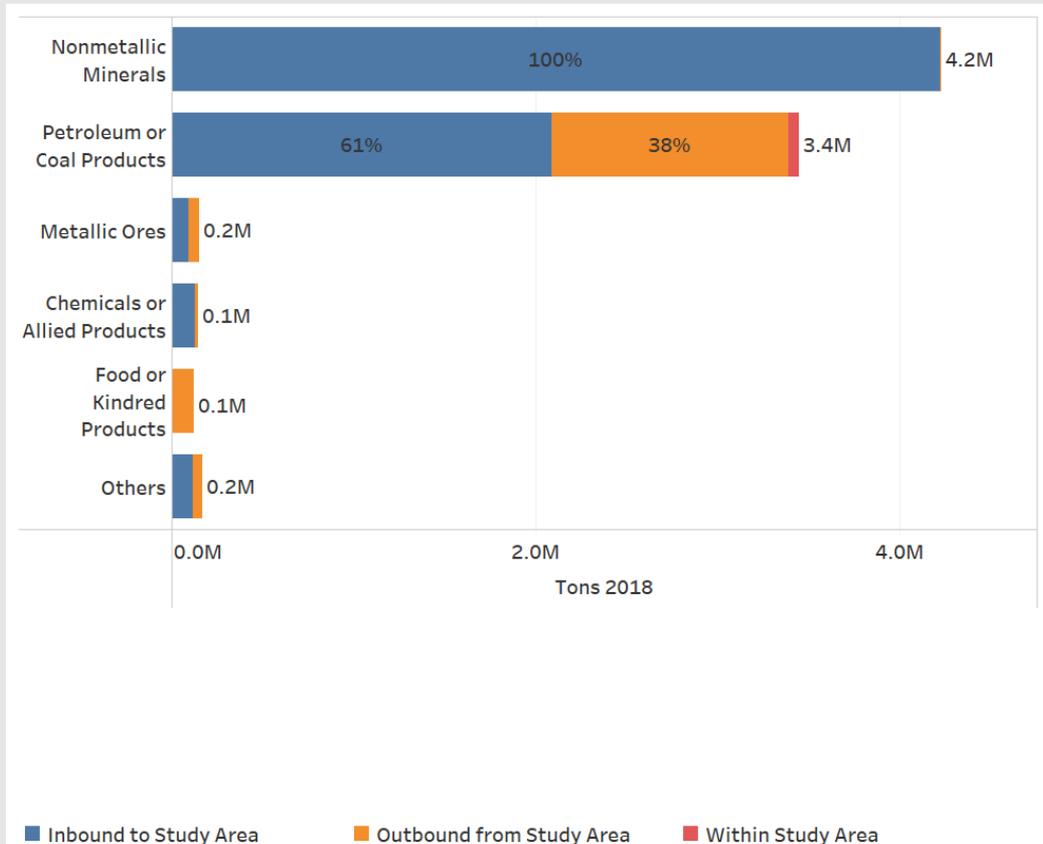


# Top Commodities: Rail



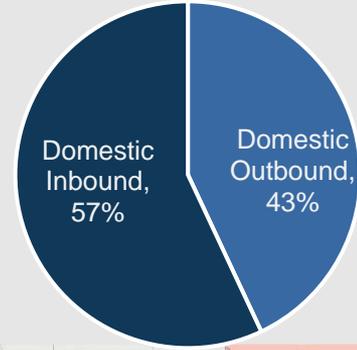


# Top Commodities: Water





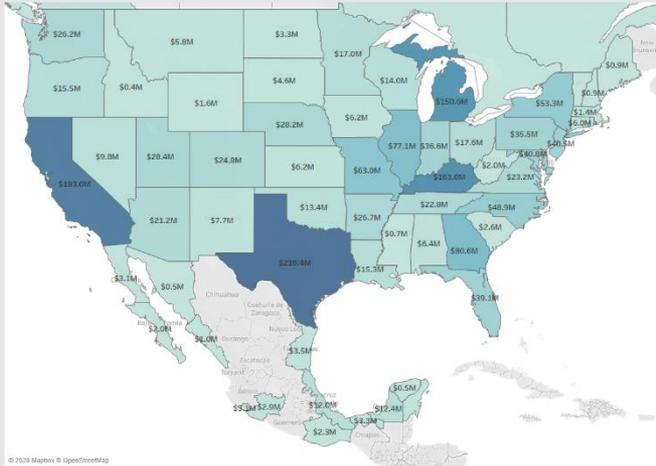
**2018 Tons by Direction**



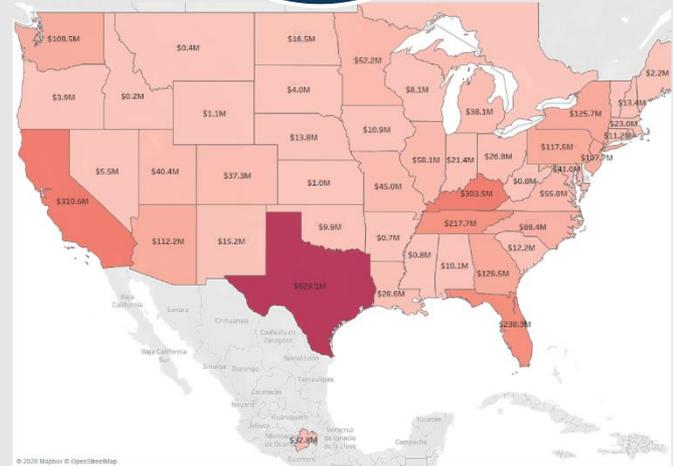
Tonnage: 0.04M

Value: \$5.1B

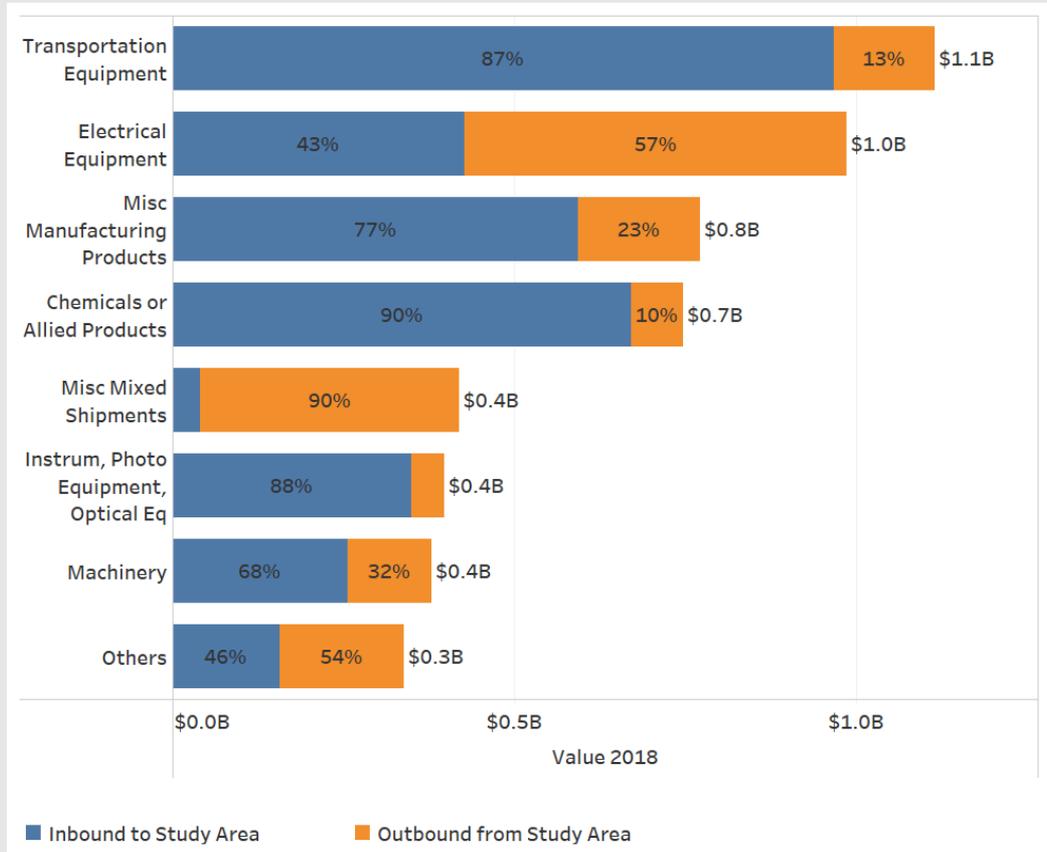
Outbound Trading Partners



Inbound Trading Partners



# Top Commodities: Air



## Forecast Year (2050) Summary: All Modes



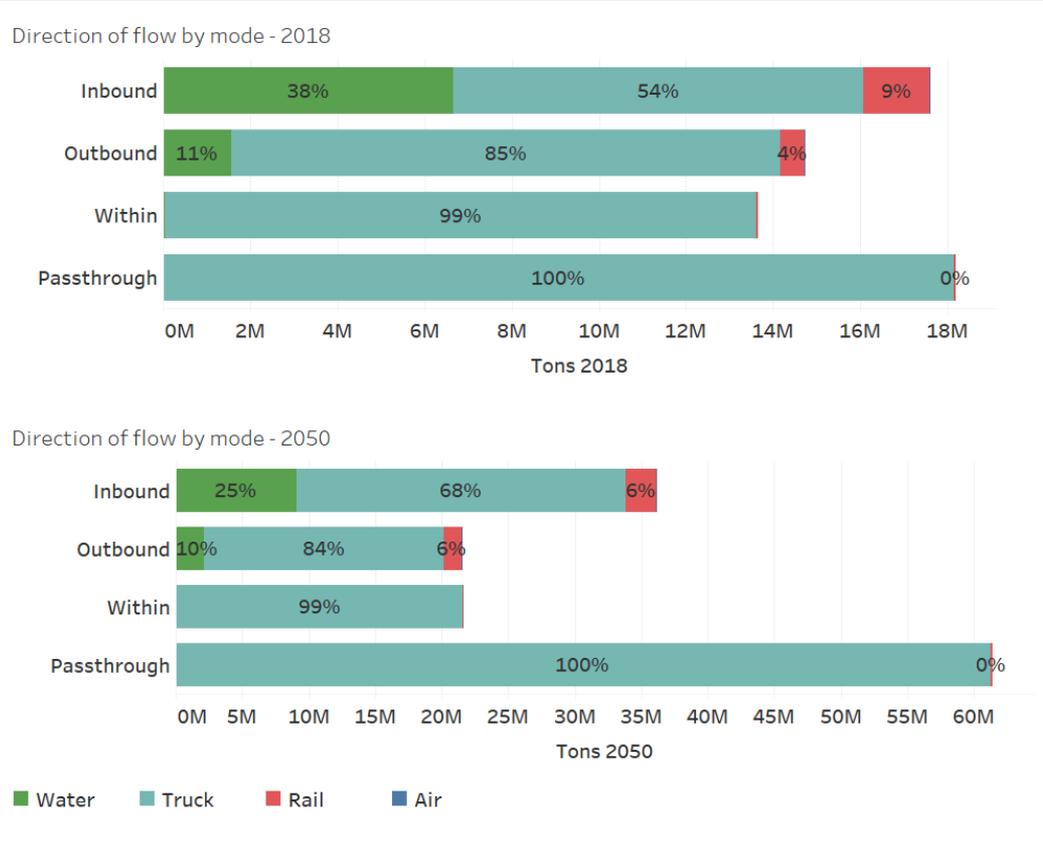
- RGV tonnage growth is slightly lower than statewide, but similar
- RGV value growth is slightly higher than statewide, but similar

	<b>RGV 2018</b>	<b>RGV 2050</b>	<b>RGV % Change</b>	<b>Texas % Change</b>
Tonnage	46.0M	79.4M	73%	77%
Value	\$46.1B	\$112.5B	144%	136%

# Direction: All Modes



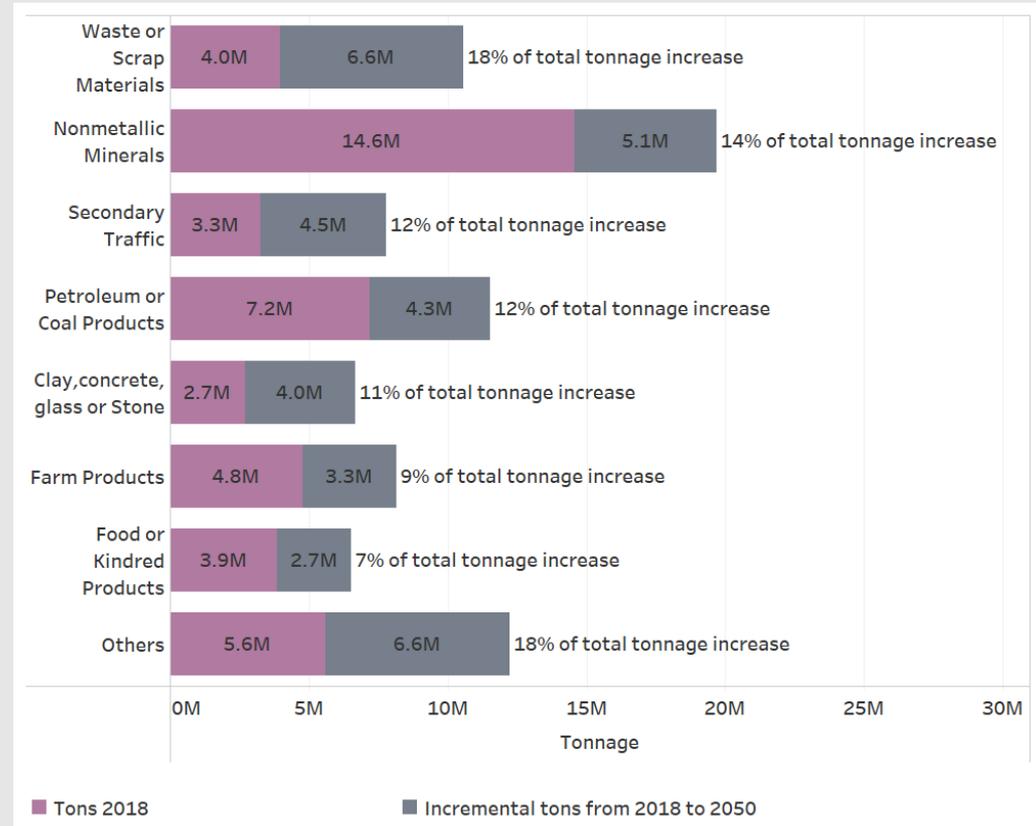
- Truck: largest share at 84% of tons
- Water and rail: most inbound at 38% and 9%, respectively
- Water and rail: drop to 25 and 6% of inbound, respectively in 2050



# Commodity Growth: All Modes



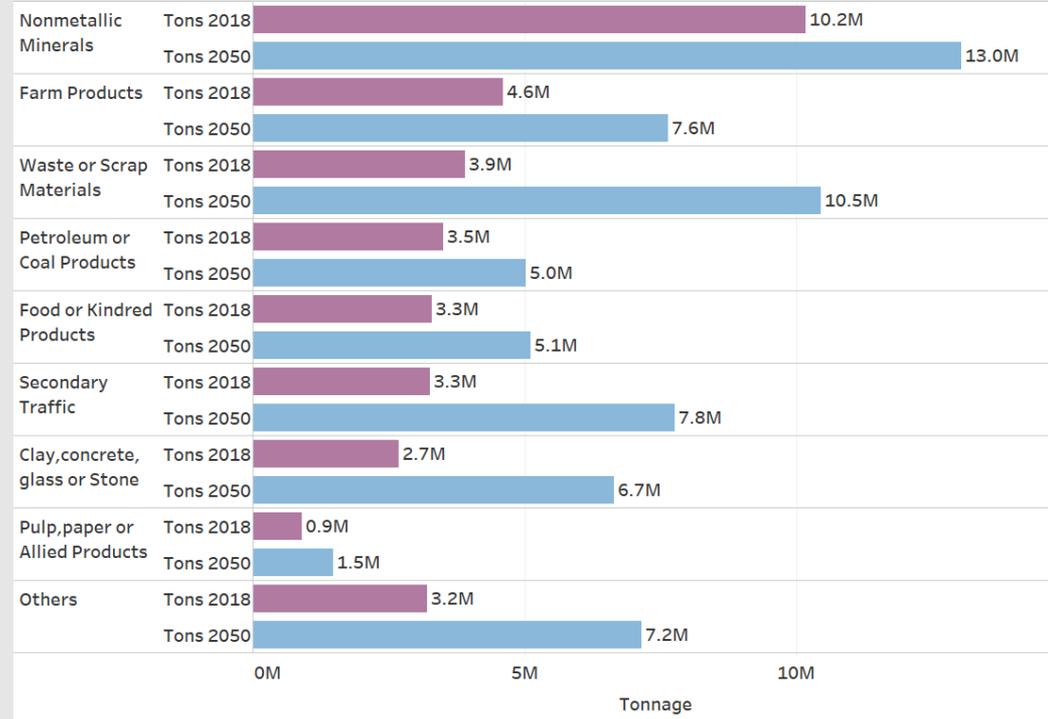
- Most growth 2018-2050:
  - Waste or Scrap Materials
  - Secondary Traffic
  - Nonmetallic



# Forecast: Truck



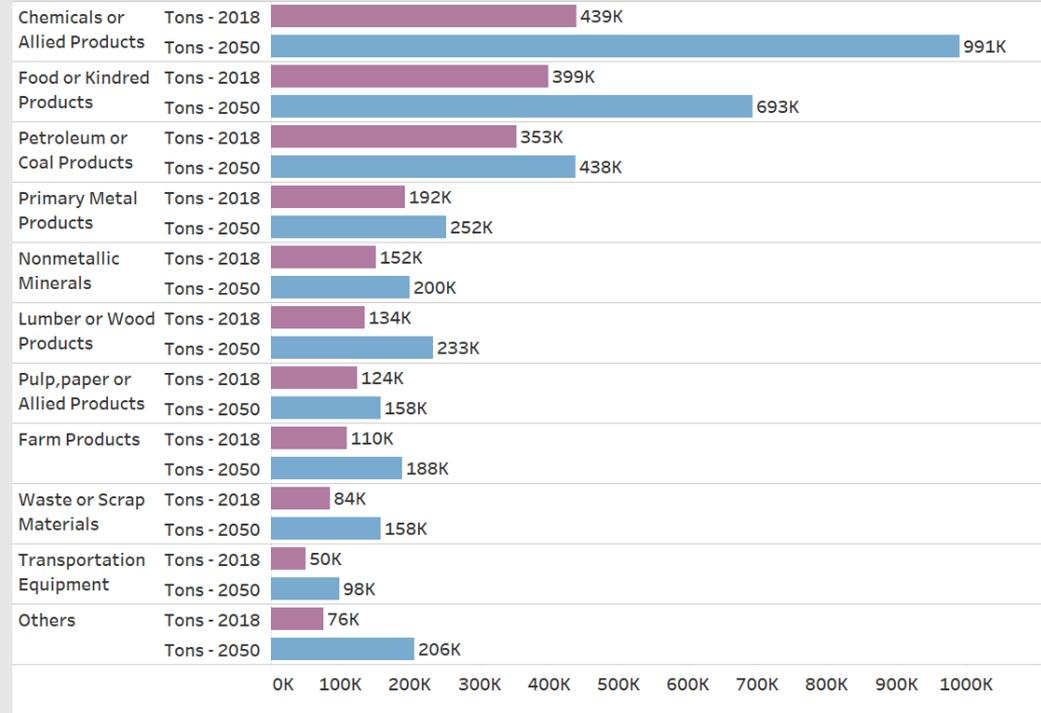
- **+81% Tonnage**
  - Total Tons (2018) – 64.5M
  - Total Tons (2050) – 35.6M
- **+133% Value**
  - Total Value (2018) – \$35.4B
  - Total Value (2050) – \$82.5B
- **Waste or scrap, secondary traffic and clay, concrete, glass and stone are expected to increase the most on a percentage basis**



# Forecast: Rail



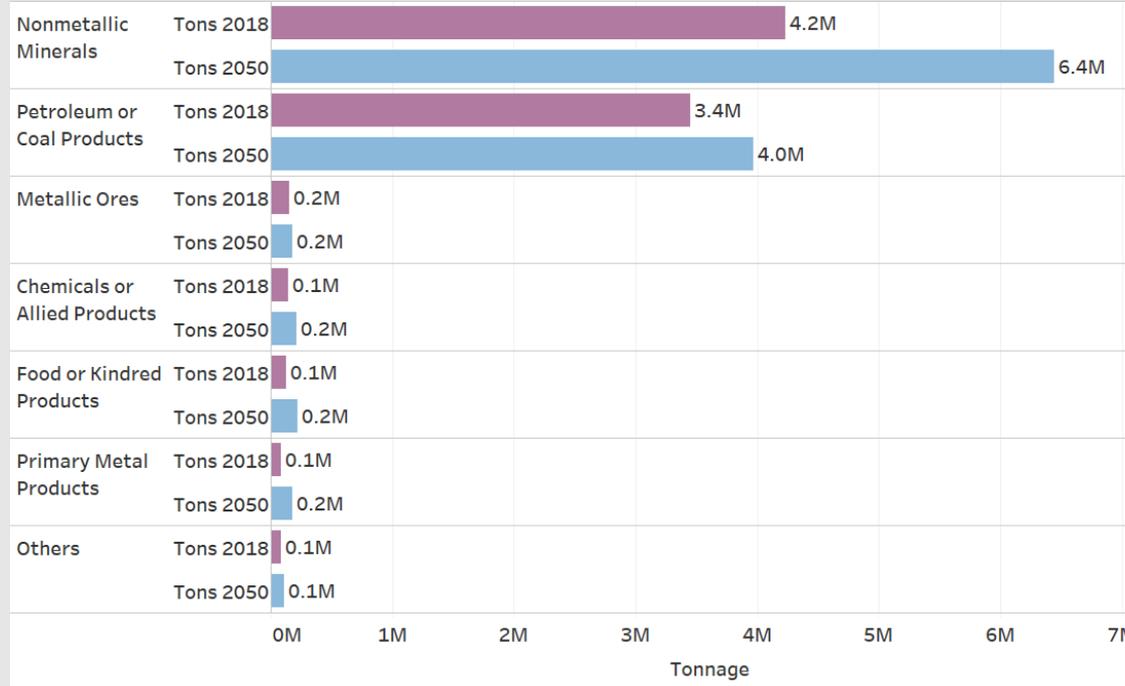
- +71% Tonnage
  - Total Tons (2018) – 2.1M
  - Total Tons (2050) – 3.6M
- Miscellaneous organic and inorganic materials contribute the most to increase in chemical products
- Liquors, blended extracts and sugar products are responsible for growth in food and kindred products



# Forecast: Water

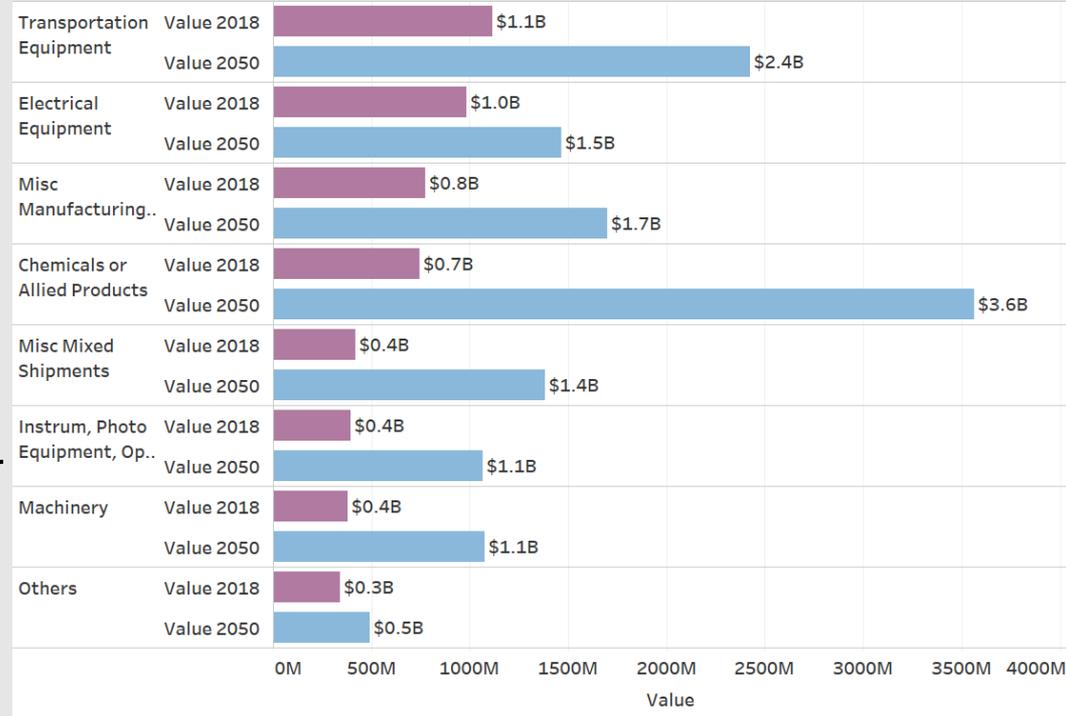


- **+36% Tonnage**
  - Total Tons (2018) – 8.3M
  - Total Tons (2050) – 11.3M
- **+96% Value**
  - Total Value (2018) – \$2.8B
  - Total Value (2050) – \$5.5B
- **Commodities with most growth:**
  - Nonmetallic minerals
  - Petroleum or coal products





- +142% Tonnage
  - Total Tons (2018) – 0.04M
  - Total Tons (2050) – 0.1M
- +156% Value
  - Total Value (2018) – \$5.1B
  - Total Value (2050) – \$13.1B
- Commodities with most growth or new top commodities:
  - **Chemicals or allied products**
  - **Transportation equipment**



## Growth in Key Commodities



Total Growth:  
73%

Oil/Gas Growth:  
43%

Produce Growth:  
87%

Secondary/Drayage  
Growth:  
136%

# Infrastructure and Performance

Mobility (Congestion and Reliability)

Asset Management (Pavement and Bridge)

Truck Parking

Non-Highway Issues





# Mobility: Reliability (PM Peak)



- Based on historical data (2018-2019)
- Some important regional connections are unreliable:
  - US 281/Military Highway
  - I-169/SH 550
  - SH 48

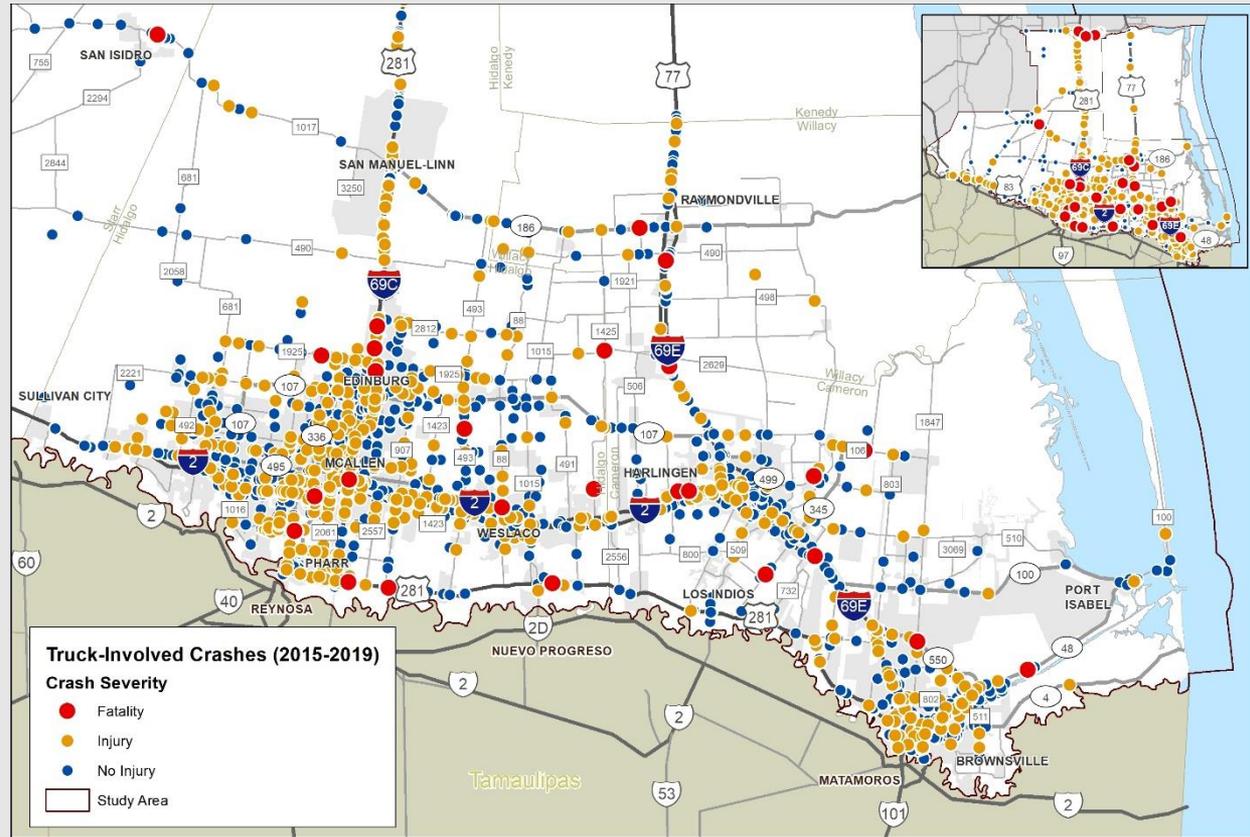


# Safety: Truck-Involved Crashes (2015-2019)



- 3,788 truck-involved crashes in 5-year period
- 32 fatal crashes
  - 16 on IH/US highway
  - 16 on other routes
- 944 injury crashes
- 2812 other crashes

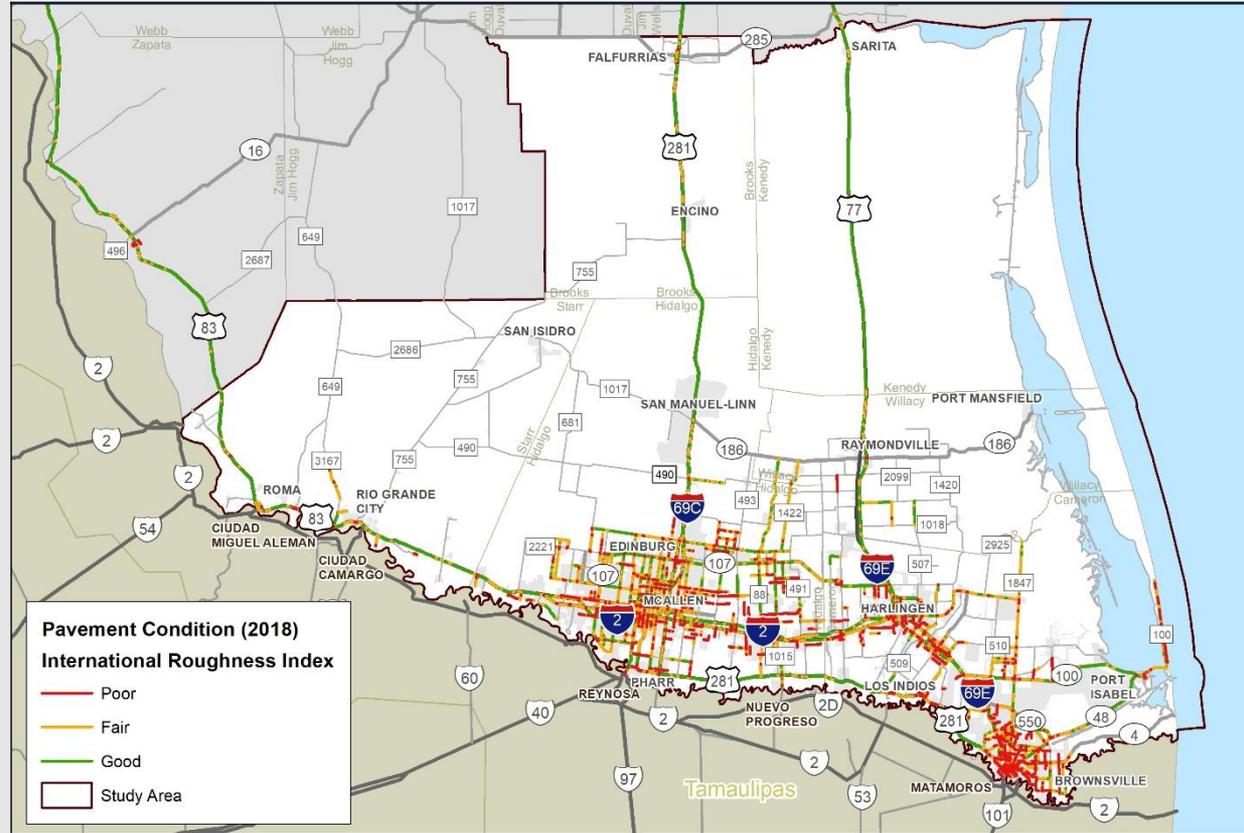
Note: “truck-involved” determined by *CMV Vehicle Type* field



# Asset Management: Pavement



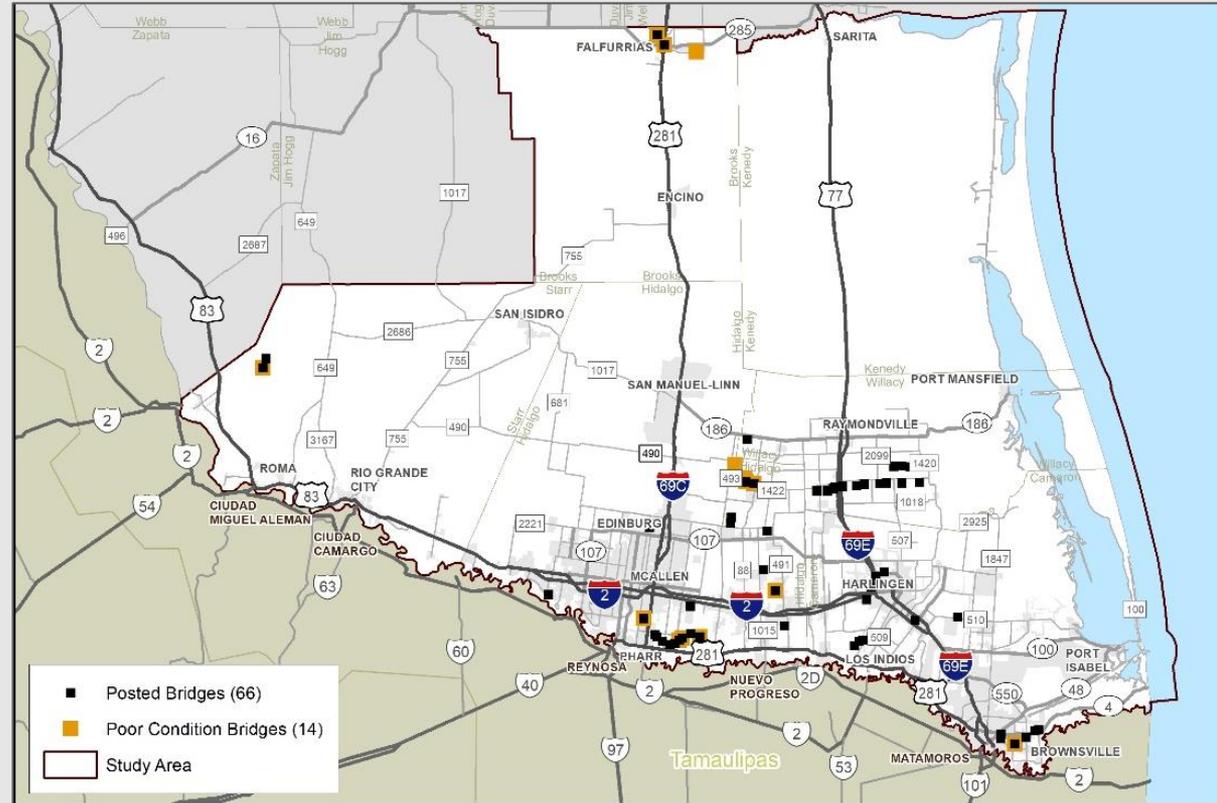
- Major roadways have good pavement quality, but this is less likely for local connections.
  - IH/US: 84% good, 1% poor
  - SH: 58% good, 8% poor
  - Others: 39% good, 21% poor



# Asset Management: Bridge Conditions



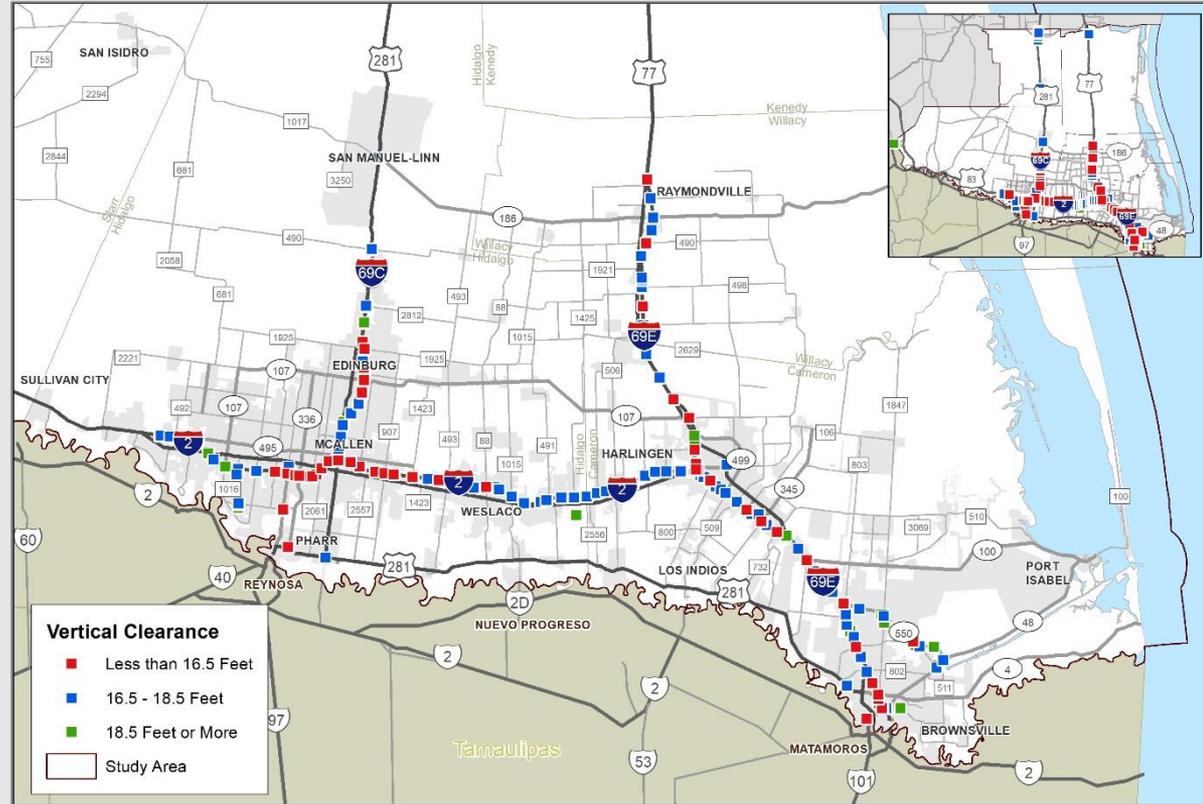
- No posted and poor condition bridges cross another roadway
- None carry major roadways, but some are local connectors
  - Ex: Minnesota Ave. in Brownsville



# Asset Management: Bridge Vertical Clearance



- Most bridges are south of SH 186
- Few bridges off of major corridors cross another roadway
- Where bridges are lower than 16.5 feet, the crossed facility is typically a minor roadway
  - 11 over IH/US
  - 16 over SH/SS

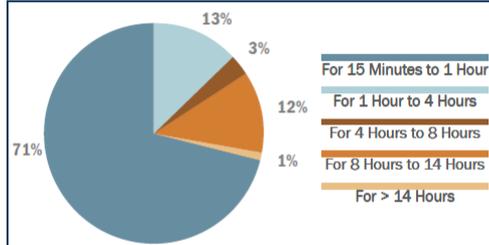


# Truck Parking: Authorized and Unauthorized

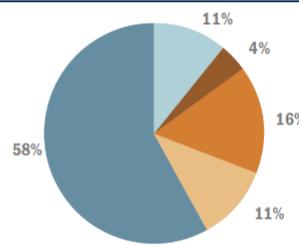


## Utilization by Length of Stay

Public Locations



Private Locations



## Parking at Authorized Locations and in Unauthorized Areas

	Number of Locations	Number of Spaces	Number of Parked Trucks	Shortage / Surplus of Spaces
Private Truck Stops	14	707	283	424
Rest Areas/Travel Information Center	4	30	8	22
Picnic Area/Pullouts	0	0	0	0
Unauthorized in TxDOT Right of Way	-	-	37	-
Unauthorized Elsewhere	-	-	157	-
<b>Total</b>	<b>18</b>	<b>737</b>	<b>485</b>	<b>252</b>

Weekday average of modeled data at 1 A.M. (Statewide Peak Hour)

Number of Locations with High Or Medium Capacity Needs\*

3



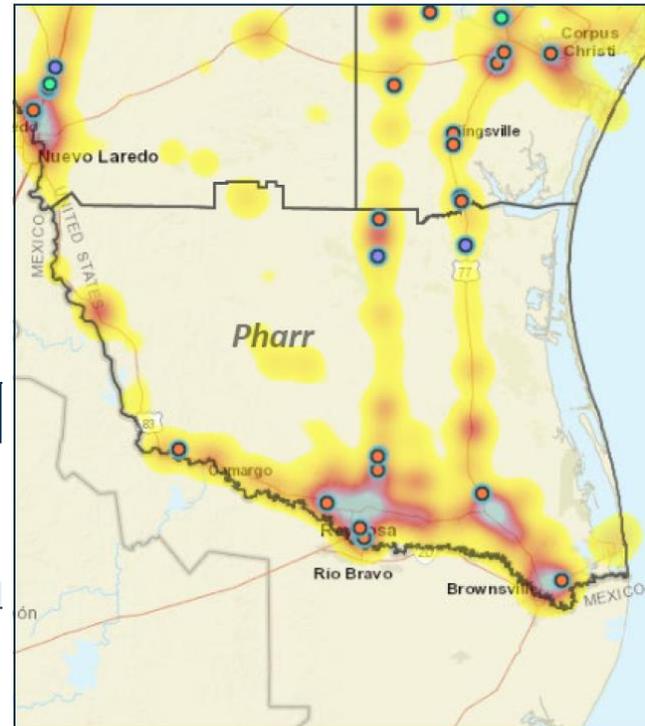
Number of Locations with Low Capacity Needs\*

15

\*Capacity Need:

High = > 80% Utilization at Peak Hour | Medium = 30%-80% Utilization at Peak Hour | Low = < 30% Utilization at Peak Hour

## Concentration of Trucks Parked in TxDOT ROW



Density of Trucks Stopping



- Privately Owned Truck Stop
- Public Picnic Area or Pull-Off
- Public Rest Area or Travel Information Center

# Stakeholder Engagement Update





## Steering Committee (2)

- Define goals and objectives
- Identify critical needs
- Refine network designation process

## Transportation Forums (4 of 8)

- Explore needs and challenges
- Identify specific locations for needs and network designation

## Interviews (14 of 30)

- Understand operating conditions and requirements
- Identify supply chains and economic linkages



## Complete

### Public

- RGV MPO
- RGV Partnership
- Port of Brownsville
- Pharr International Bridge
- Progreso International Bridge

### Private

- Texas International Produce Association
- South Texas Manufacturers Association
- TransMontaigne Partners
- Gulf Stream Marine
- Lone Star Citrus
- Bettcher Manufacturing
- NIBCO
- Regal Beloit
- Rio Valley Switching

## Targets

### Public

- Port of Harlingen
- Cargo Airport(s)
- Economic Development Corporations

### Private

- Texas Warehouse Association
- Customs Brokers Associations
- Trucking Companies (including OS/OW)
- Owner-Operator Independent Drivers Association
- Railroads
- Barge Company
- Industrial Developer
- Cold Storage
- Warehousing
- Advanced Manufacturing (automotive, electronics)
- Non-Produce Agriculture



## Network Designation

- Highways that move the most freight (trucks, tonnage) are the highest priority.
- First and last mile connections to maritime and border ports are critical.

## Supply Chains and Economic Links

- Pipeline shutdowns in Mexico have led to immense truck traffic between the Port of Brownsville and Mexico.
- The binational economy is strongly linked; goods and people are moving back and forth (not just through).



## Needs and Challenges

- **Connectivity** is a top concern.
  - Additional connections between the I-69 corridors, especially north of SH 186
  - Accessing major highways
- **Congestion and reliability** are made worse by lack of alternatives for freight.
  - Interchanges and intersections
  - Signals on local thoroughfares
- Border crossings, customs, and inspections are closely tied to the overall **performance of the system**.
  - Wait times, operating hours

# Closing and Next Steps



# Project Milestones and Timeline



Milestones	Schedule
Regional freight profile, land use analysis, needs assessment, and performance measures	Spring 2020 – Summer 2020
Regional freight recommendations, strategies, and implementation plan	Summer 2020 – Fall 2020
Regional Freight Plan and Executive Summary	Late 2020

## Steering Committee Meetings

August 2020  
November 2020

## Round 2 Transportation Forums

August 2020

# Contact Information



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