



# Ports-to-Plains Corridor Feasibility Study (HB 1079)

**Segment #2, Public Meeting #1**  
**Hale/Lubbock County Line to**  
**Sutton/Edwards County Line**

**San Angelo, Texas**



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## HB 1079 Overview



# Ports-to-Plains Feasibility Study



House Bill (HB) 1079 requires TxDOT to conduct a comprehensive feasibility study of the Ports-to-Plains (P2P) Corridor, as defined by Texas Transportation Code 225.069.

- The study must evaluate the feasibility of, and costs and logistical matters associated with, improvements to the corridor that create a continuous-flow, four-lane divided highway that meets interstate standards to the extent possible.





- HB 1079 requires TxDOT to establish a **P2P Advisory Committee (committee)**:
  - The committee is required to meet at least twice annually on a rotational basis in Lubbock and San Angelo.
  - Membership of the committee is limited to elected officials or their appointees specifically named in HB 1079.
  - The committee will review and compile reports from segment committees to form full advisory committee report.
  - TxDOT is required to incorporate reports submitted by the committee into the feasibility study.



- Additionally, TxDOT is required to establish **Corridor Segment Committees**. The segment committees are composed of:
  - Volunteers who may represent cities, counties, metropolitan planning organizations (MPOs), ports, chambers of commerce, and economic development corporations along the corridor;
  - The trucking industry;
  - TxDOT representatives; and
  - Other interested parties.



## Quarterly Public Meetings

- TxDOT is required to hold **quarterly public meetings** on a rotational basis in Amarillo, Laredo, Lubbock, and San Angelo.
- These meetings will **gather public feedback** on potential improvements or expansions to the P2P Corridor.
- Occurs in conjunction with the study.





Your participation gives you the opportunity:

- **To learn** about the Ports-to-Plains Corridor Feasibility Study
- **To provide input** on needs, challenges, and opportunities for moving people and goods along the corridor





## Feasibility Study Overview



# Ports-to-Plains Corridor and Segments



## Ports-to-Plains Corridor



## Segment 1

New Mexico and Oklahoma borders to Hale/Lubbock County line

## Segment 2

Hale/Lubbock County line to Sutton/Edwards County line

## Segment 3

Sutton/Edwards County line to I-35/Juarez-Lincoln Bridge in Laredo

## Corridor Segments





## *Verbatim HB 1079, Section 1, Subsection (h)*



An examination of the ability of the energy industry to **transport products** to market



An evaluation of the economic development impacts of the Ports-to-Plains Corridor, including whether the improvement or expansion of the Ports-to-Plains Corridor would create **employment opportunities** in this state



A determination of whether improvements or expansion of the Ports-to-Plains Corridor would **relieve traffic congestion** in the segment

# Ports-to-Plains Corridor Feasibility Study Goals



An examination of **freight movement** along the Ports-to-Plains Corridor



A determination and prioritization of improvements and expansion of the Ports-to-Plains Corridor that are warranted in order to promote safety and mobility, while **maximizing the use of existing highways** to the greatest extent possible and **striving to protect private property** as much as possible



A determination of the areas that are preferable and suitable for **interstate designation**



An examination of **project costs** related to the improvement or expansion of the Ports-to-Plains Corridor

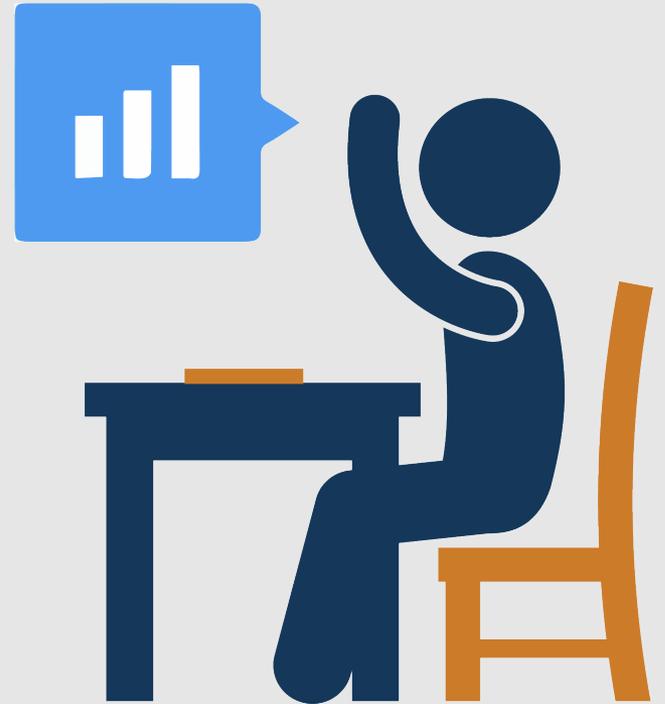


An assessment of federal, state, local, and private **funding sources** for a project improving or expanding the Ports-to-Plains Corridor

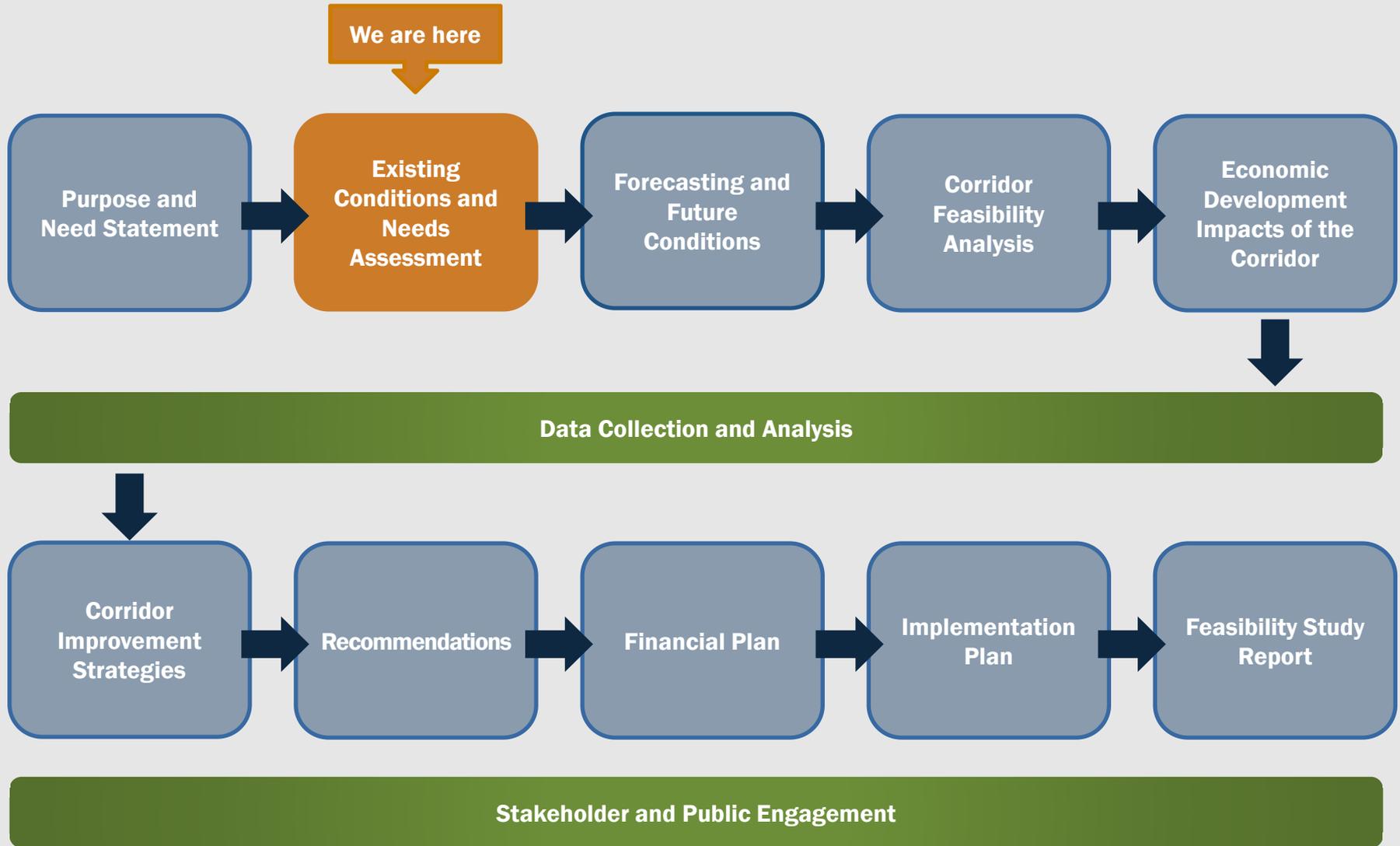


## Public Feedback

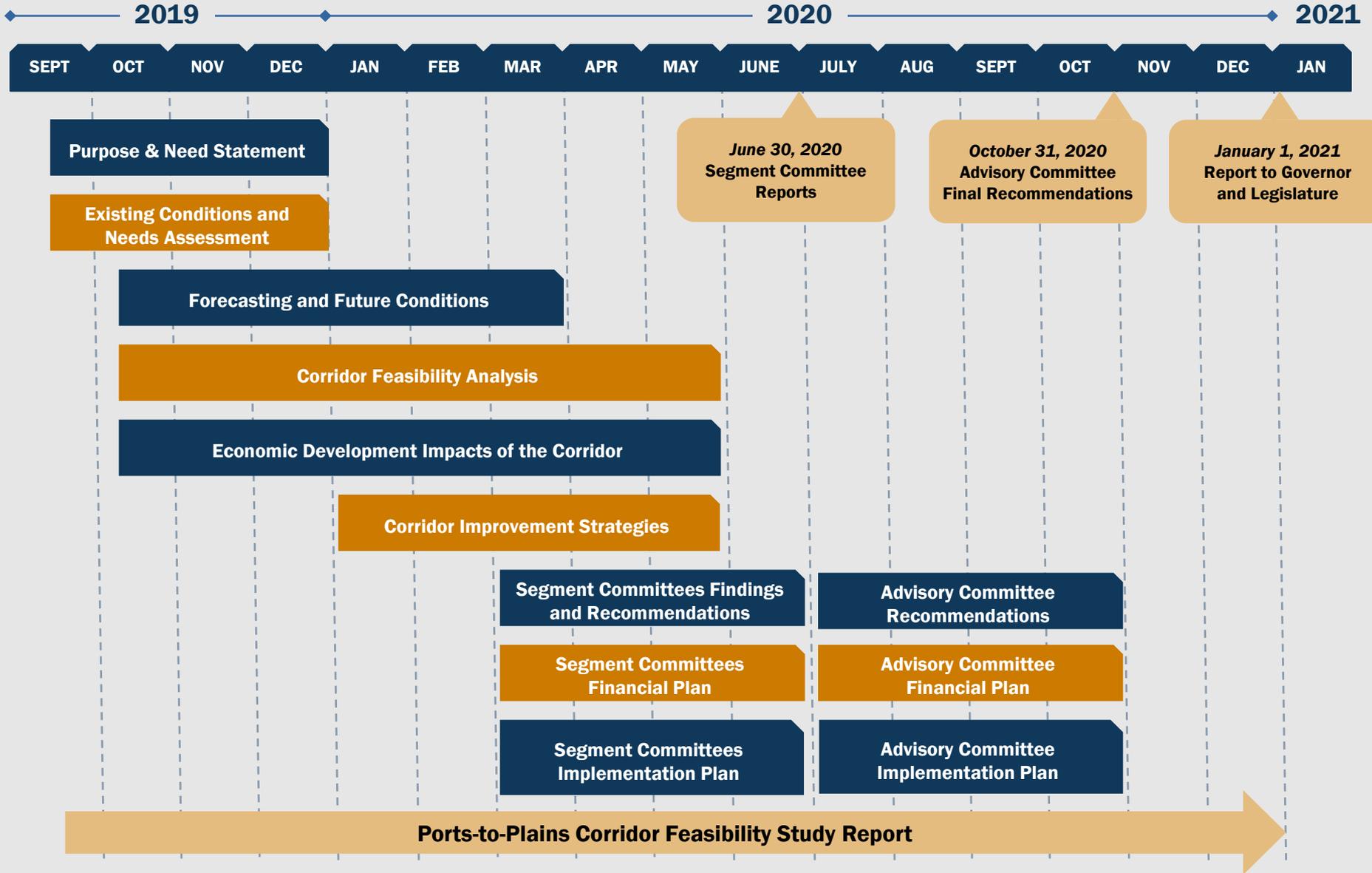
- Which goals of the corridor feasibility study are the most important to you?



# Ports-to-Plains Corridor Feasibility Study Scope



# Ports-to-Plains Corridor Feasibility Study Schedule

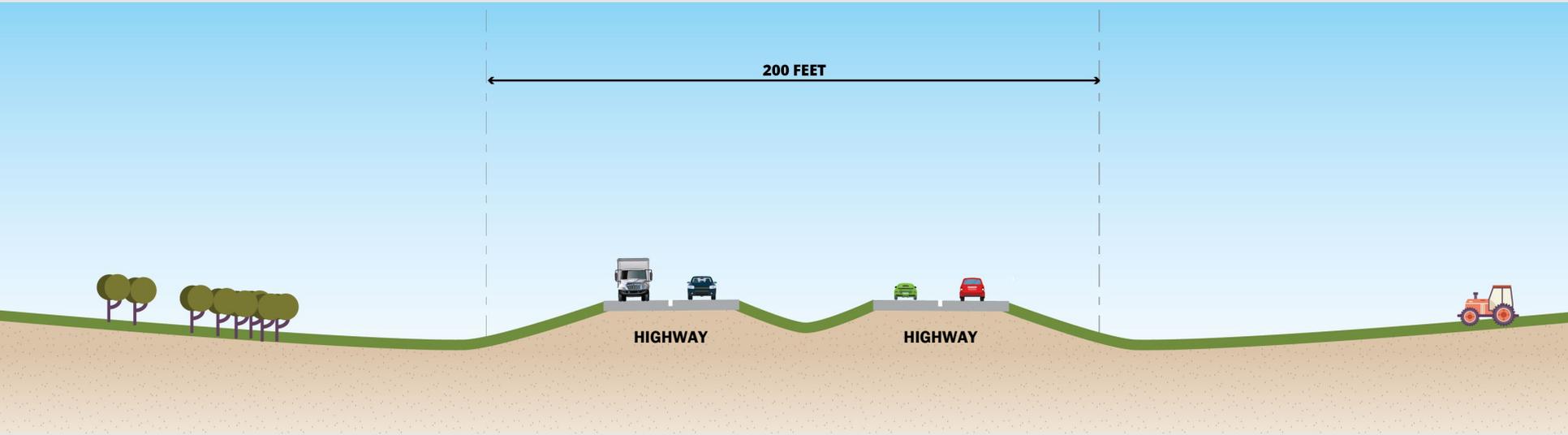




## Study Alternatives



# Four-Lane Divided Highway Cross Section



**Driveway access** to local businesses and residences



**Lower design speeds**

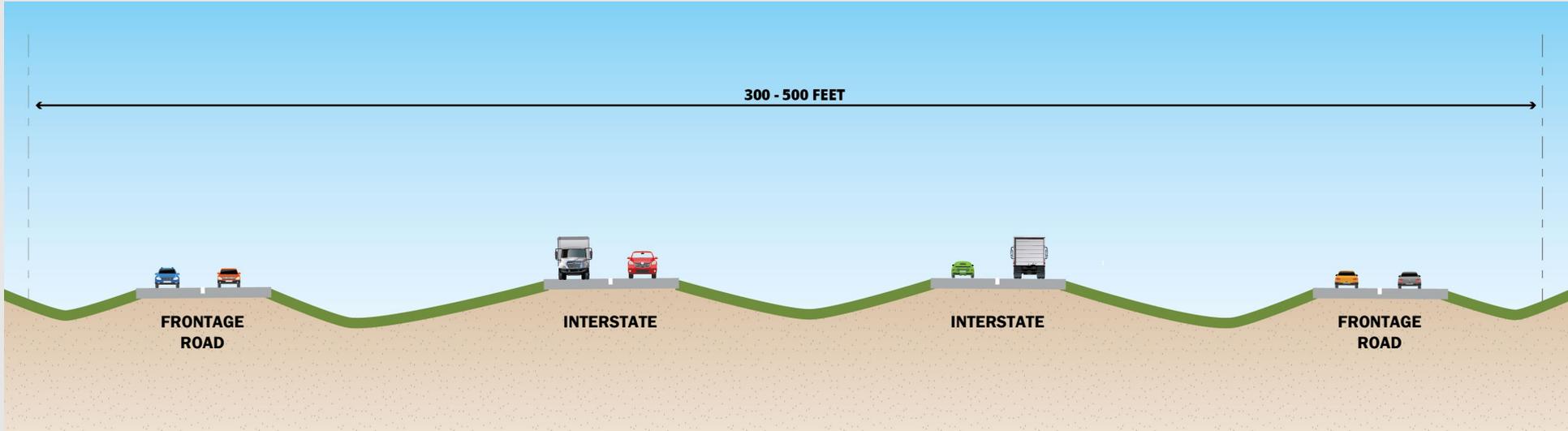


**Smaller right-of-way widths**



**At-grade intersections** with other roadways

# Interstate with Frontage Roads Cross Section



**No driveways** connecting to main lanes.



**No stop signs or traffic signals** on main lanes.



**Higher design speeds**



Traffic will flow uninterrupted from one end of the facility to the other. To accomplish this, **overpasses are necessary.**



**Larger** right-of-way **widths**



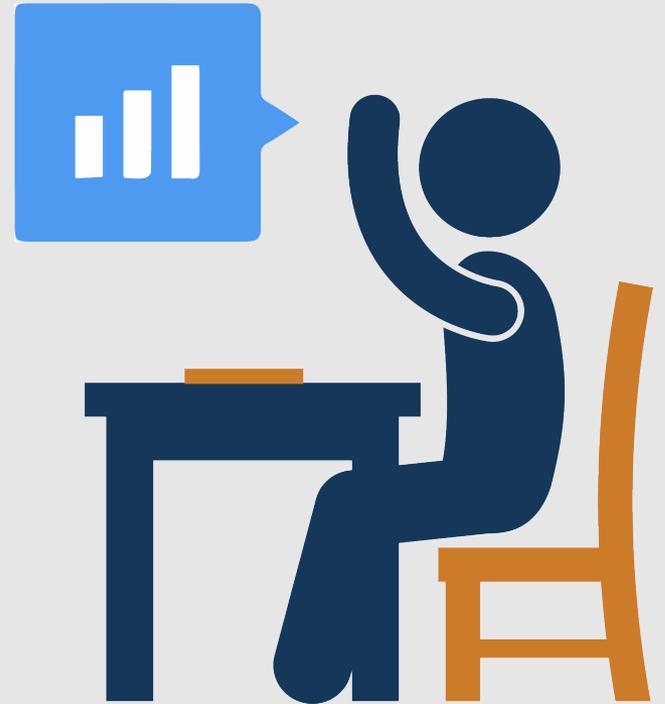
## Existing Conditions and Needs





## Public Feedback

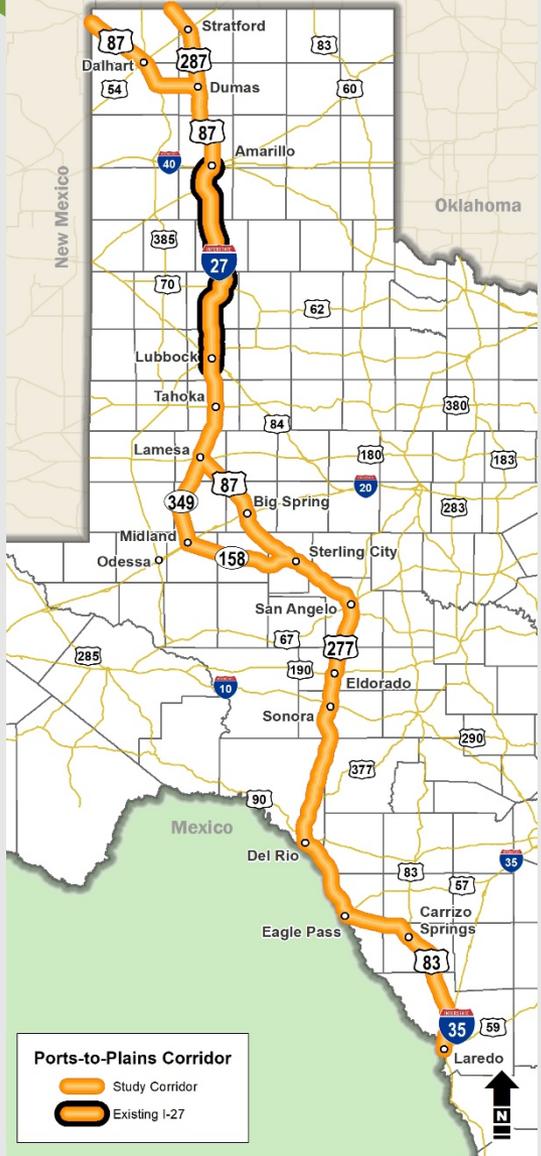
- What are the key needs and challenges in Segment #2?
- What are the potential opportunities in Segment #2?



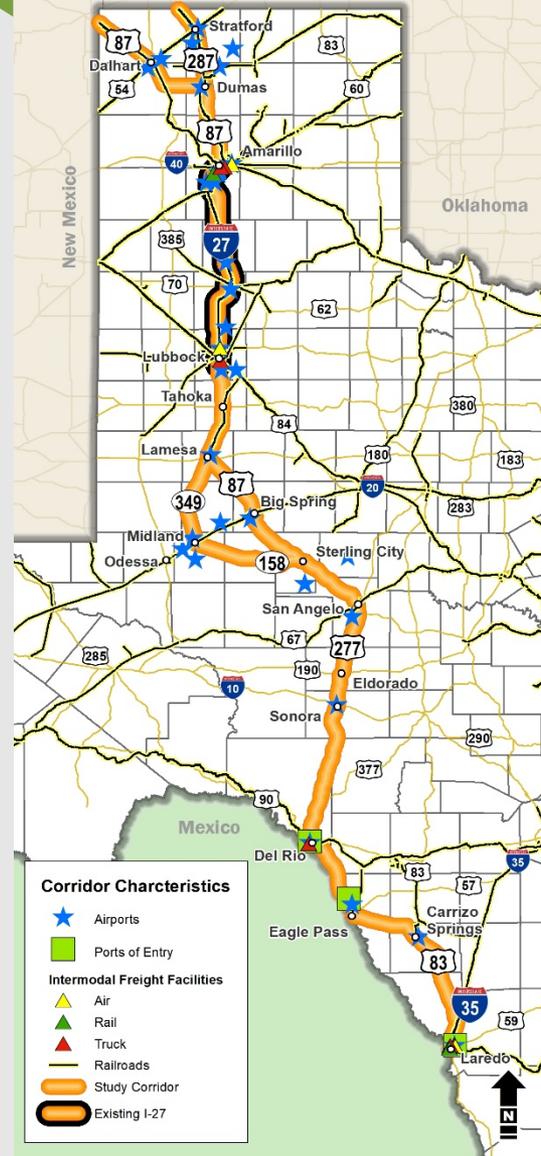
# Current Corridor Characteristics



## Ports-to-Plains Corridor



## Other Modal Facilities



**962** Corridor Miles  
**26** Counties  
**6** TxDOT Districts

## Major Cities

Laredo, Del Rio, San Angelo, Big Spring, Midland, Lamesa, Lubbock, Amarillo, Dumas, Dalhart

## Major Land Ports of Entry

Laredo, Del Rio, Eagle Pass

# Current Segment #2 Characteristics



**440 Segment Miles**

**12 Counties**

**4 TxDOT Districts**

Lubbock, Abilene, Odessa, San Angelo

## Major Cities and Towns

Sonora, Eldorado, San Angelo, Sterling City, Big Spring, Midland, Lamesa, Lubbock

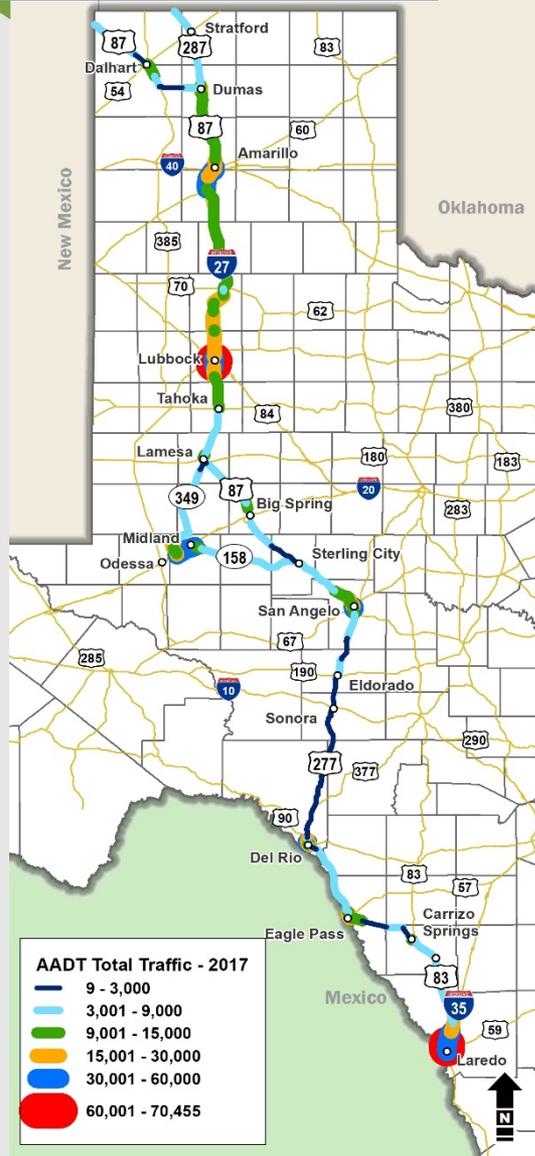
## Corridor Highways

- US-277 from Edwards Co. to San Angelo
- US-87 from San Angelo to I-27
- I-27 through Lubbock to Hale Co.
- SH-158 from Sterling City to I-20
- I-20 from SH 158 to SH 349
- SH 349 from I-20 to Lamesa

# Average Daily Traffic - 2017



## Corridor Total Traffic 2017



## Segment #2 Total Traffic 2017



Source: TxDOT TPP Roadway Inventory 2017

## Range - Annual Average Daily Traffic

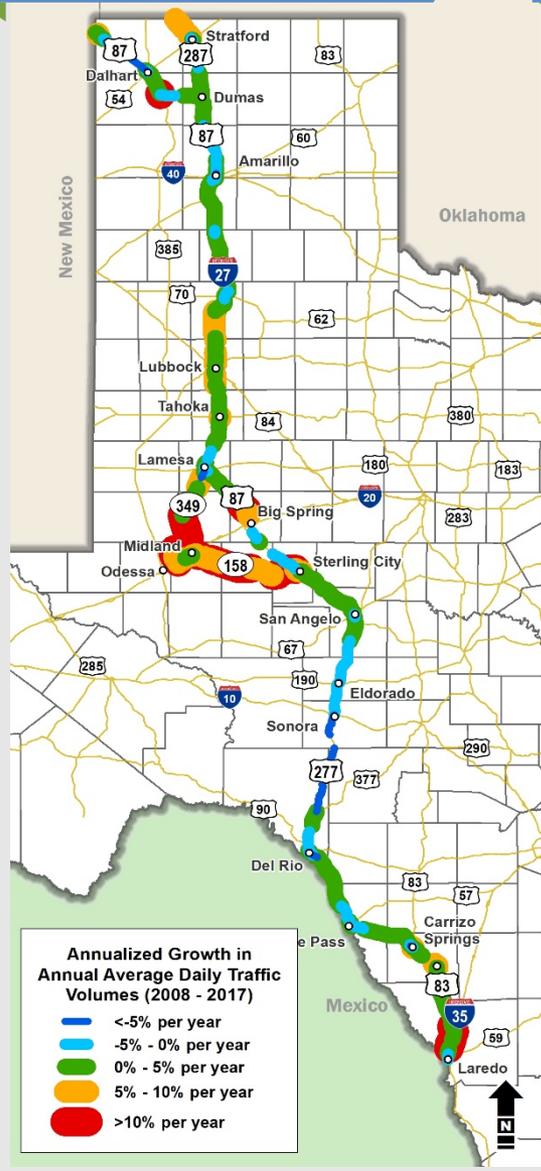
- <3,000 Per day from **Eldorado** to Del Rio
- 3,000-9,000 Per day on many rural US Highway segments
- 9,000-30,000 Per day on rural I-27, north of Amarillo, near **Big Spring**
- Per day on Interstate Highways in Laredo, **Lubbock, Midland, and Amarillo**
- Key Takeaways**

- Traffic volumes in the corridor and Segment #2 vary considerably.
- SH-349 around Midland and US 87 in San Angelo carry 25,000 to 30,000 vehicles per day

# Growth in Traffic Volumes - 2008 to 2017



## Corridor Growth - 10 Years



## Segment #2 Growth - 10 years



## Growth Trends

- 5-10%** Per year in **Midland, Big Spring, Sterling City, & Laredo**
- 0-5%** Per year in **Carrizo Springs, south of Del Rio, San Angelo, Lubbock, rural I-27, Dumas**
- <0%** Per year in **Sonora, Edwards/Val Verde County, Amarillo**

## Key Takeaways

- Growth in the corridor and Segment #2 vary considerably.
- Segment #2 has largest concentration of growth areas in the corridor

Source: TxDOT TPP Roadway Inventory 2017

# Corridor Average Daily Truck Traffic - 2017



- The heaviest truck volumes by far are on the I-35 segment from **Laredo**
- Relatively low truck volumes between **Eagle Pass** and **San Angelo**
- Higher truck volumes in **northern portion** of corridor
- Spike in truck volumes at **Midland**, perhaps reflecting Permian Basin traffic
- Truck percentages/freight intensity follow similar pattern to overall truck volumes
- Higher percentages at **southern** and **northern** portions of corridor

Source: TxDOT TPP Roadway Inventory 2017

# Segment #2 Average Daily Truck Traffic - 2017



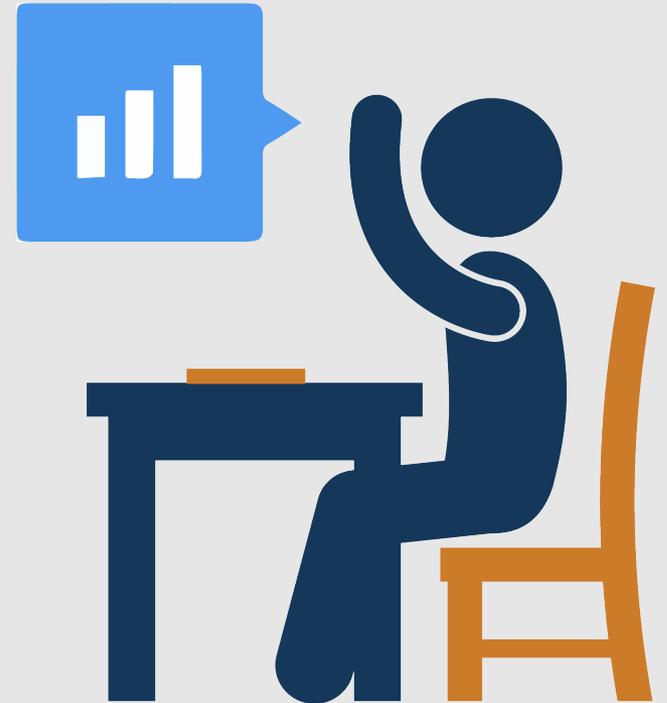
- **Midland/Odessa and Lubbock** with significant truck volumes though moderate percentage of mix
- **Glasscock, Howard, and Sutton County** with large truck percentages larger than 30%
- Relatively low truck counts and percentage between **San Angelo and Sonora**

Source: TxDOT TPP Roadway Inventory 2017



## Public Feedback

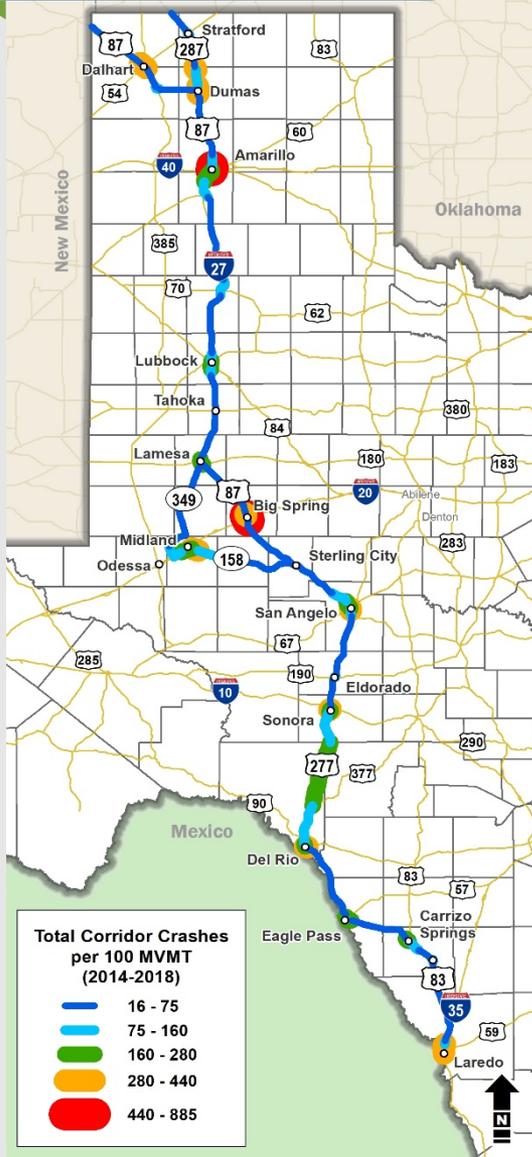
- Where are the bottlenecks for traffic in Segment #2 and what are the causes?



# Total Crashes – 2014-2018



## Corridor Total Crashes



## Segment #2 Total Crashes



## Key Corridor Takeaways

- 17,554 Total Crashes
- Highest rates in cities (Big Spring, Amarillo)
- Rural I-27 with relatively low rates

## Key Segment #2 Takeaways

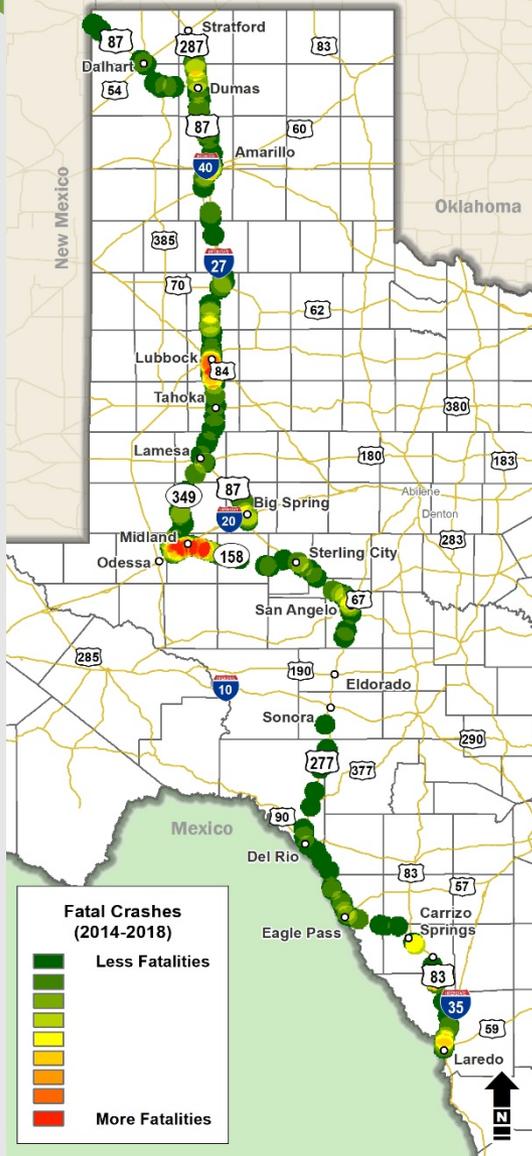
- 7,460 Total Crashes
- Highest crash rates in Midland and Big Spring
- Lower rates in rural areas and Lubbock

Source: TxDOT Crash Records Inventory

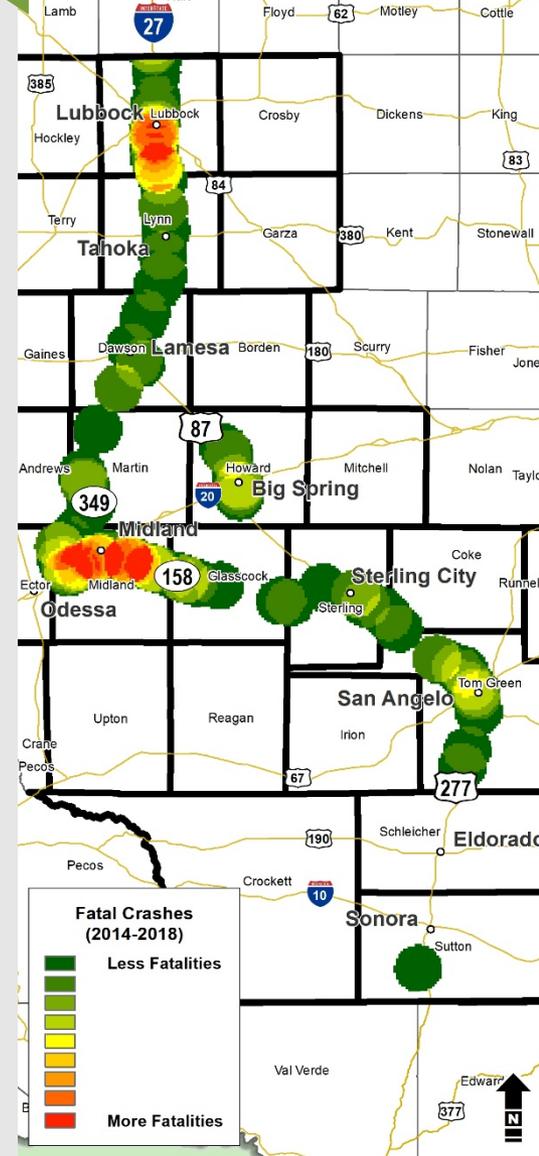
# Fatal Crashes – 2014-2018



## Corridor Fatal Crashes



## Segment #2 Fatal Crashes



## Key Corridor Takeaways

- 242 fatal crashes
- Amarillo, Lubbock and Midland exhibit highest number of crashes due to higher traffic volume
- Few fatalities on US 277 near Sonora and Eldorado

## Key Segment #2 Takeaways

- 132 Fatal Crashes
- Highest concentrations in Lubbock and Midland
- Some rural segments without crashes

Source: TxDOT Crash Records Inventory



## Corridor Wide



■ **29%**  
Speeding



■ **28%**  
Failure to Stop/Yield



■ **9%**  
Impaired or  
Distracted Driver



■ **9%**  
Improper Use of Lanes

## Segment #2



■ **31%**  
Speeding



■ **35%**  
Failure to Stop/Yield



■ **7%**  
Impaired or  
Distracted Driver

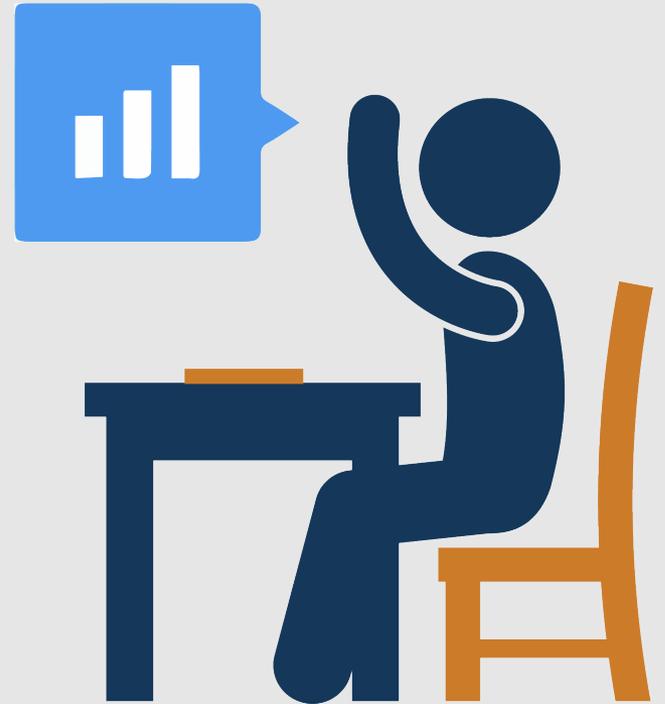


■ **7%**  
Improper Use of Lanes



## Public Feedback

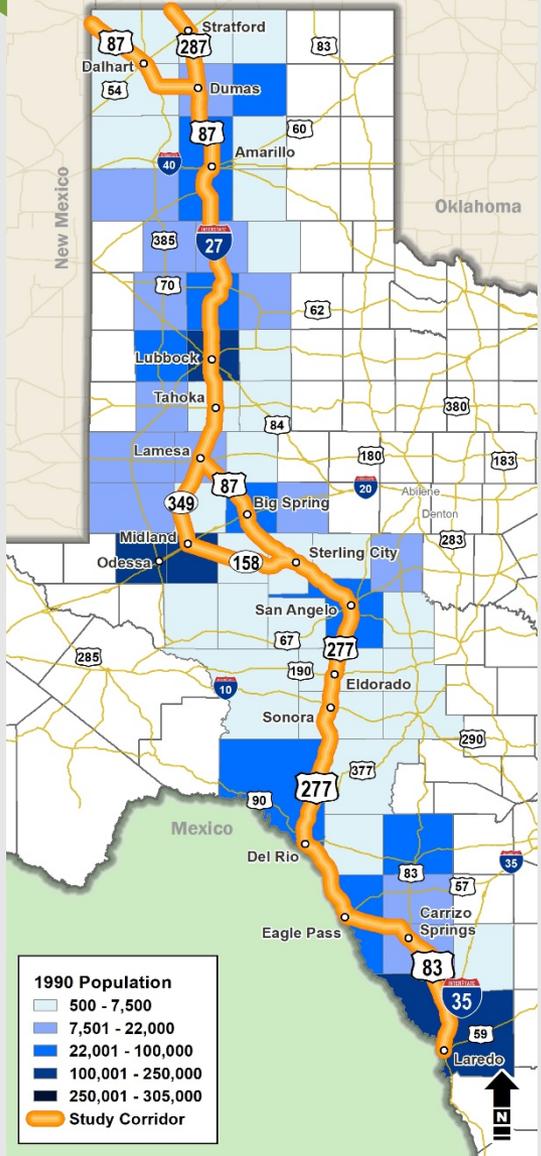
- What areas and issues contribute to safety needs and challenges in Segment #2?



# Corridor Population Growth 1990-2017



1990



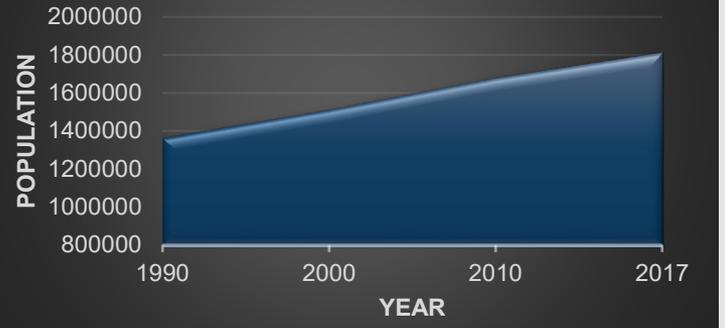
2017



**1,362,255** (1990)      **1,811,411** (2017)

- Corridor total population **increased by 449,156 persons**
- Overall corridor population **grew by 33%**

**Corridor Population 1990-2017**



Source: Texas Demographic Center, U.S. Census

# Segment #2 Population Growth 1990-2017



1990



2017



**740,999** (1990)      **954,316** (2017)

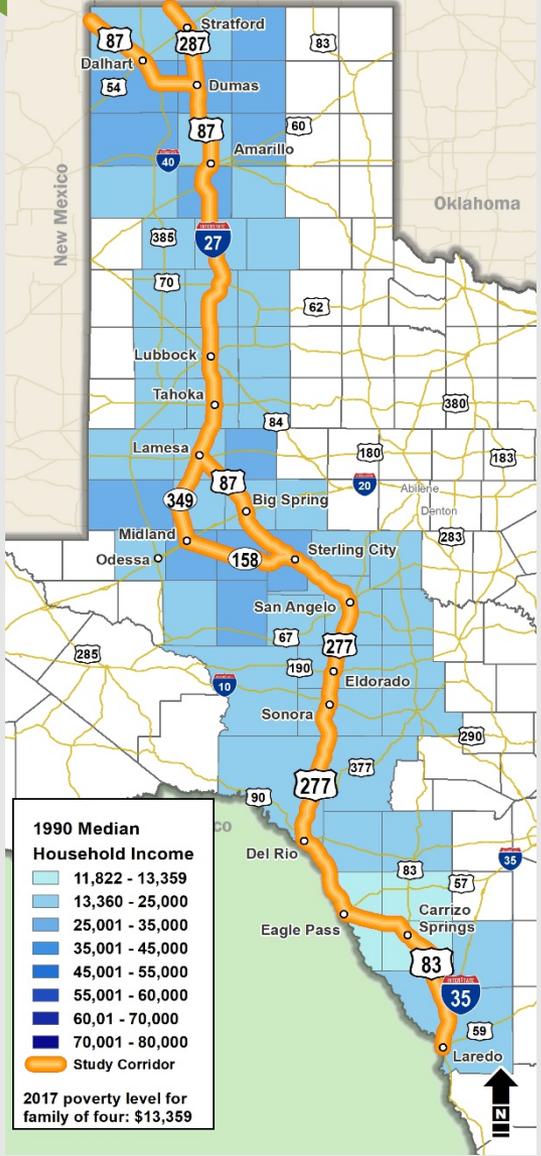
- Total population **increased by 213,317** persons
- **Midland County** (59%) and **Gaines County** (41%) had the highest population growth
- **Borden County** (-25%) and **Upton County** (-20%) had the largest population declines
- Overall segment population **grew by 29%**
- Overall corridor population **grew by 42%**

Source: Texas Demographic Center, U.S. Census

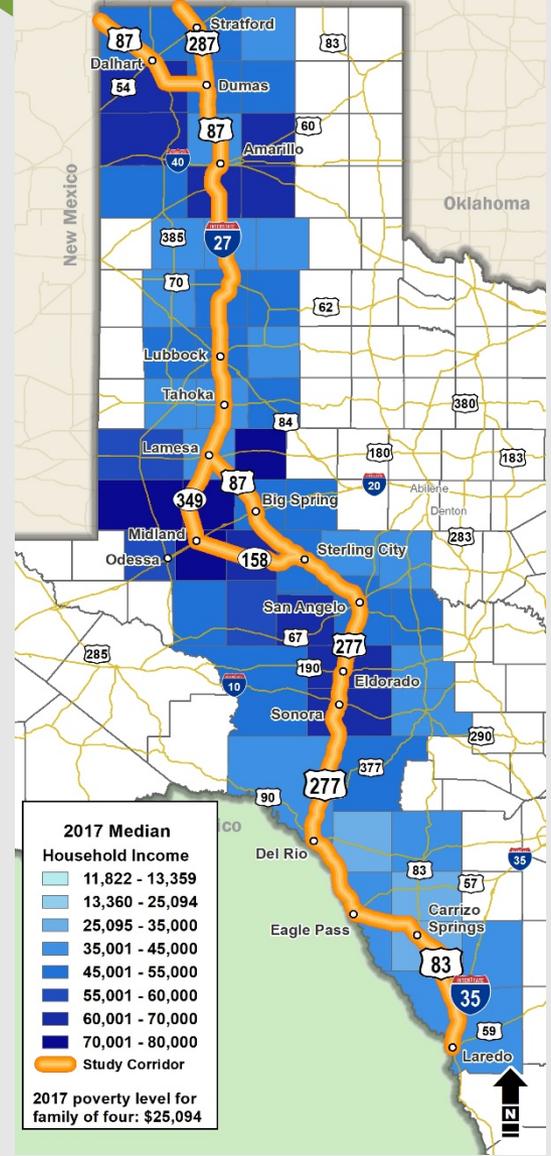
# Corridor Median Household Incomes 1990-2017



1990

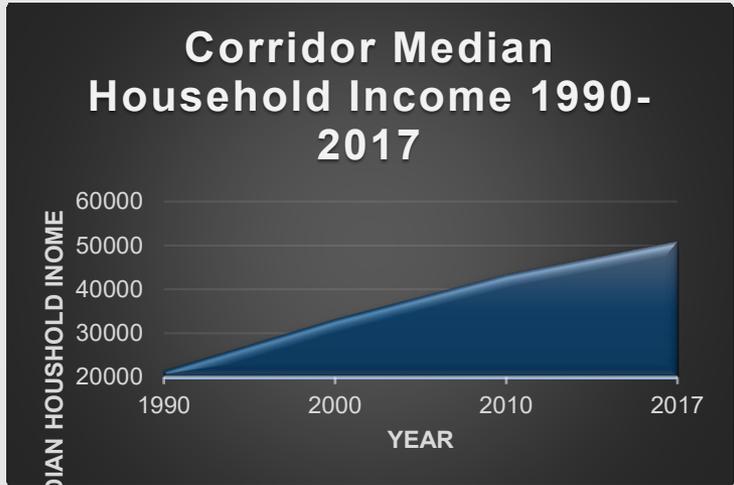


2017



**\$21,396** (1990)      **\$50,786** (2017)

- Corridor total median household income **increased by \$29,390**
- Overall corridor median household income **grew by 137%**

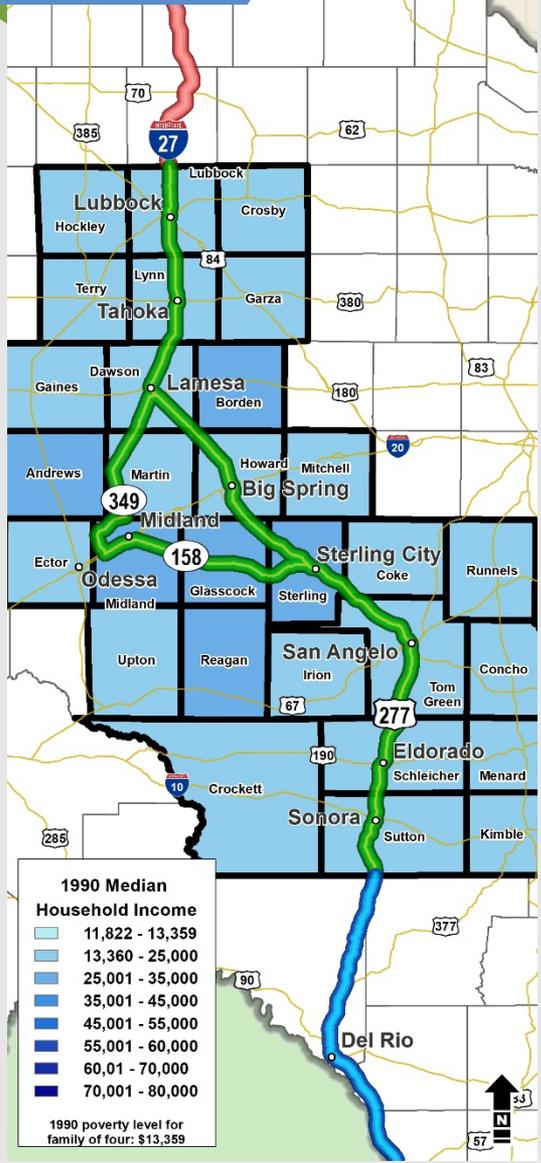


Source: U.S. Census, American Community Survey

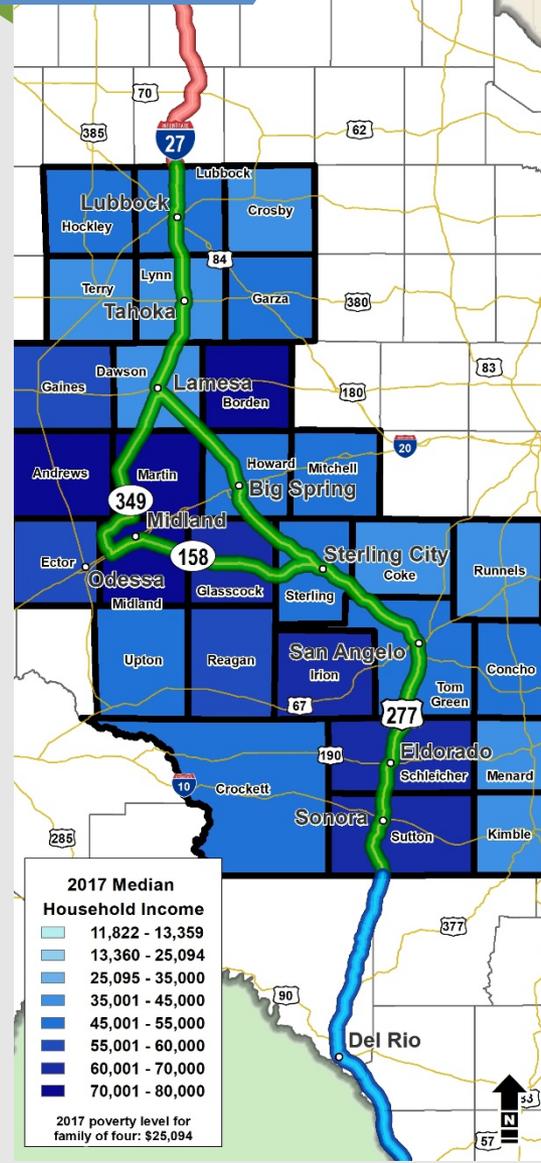
# Segment #2 Median Household Incomes 1990-2017



1990



2017



**\$22,135**

(1990)

**\$52,194**

(2017)

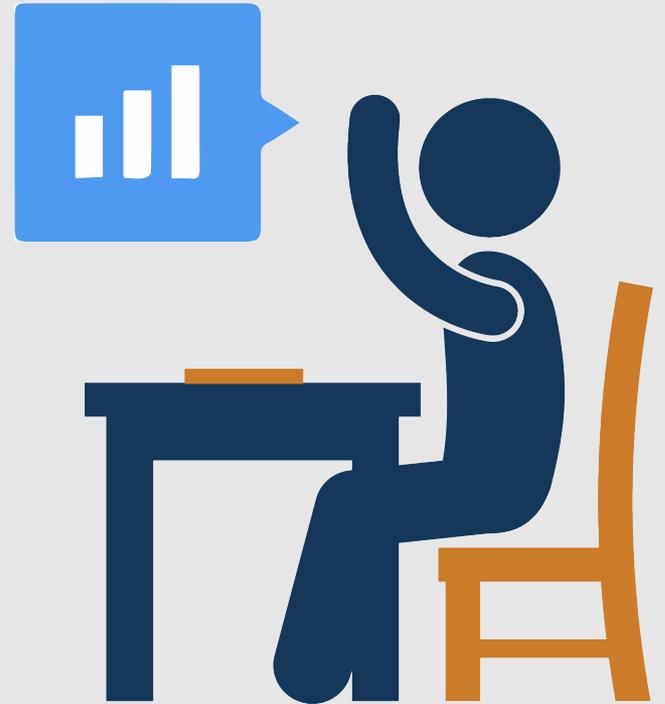
- Total income **increased by \$30,059**
- **Martin County (245%) and Mitchell County (197%)** had the highest increases in income
- No counties saw declines in household income
- No counties had median incomes below the poverty line in 1990 or 2017
- Overall **segment** income **grew by 144%**
- Overall **corridor** income **grew by 135%**

Source: U.S. Census, American Community Survey



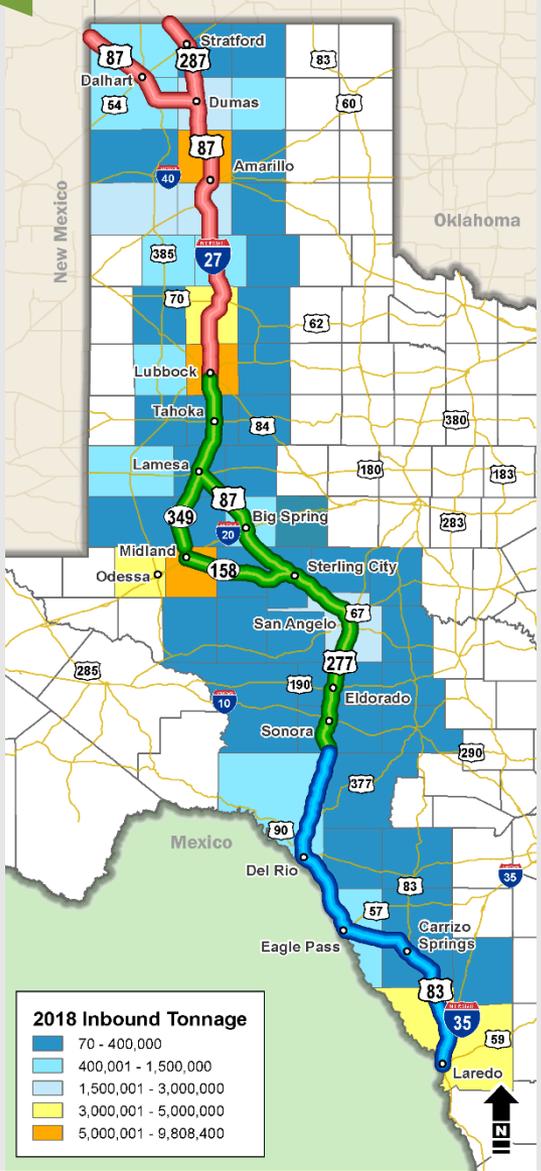
## Public Feedback

- What factors do you think will influence population, income, and employment in Segment #2 over the next 30 years?

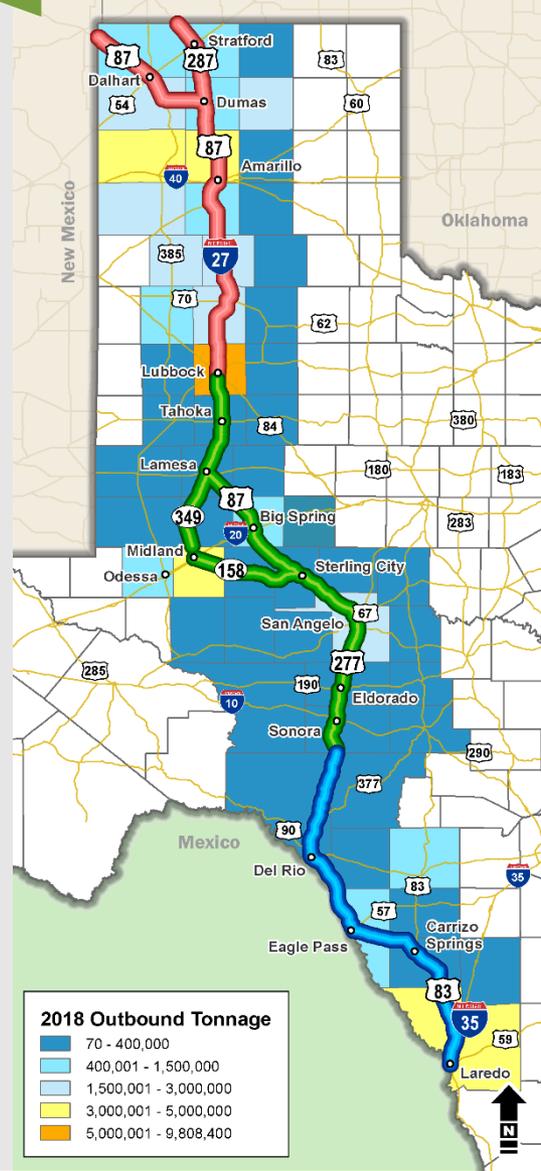


# Inbound and Outbound Freight on the Corridor by County - 2018

## Inbound Freight on the Corridor



## Outbound Freight on the Corridor

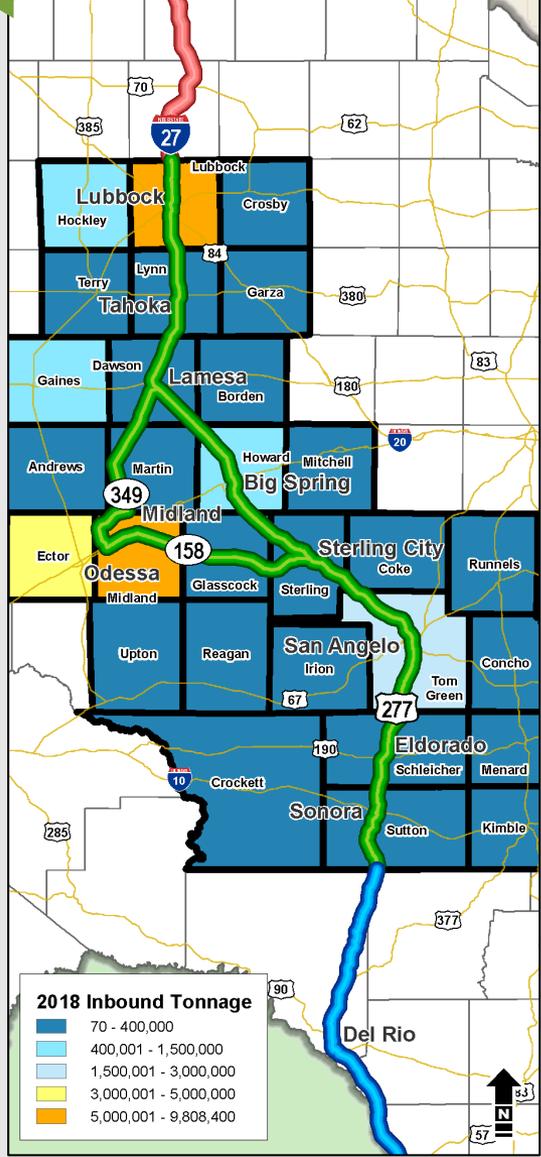


- **Panhandle** ships more freight than it receives, except:
  - **Amarillo** receives more freight than it ships out
- **Midland/Odessa** receives more freight than it ships out, due to:
  - **Outbound freight traveling by other modes**
  - **Inbound freight supplies industry**
- Port of Entry at **Laredo** is busy in both directions

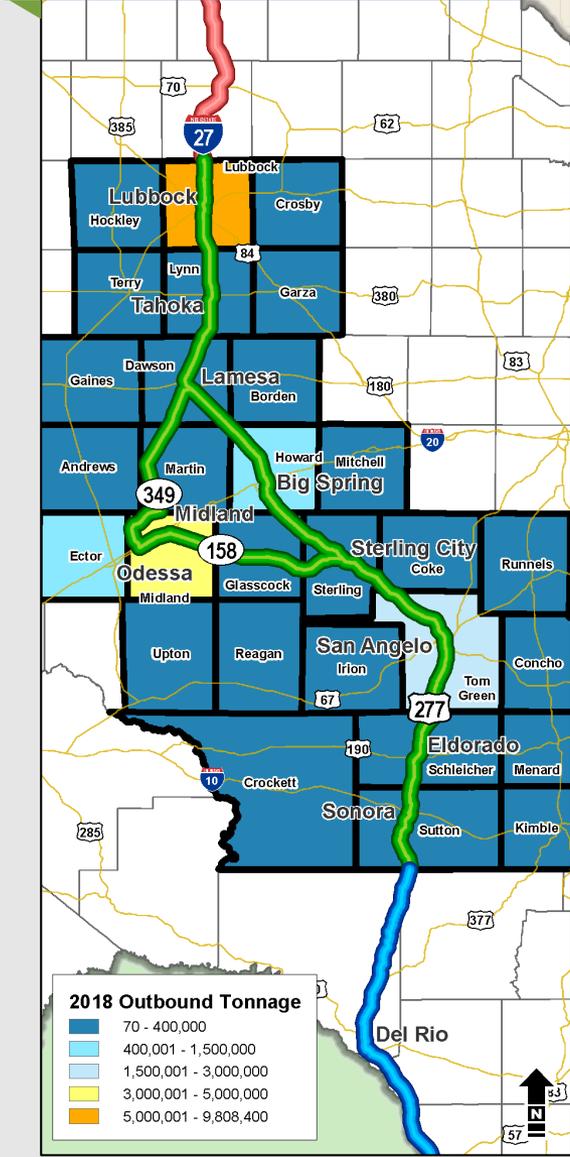
Source: TXDOT SAM and TRANSEARCH database

# Inbound and Outbound Freight Using Segment #2 by County - 2018

### Inbound Freight on the Segment



### Outbound Freight on the Segment



- Freight coming in and going out of Segment #2 is **generally balanced** (in tonnage)
- **Midland/Odessa** receives more freight than it ships
  - Freight coming in supplies the **energy sector** and local transient population
  - Energy freight going out uses **other modes** (e.g. pipelines)
- **Lubbock, Tom Green, and Howard Counties** are busy in both directions

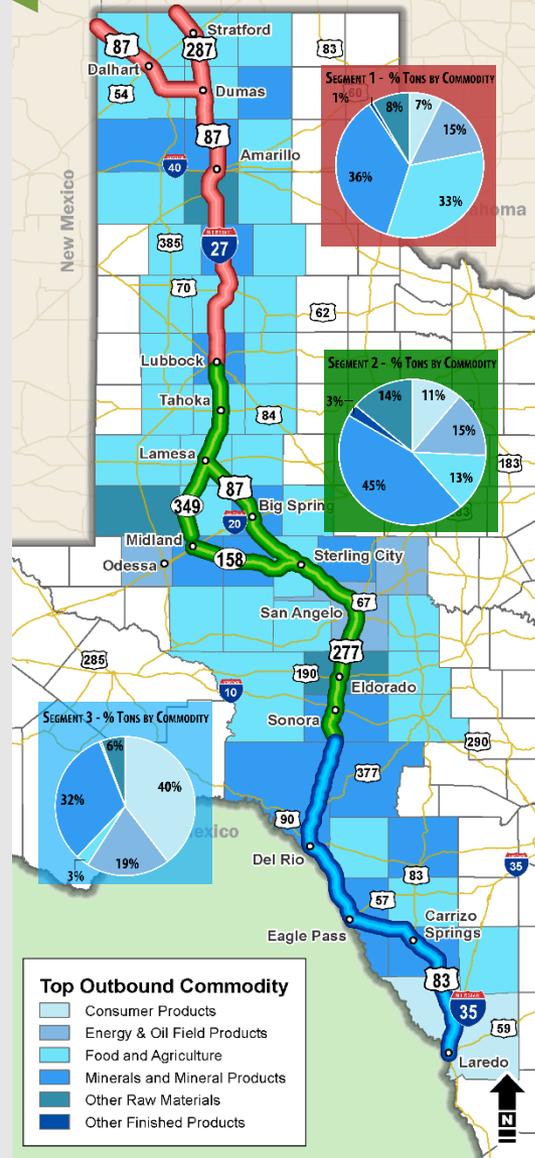
Source: TXDOT SAM and TRANSEARCH database

# Corridor Freight Commodities Outbound by County - 2018



## Outbound Commodities on the Corridor

- The mix of **outbound commodities** by truck differs along the corridor:
  - **Food and agriculture** is most prominent in the Panhandle
  - **Mineral products** - including frac sand - are more than half the volume in the Permian Basin
  - **Consumer products** are most prominent further south because of the Laredo gateway
- **Minerals and raw materials** are most often the top commodity in counties on the corridor
- **Food and agriculture** tends to be the top commodity in counties adjacent to the corridor
- **Energy and oil field products** are important across the corridor
  - But truck tonnage is smaller than minerals
  - And other modes also handle outbound shipping

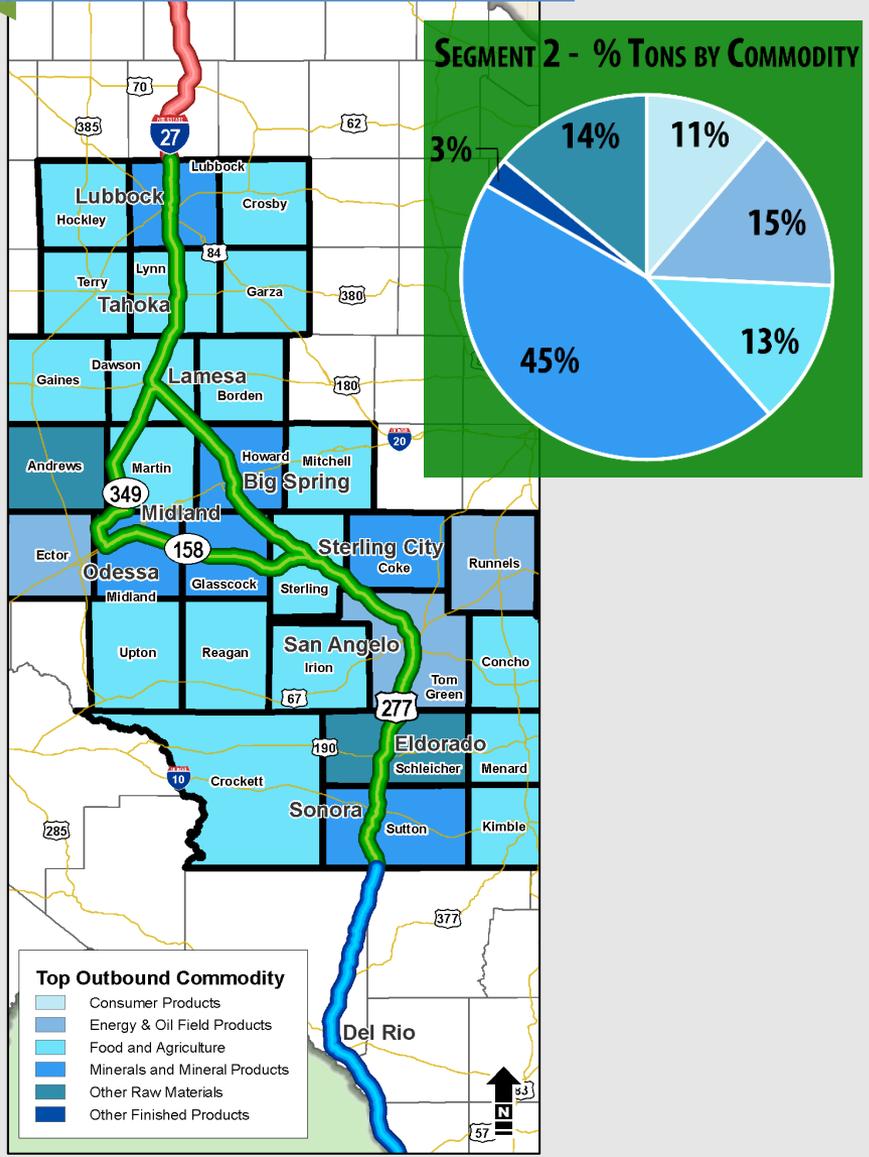


Source: TxDOT SAM and TRANSEARCH database

# Segment #2 Freight Commodities: Outbound by County - 2018



## Outbound Commodities on the Segment



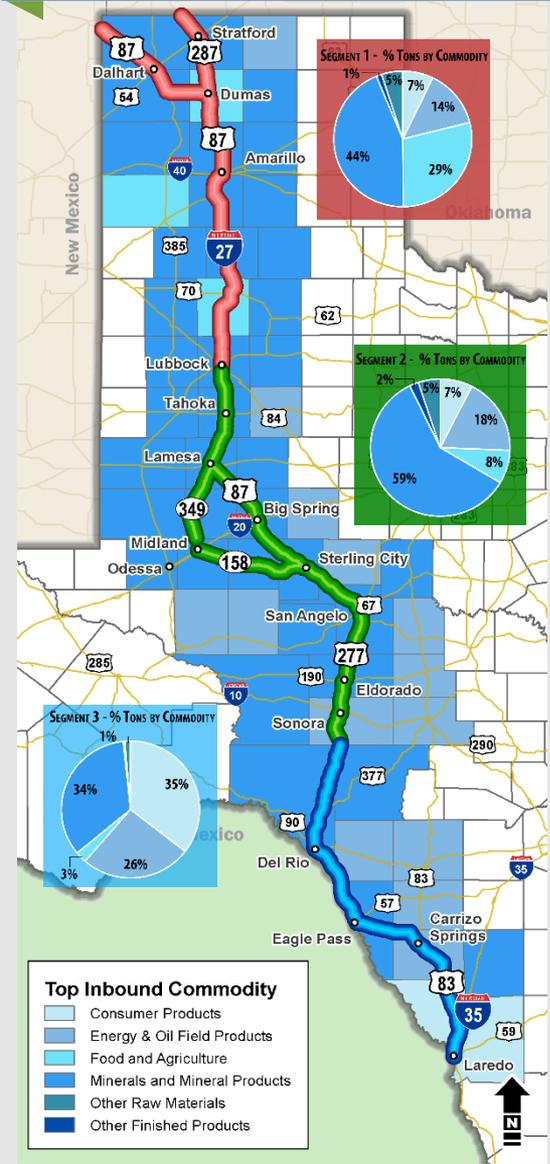
- Highest tonnage of outbound freight on Segment #2
  - **Mineral/Mineral Products (45%)**
  - **Energy and Oil Field Products (15%)**
  - **Other Raw Materials (14%)**
- Outbound commodities is led by **Minerals/Mineral Products** (including frac sand), but is otherwise diverse
- **Energy, raw materials, food/agriculture, and consumer products** are comparable in tonnage
- By county, **Food/Agricultural Products** are often the top commodity – region is a major producer of cotton and grain
- **Energy and oil field products** are important across the segment - other modes also handle outbound shipping of energy products
- **Raw Materials** are important in Schleicher and Andrews Counties

Source: TXDOT SAM and TRANSEARCH database

# Distribution of Freight Commodities Inbound by County - 2018



## Inbound Commodities on the Corridor



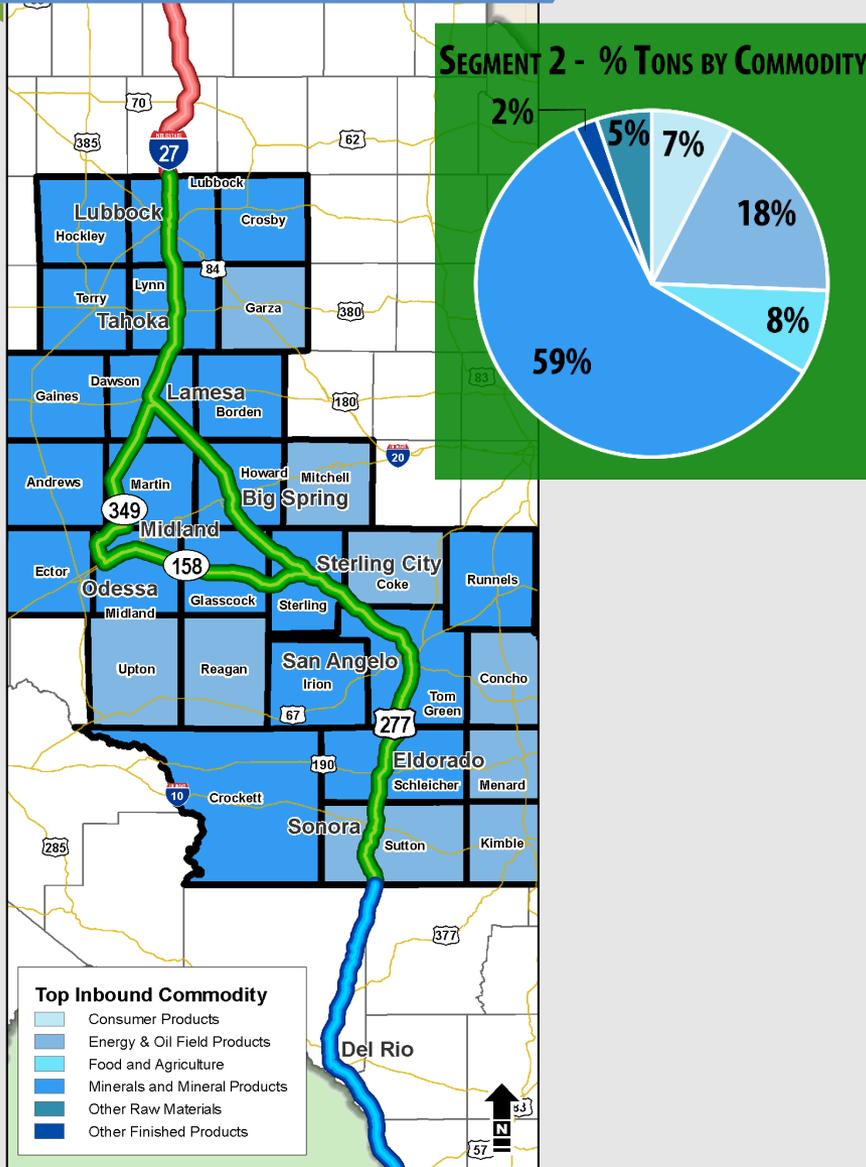
- **Inbound commodities** is similar to outbound at the corridor level:
  - **Food and agriculture** is most prominent in the Panhandle
  - **Mineral products** - including frac sand - are more than half the volume in the Permian Basin
  - **Consumer products** are most prominent further south because of the Laredo gateway
- The top inbound commodities by county show **less variation** than inbound:
  - The top commodity is either **mineral products** or **energy and oil field products**
  - The biggest exception is **consumer products** at Laredo, mainly concerned with foreign trade

Source: TxDOT SAM and TRANSEARCH database

# Segment #2 Freight Commodities: Inbound by County - 2018



## Inbound Commodities on the Segment



- The top 2 highest tonnage of inbound freight products on Segment #2 comprise **77% of total freight coming in** (far more concentrated than inbound):

  - Mineral/Mineral Products (59%)**
  - Energy and Oil Field Products (18%)**
- Minerals and energy products** account for the top commodity in every county
- Minerals include commodities important to production across the region

  - Frac sand** for the energy sector
  - Fertilizer** for agriculture
  - Aggregates** for construction

Source: TXDOT SAM and TRANSEARCH database

# Foreign Truck Trade Across the Corridor by County - 2018



## Import Freight



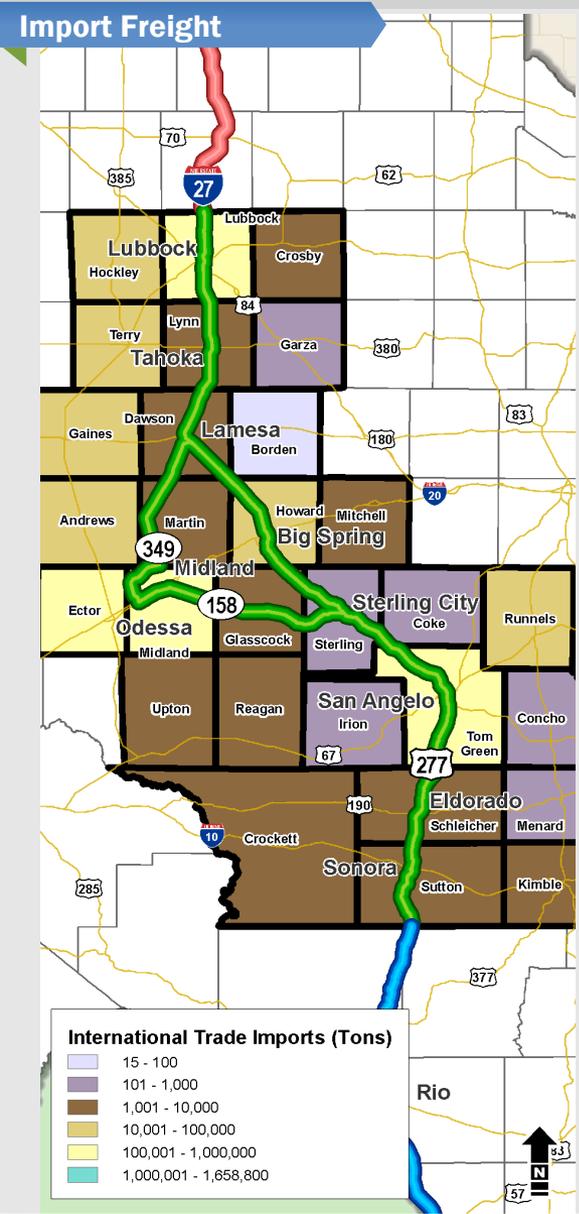
## Export Freight



- Foreign trade is chiefly **cross-border trade with Mexico**
  - Also includes Canadian and overseas traffic
- While **Laredo is the top location** for imports and exports, foreign trade appears throughout the corridor
  - Exports from agricultural areas in the **Panhandle** and elsewhere
  - Imports and exports in the **metropolitan** areas
  - Cross-border trucking at **Del Rio and Eagle Pass**
- **Midland/Odessa** receives imports of industrial and consumer supplies
  - Exports also involve other modes

Source: TRANSEARCH database

# Segment #2 Foreign Truck Trade by County - 2018



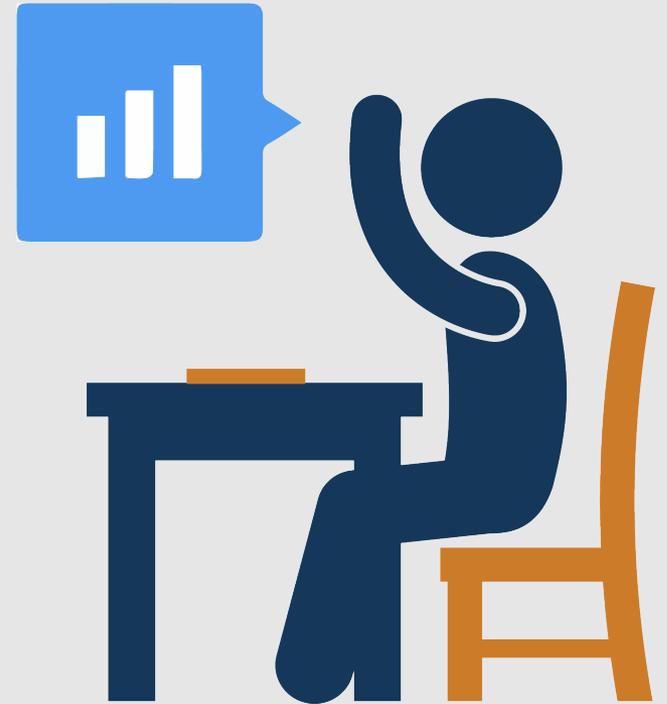
- Foreign trade chiefly **cross-border trade with Mexico**, with some Canadian and overseas traffic
- Foreign trade appears throughout the segment
- Exports** are stronger than imports, particularly in agricultural areas
- Midland/Odessa** imports supplies for the **energy sector**, exports rely on other modes
- All counties have some level of involvement in foreign trade

Source: TRANSEARCH database



## Public Feedback

- What are the key needs and challenges for moving people and freight in Segment #2?





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**THANK YOU!**

