



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

Public Meeting Segment #3
Sutton/Edwards County Line to
I-35/Juarez-Lincoln Bridge in Laredo
Del Rio, Texas



Discussion Review



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Discussion Review



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10 Safety



HB 1079 Overview



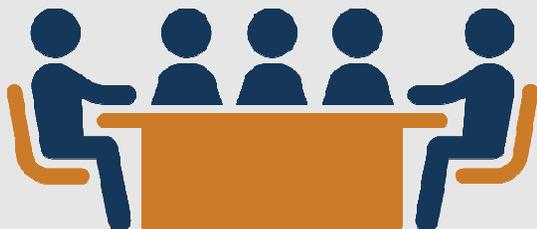
Ports-to-Plains Feasibility Study



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.



Why is My Participation Important?



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

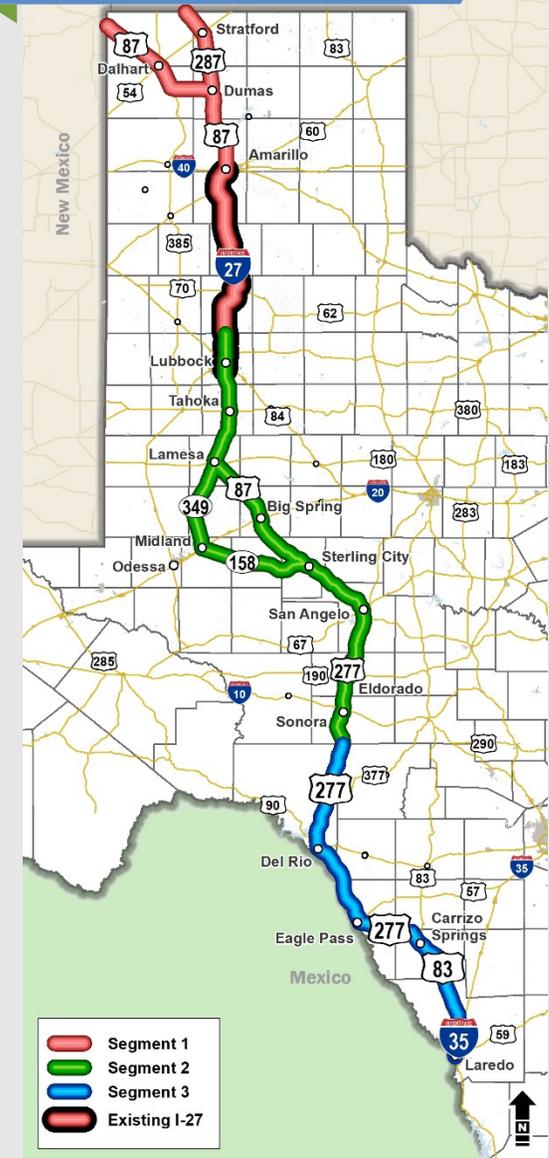
Segment 2

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



Ports-to-Plains Corridor Feasibility Study Goals



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

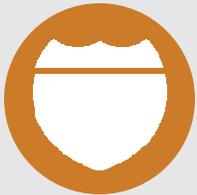
Ports-to-Plains Corridor Feasibility Study Goals



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

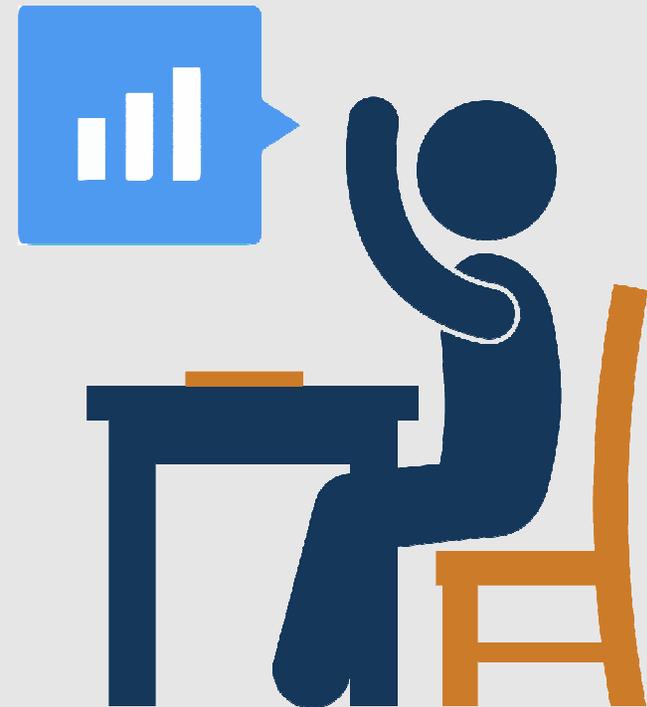


An assessment of federal, state, local, and private **funding sources** for a project improving or expanding the Ports-to-Plains Corridor

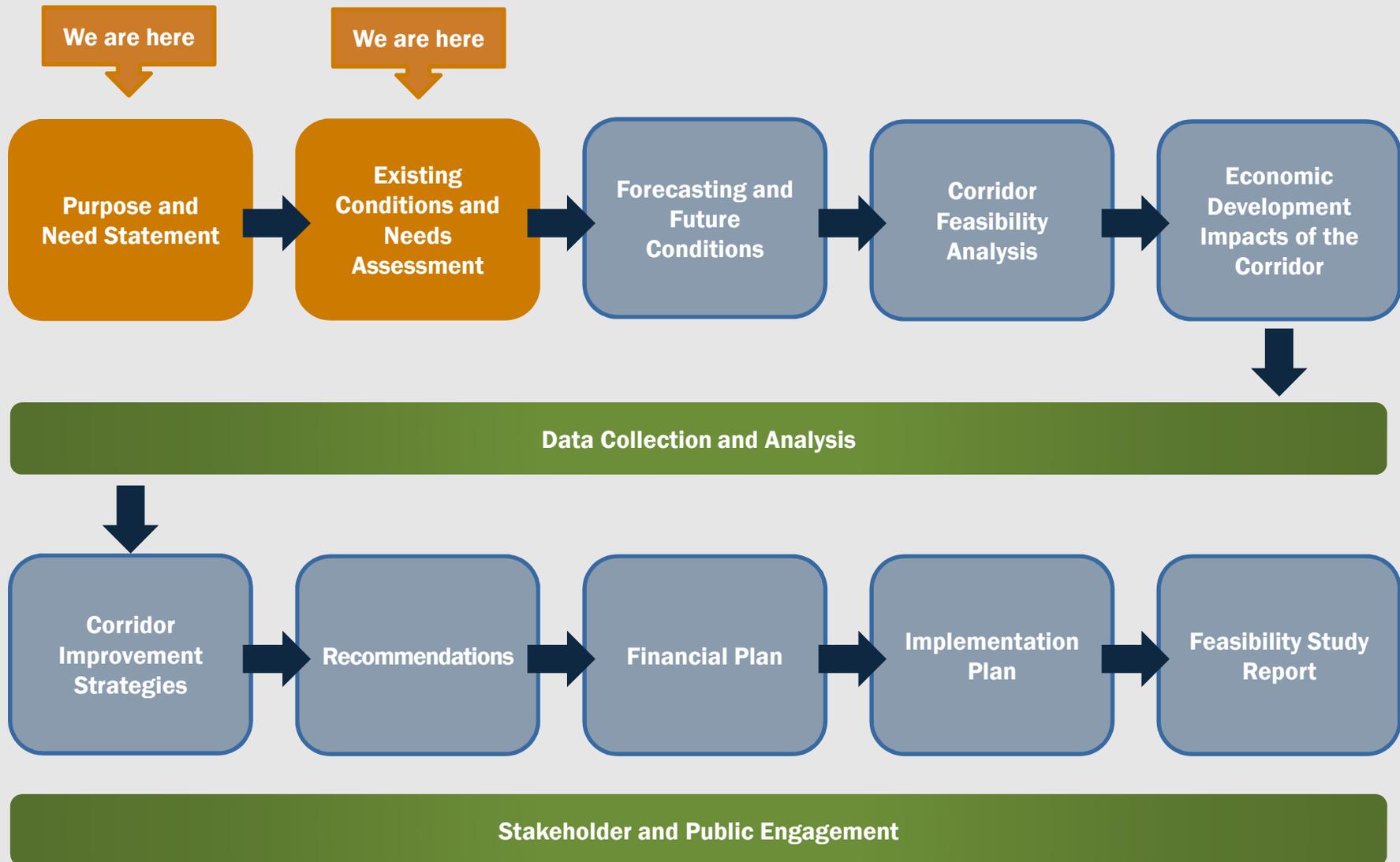


Public Feedback

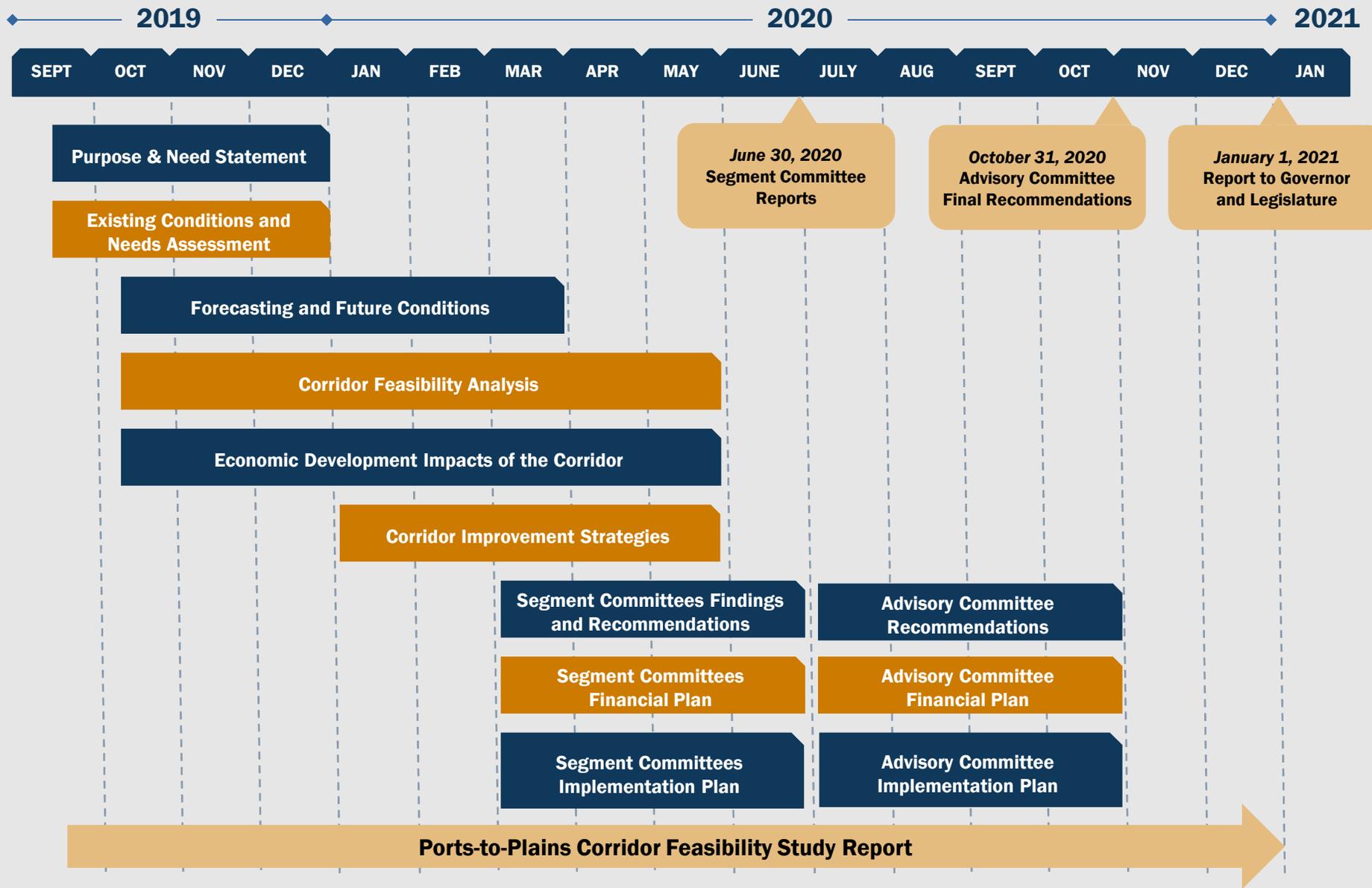
- Which goals of the corridor feasibility study are the most important to you?



Ports-to-Plains Corridor Feasibility Study Scope



Ports-to-Plains Corridor Feasibility Study Schedule

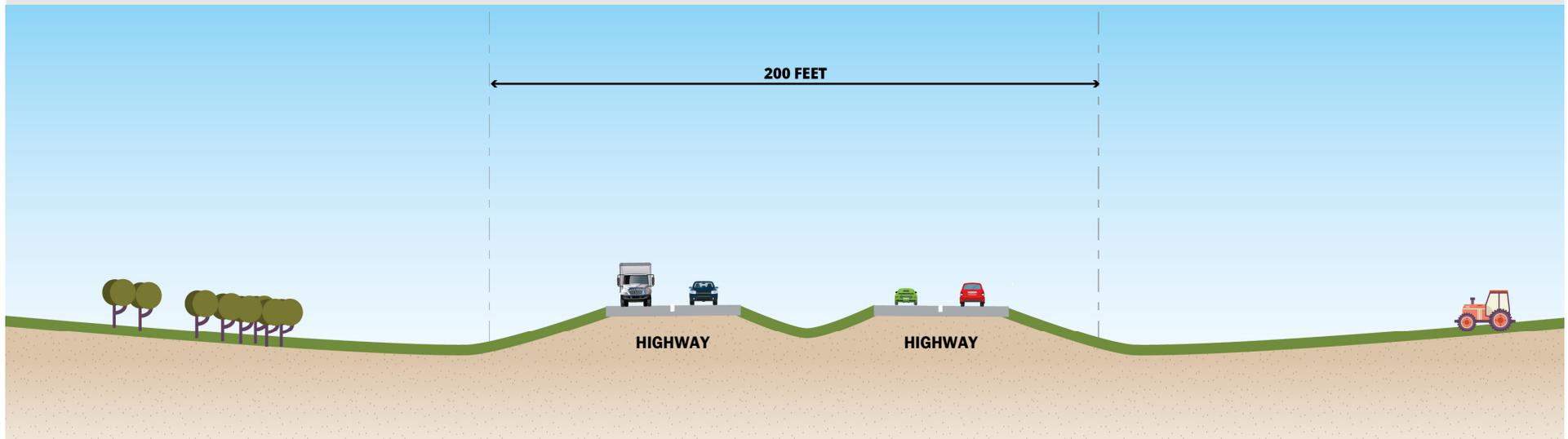




Study Alternatives



Four-Lane Divided Highway Cross Section



Driveway access to local businesses and residences



Lower design speeds

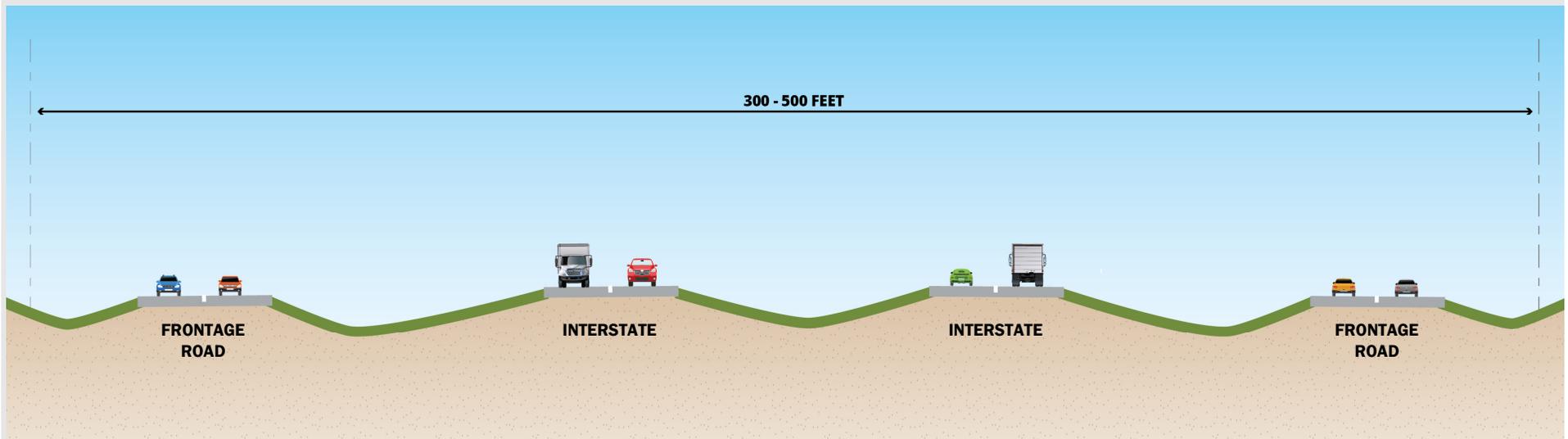


Smaller right-of-way widths



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**



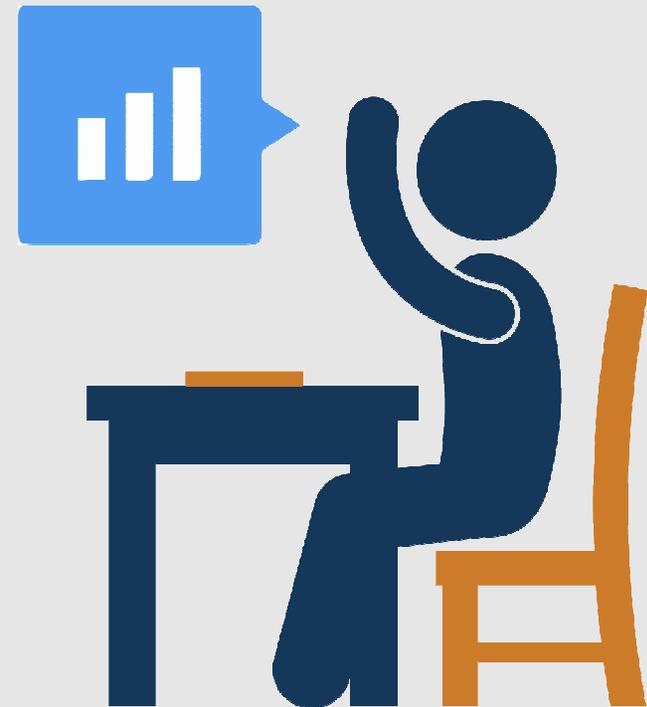
Existing Conditions and Needs





Public Feedback

- What are the key needs and challenges in Segment #3?
- What are the potential opportunities in Segment #3?



Current Corridor Characteristics



Ports-to-Plains Corridor



Other Modal Facilities



992 Corridor Miles
26 Counties
6 TxDOT Districts

Major Cities

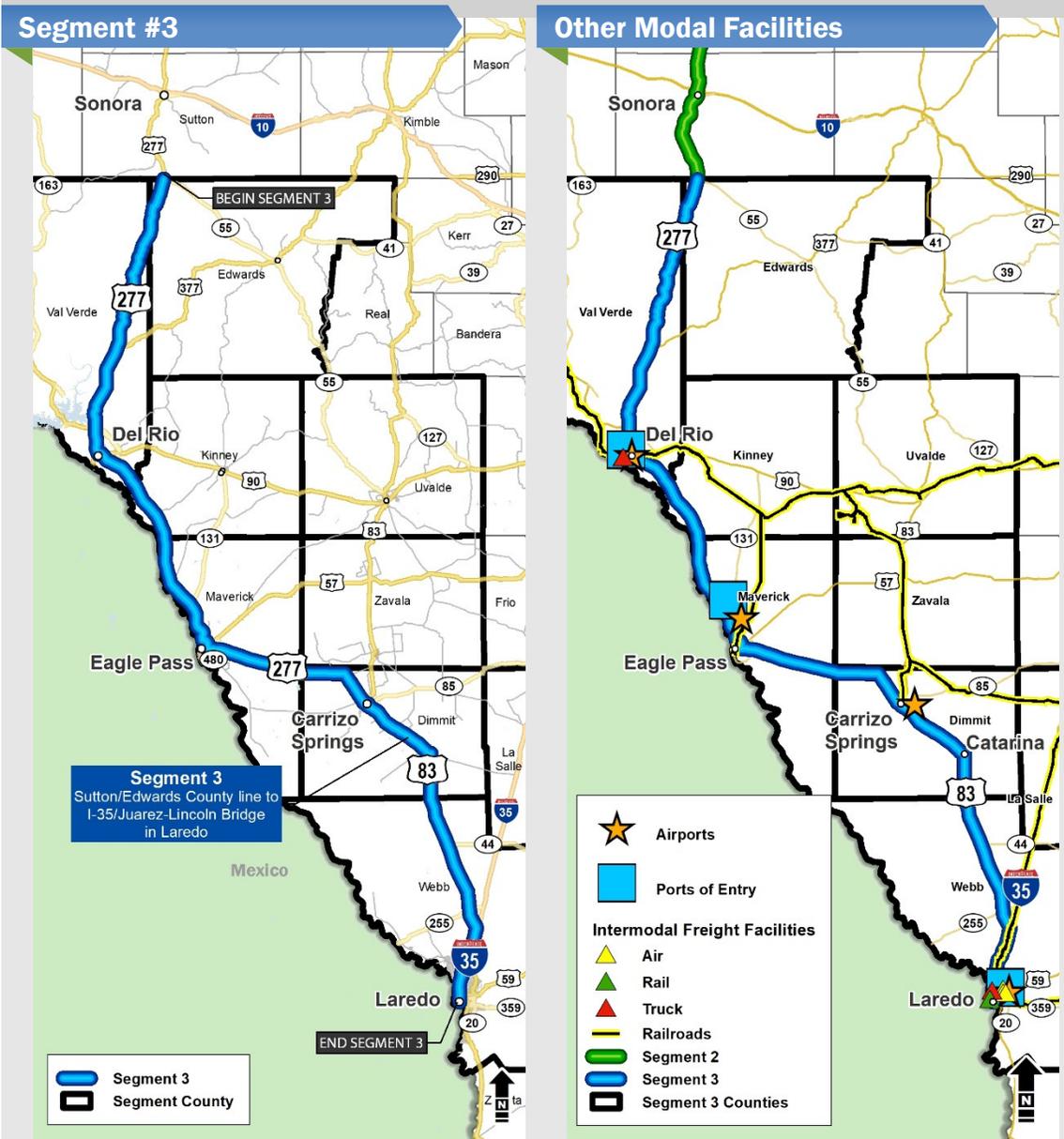
Laredo, Del Rio, San Angelo, Big Spring, Midland, Lamesa, Lubbock, Amarillo, Dumas, Dalhart

Major Land Ports of Entry

Laredo, Del Rio, Eagle Pass



Current Segment #3 Characteristics



247 Segment Miles

6 Counties

3 Ports of Entry

2 TxDOT Districts
(Laredo, San Angelo)

Major Cities and Towns

Laredo, Carrizo Springs, Eagle Pass, Del Rio

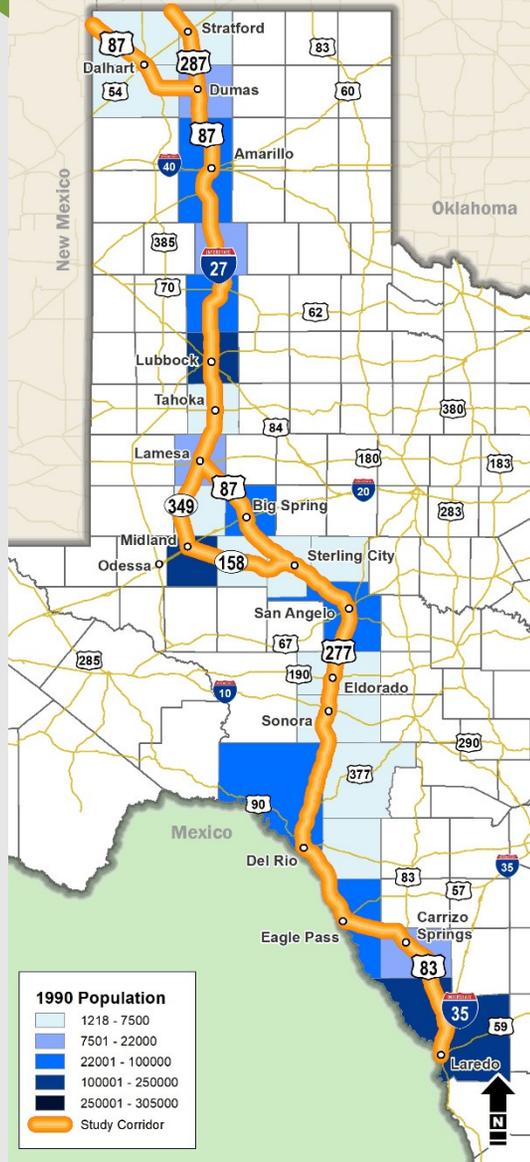
Corridor Highways

- I-35 from Laredo to US-83
- US-83 from I-35 to Carrizo Springs
- US-277 from Carrizo Springs to Sutton County

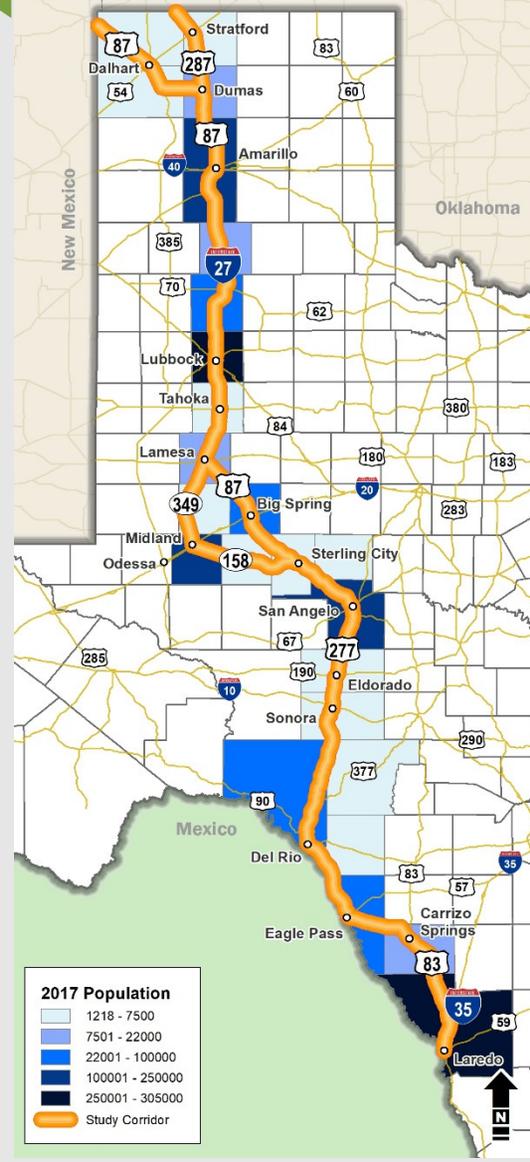
Corridor Population Growth 1990-2017



1990



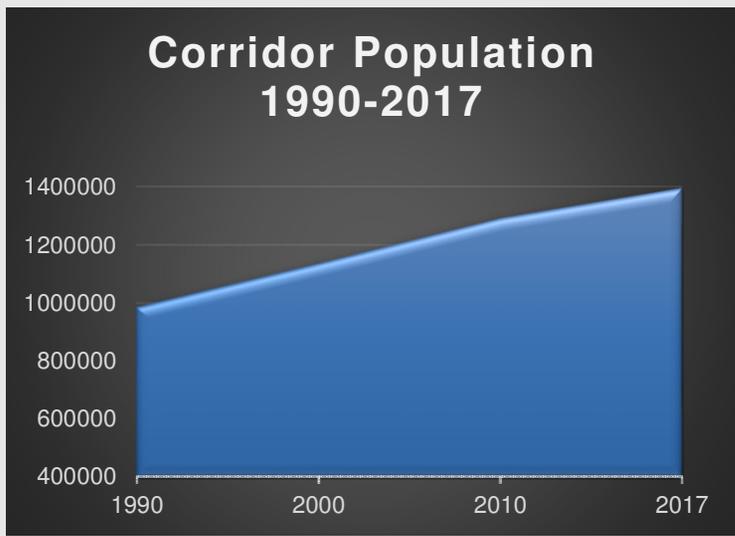
2017



983,870 **1,395,130**
(1990) (2017)

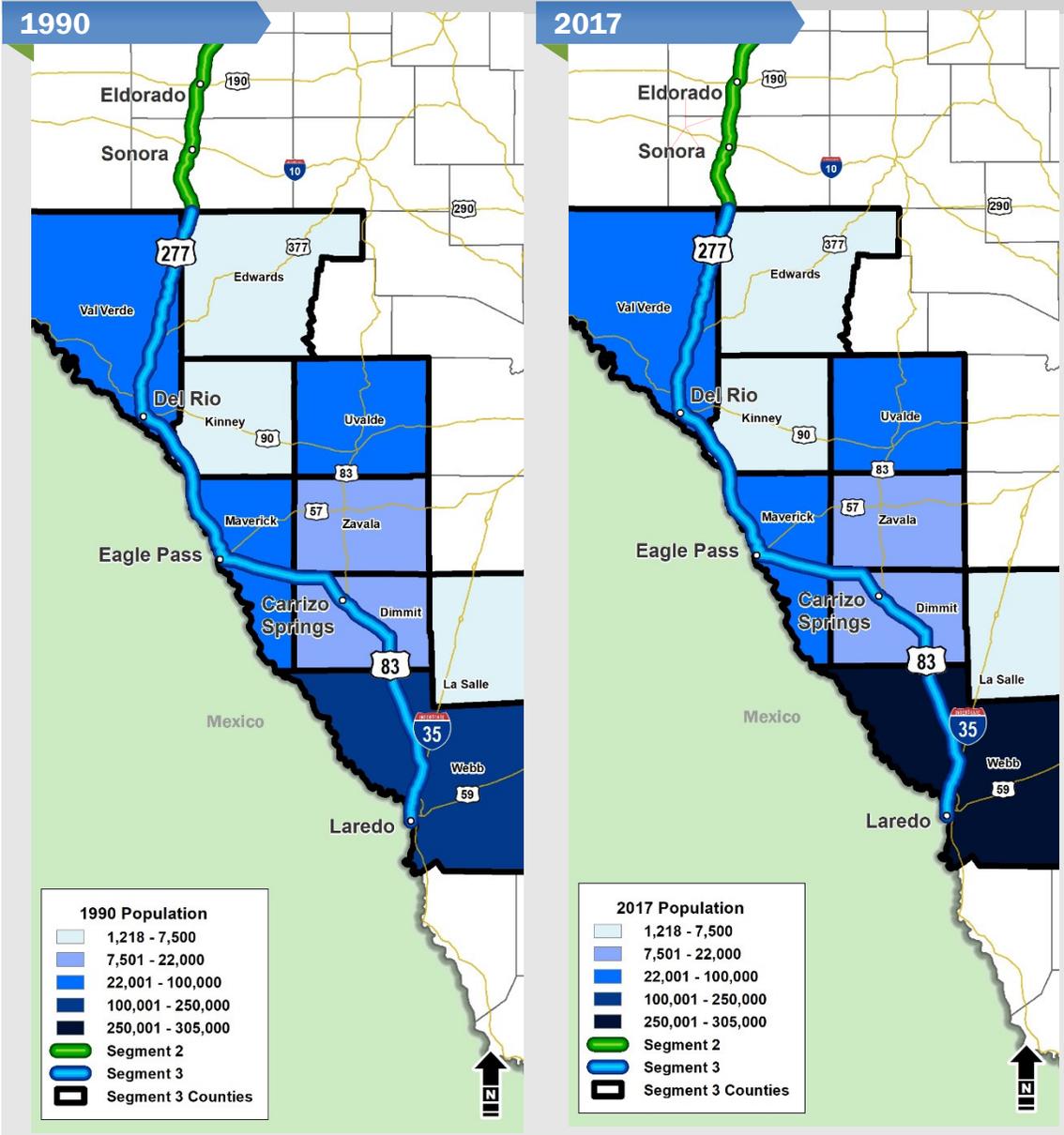
- Corridor total population **increased by 411,260 persons**
- Overall corridor population **grew by 42%**

Corridor Population 1990-2017



Source: Texas Demographic Center, U.S. Census

Segment #3 Population Growth 1990-2017



Population 1990-2017

264,912 **437,909**
 (1990) (2017)

- Total population **increased by 172,997** persons
- **Webb County** (101%) and **Maverick County** (60%) had the highest population growth
- **Edwards County** (-11%) declined in population
- Overall segment population **grew by 65%**
- Overall corridor population **grew by 42%**

Source: Texas Demographic Center, U.S. Census

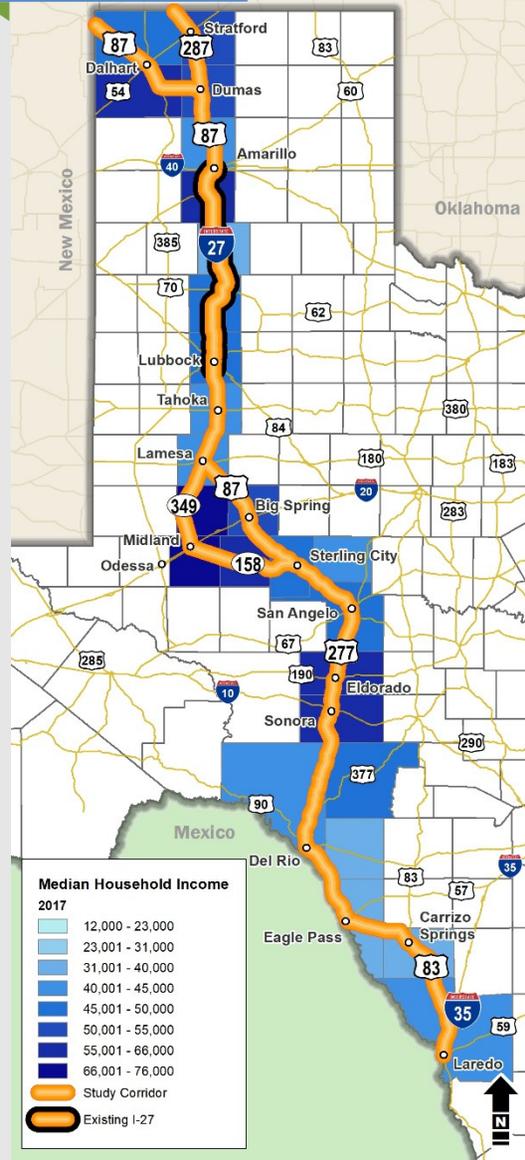
Corridor Median Household Incomes 1990-2017



1990



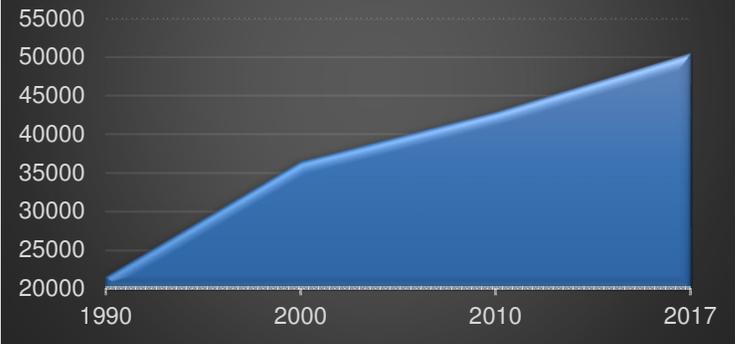
2017



\$21,517 (1990) **\$50,491** (2017)

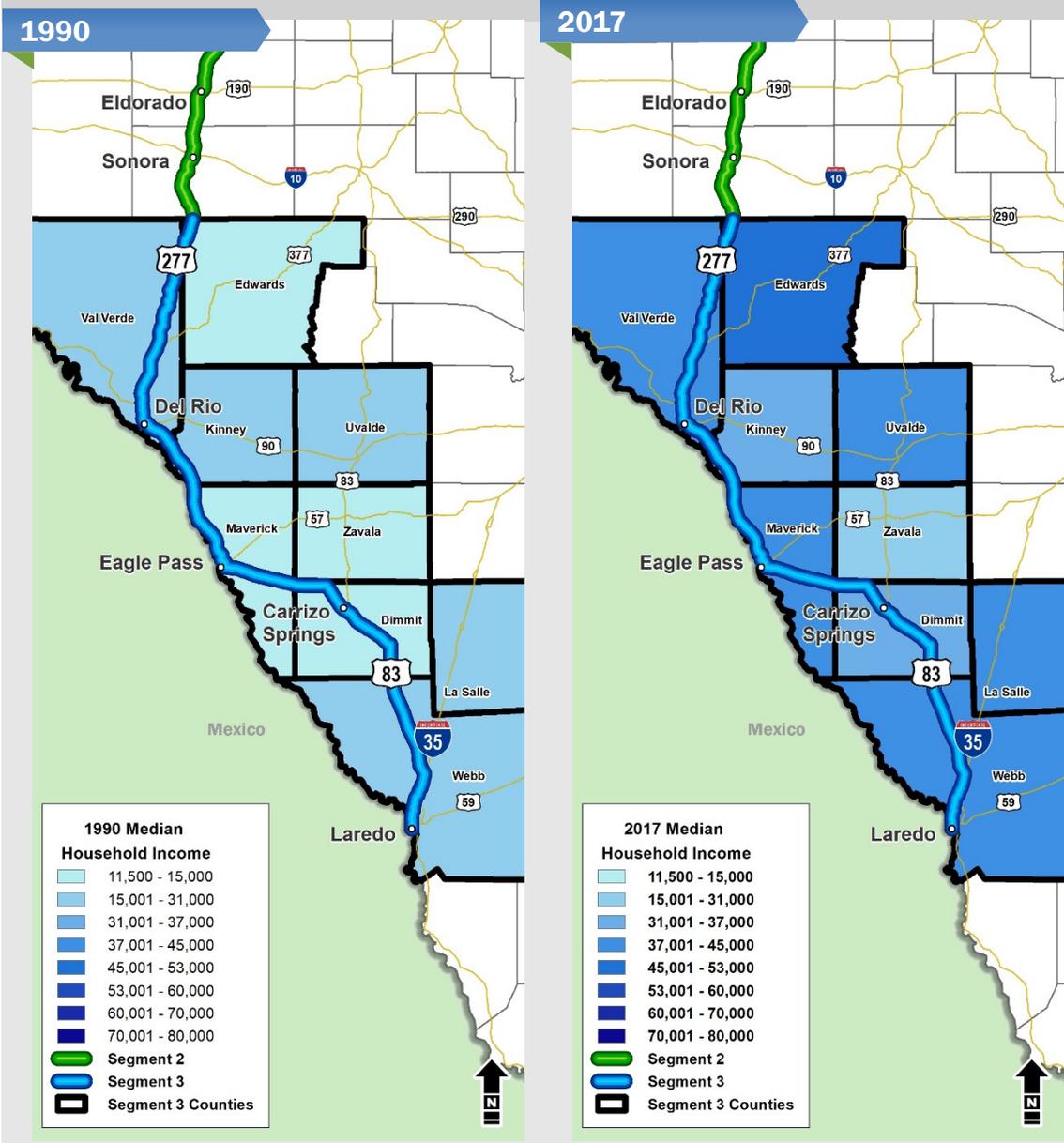
- Corridor total median household income **increased by \$28,974**
- Overall corridor median household income **grew by 135%**

Corridor Median Household Income 1990-2017



Source: U.S. Census, American Community Survey

Segment #3 Median Household Incomes 1990-2017



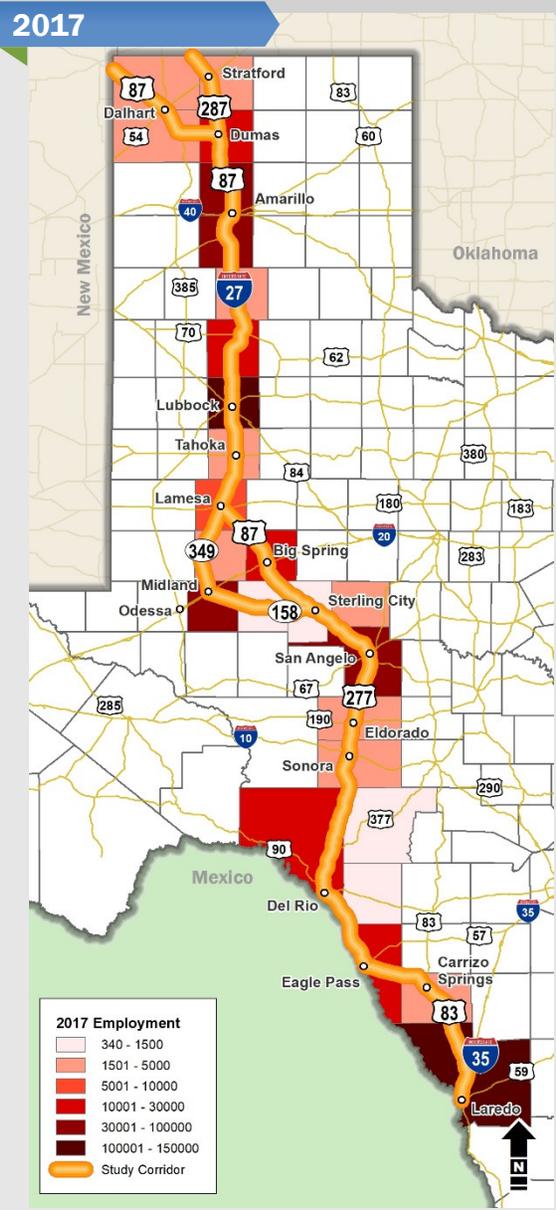
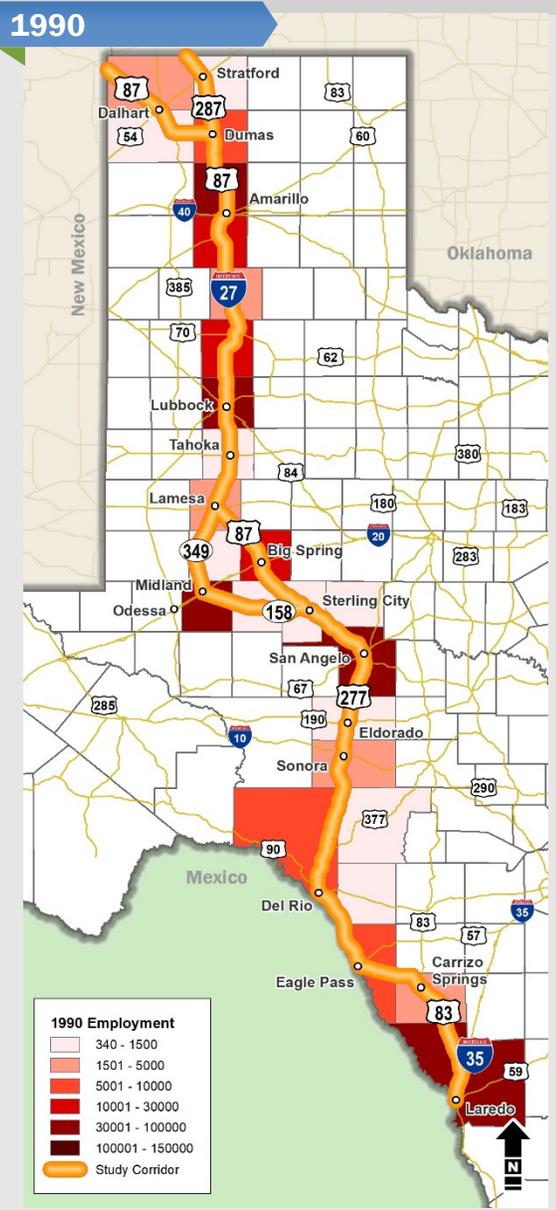
Average Median Household Income

\$15,159 (1990) **\$38,770** (2017)

- Total income **increased by \$23,611**
- **Edwards County** (231%) and **Maverick County** (208%) had the highest increases in income
- No counties had income declines
- Overall segment income **grew by 156%**
- Overall corridor income **grew by 135%**

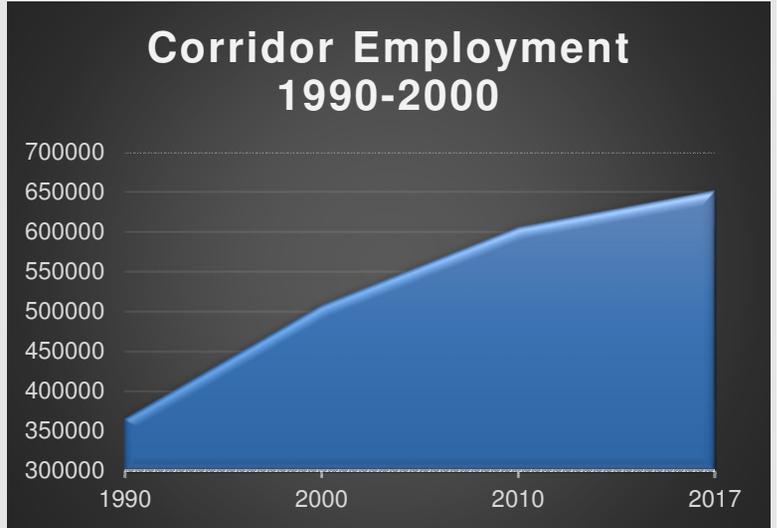
Source: U.S. Census, American Community Survey

Corridor Total Employment 1990-2017



365,609 **651,938**
 (1990) (2017)

- Corridor total employment **increased by 286,329**
- Overall corridor employment **grew by 78%**



Source: U.S. Census, American Community Survey

Segment #3 Total Employment 1990-2017



1990



2017



Employment 1990-2017

65,130

(1990)

161,508

(2017)

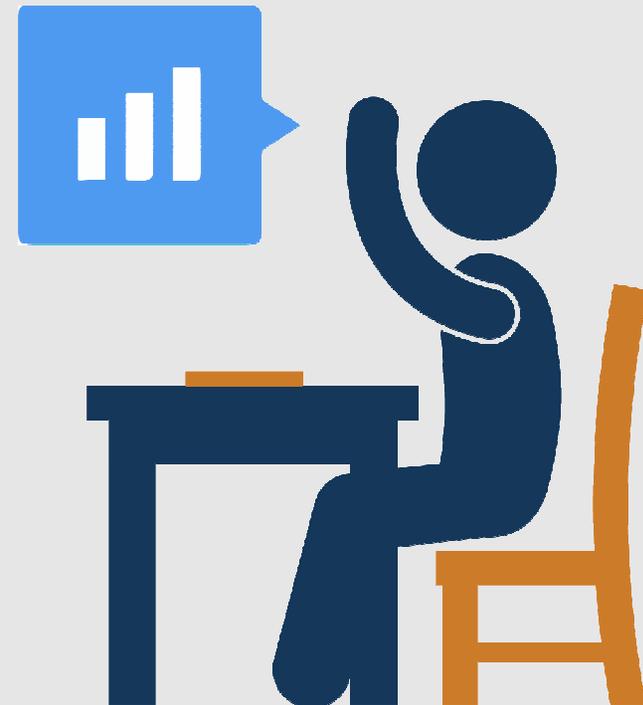
- Total employed population **increased by 96,378** persons
- **Webb County** (110%) and **Maverick County** (85%) had the highest employment growth
- No counties declined in employment
- Overall segment employment **grew by 78%**
- Overall corridor employment **grew by 78%**

Source: U.S. Census, American Community Survey

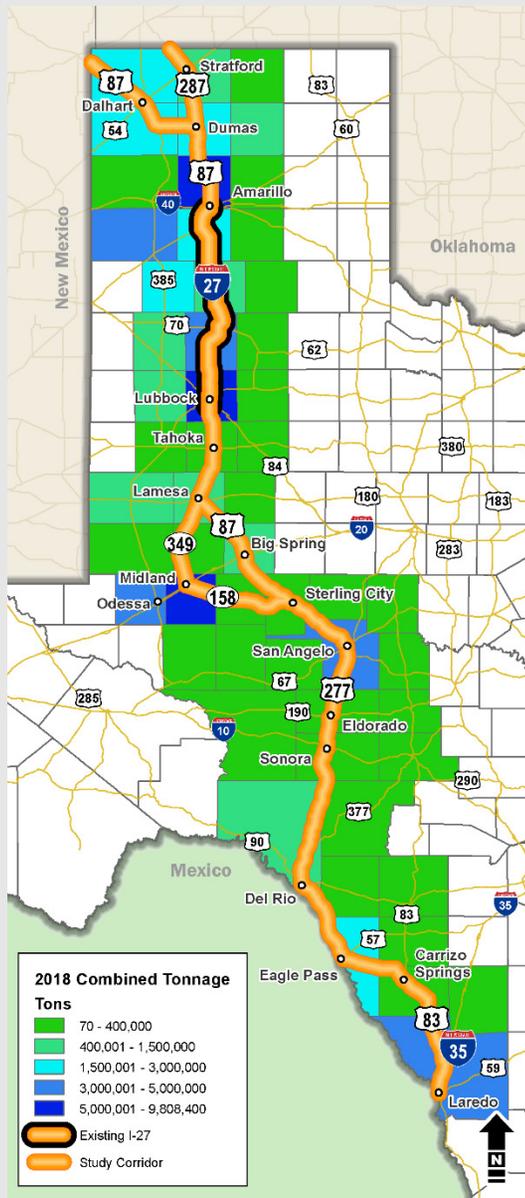


Public Feedback

- What factors do you think will influence population, income, and employment in Segment #3 over the next 30 years?



Corridor Total Freight - 2018



- Map shows the freight traffic from adjacent counties that is **using the Ports-to-Plains Corridor**
- Principal points for truck freight on the segment are at
 - **Amarillo** (Potter County)
 - **Lubbock** (Lubbock County)
 - **Midland** (Midland County)
 - **Laredo** (Webb County)
- Also existing I-27, Odessa, and San Angelo, northern Panhandle
- Corridor crosses **large rural areas** with light – but locally meaningful – freight volumes
- Segment 3 provides **market access** for many nearby counties

Source: TxDOT SAM and TRANSEARCH database

Segment #3 Total Freight - 2018



Total Freight Using the Segment



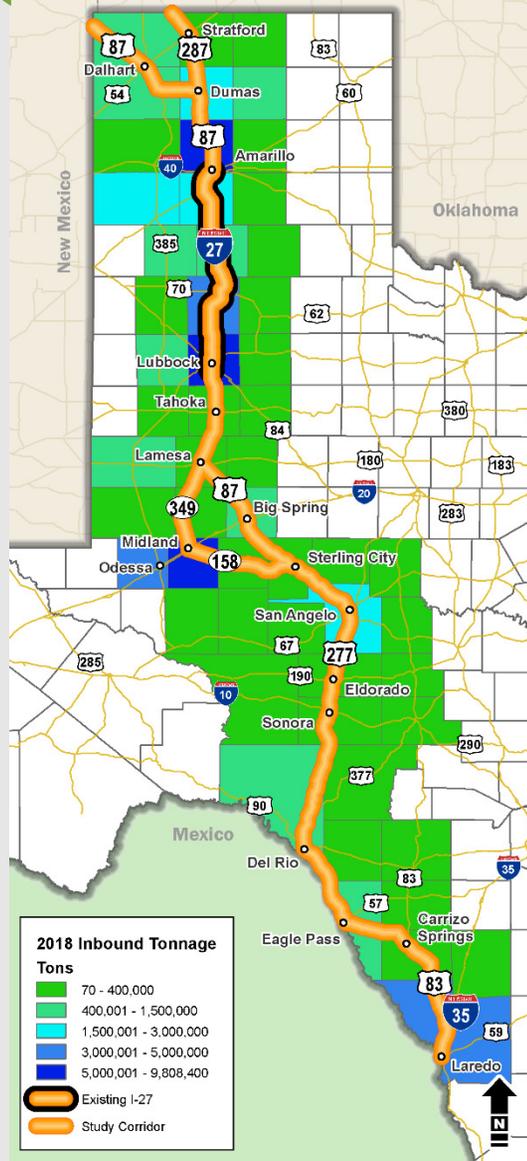
- Map shows the freight traffic from adjacent counties that is **using the Ports-to-Plains Corridor**
- Principal points for truck freight on the segment are at the **border crossings**
 - Laredo (Webb County)
 - Eagle Pass (Maverick County)
 - Del Rio (Val Verde County)
- Segment 3 crosses **large rural areas** with light – but locally meaningful – freight volumes
- Segment 3 provides **market access** for many nearby counties

Source: TXDOT SAM and TRANSEARCH database

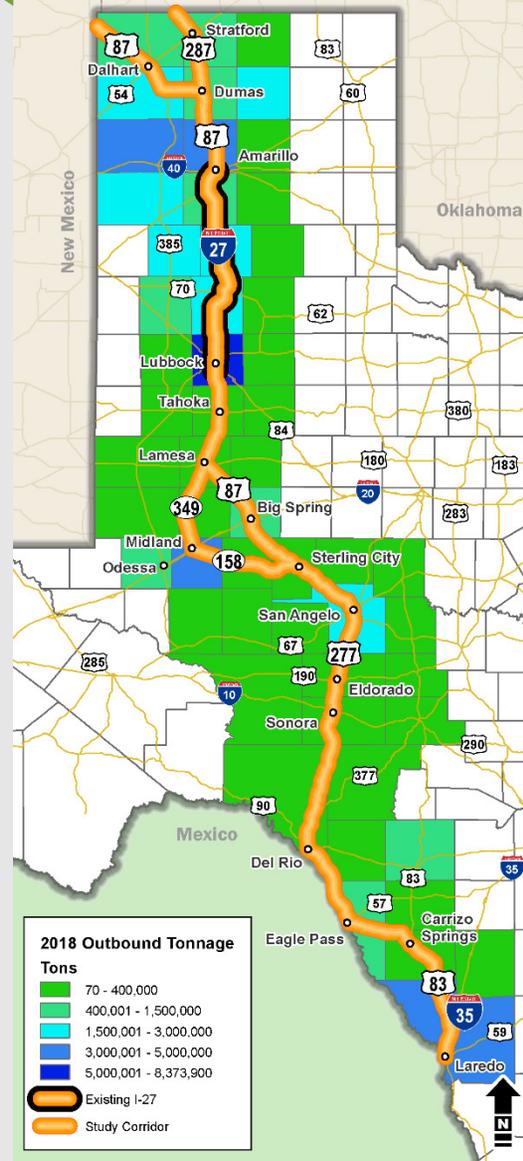
Inbound and Outbound Freight on the Corridor - 2018



Inbound



Outbound



- **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 #3 – 2018



Inbound Freight on the Segment



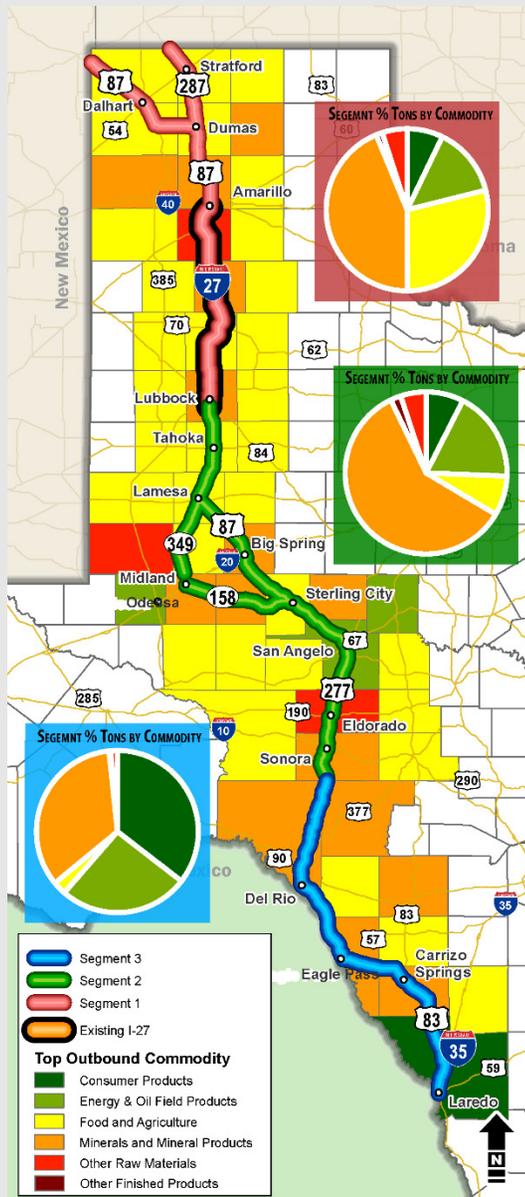
Outbound Freight on the Segment



- Freight coming in and going out of Segment 3 is **generally balanced** (in tonnage)
 - Val Verde County** receives somewhat more freight than it ships
 - Uvalde County** ships somewhat more freight than it receives
- Ports of Entry at **Laredo and Eagle Pass** are busy in both directions

Source: TXDOT SAM and TRANSEARCH database

Corridor Freight Commodities Outbound - 2018



- 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

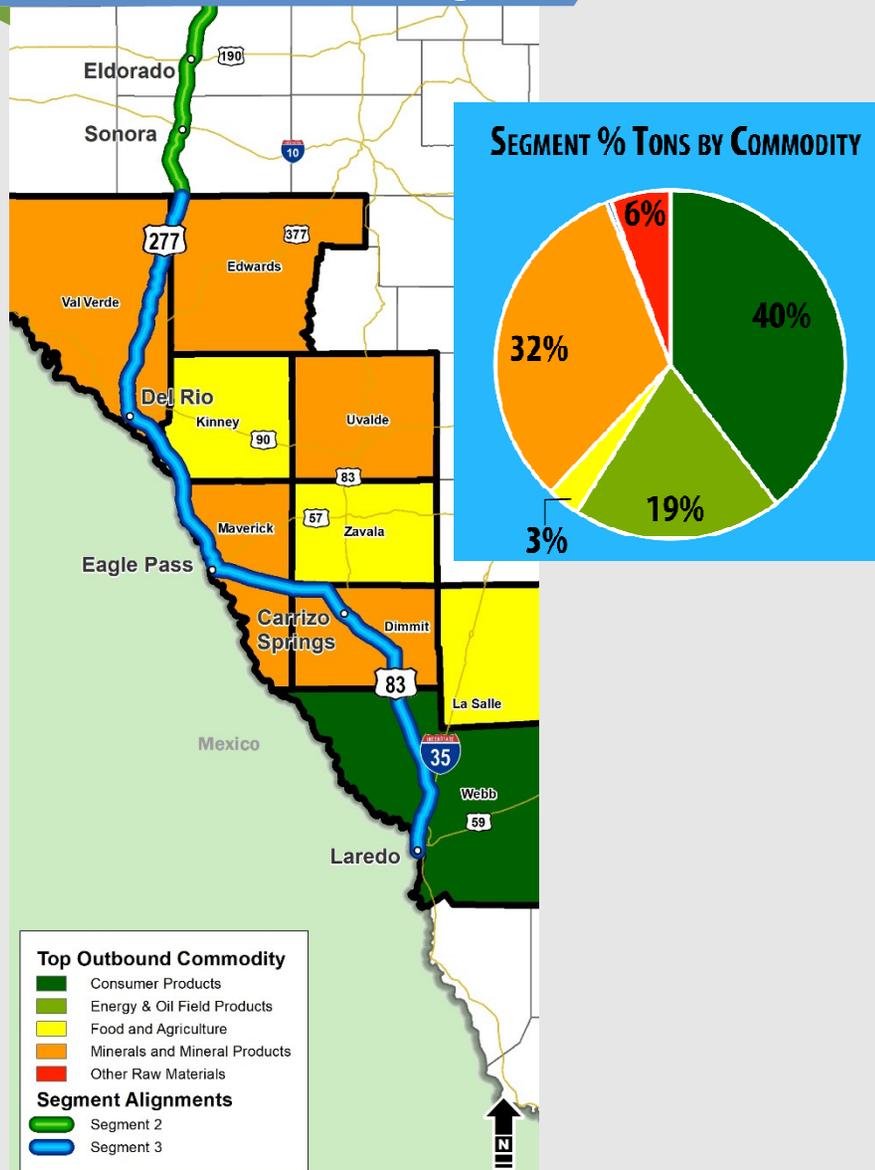
34

Source: TxDOT SAM and TRANSEARCH database

Segment #3 Freight Commodities Outbound - 2018



Outbound Commodities on the Segment

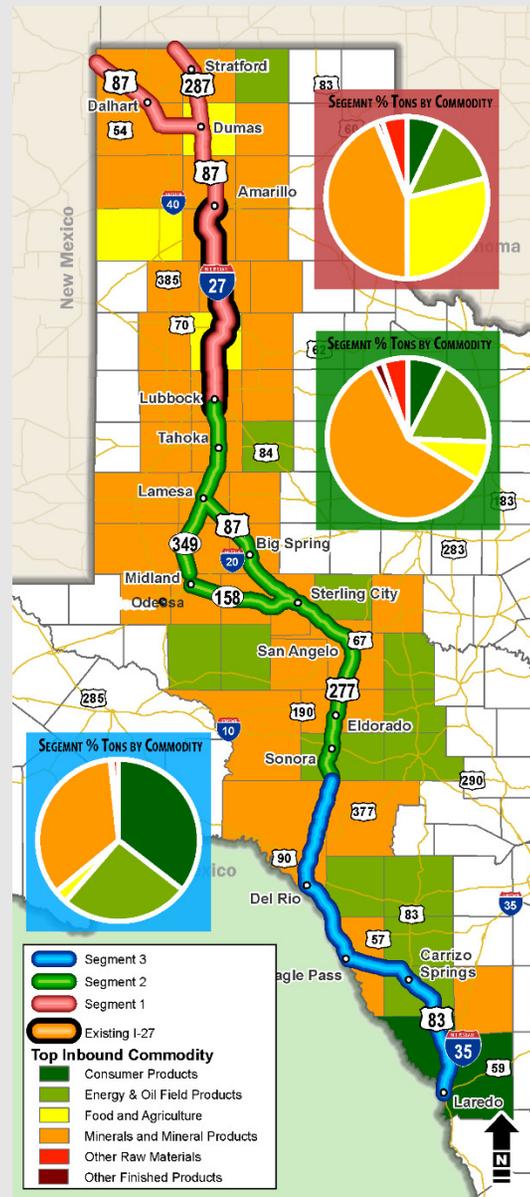


- Highest tonnage of **outbound freight** on Segment #3:
 - **Consumer Products (40%)**
 - **Mineral/Mineral Products (32%)**
 - **Energy and Oil Field Products (19%)**
- Commodities being shipped out by truck on Segment #3 differs by county:
 - **Mineral or Agricultural Products** are the top commodities in most counties
 - **Consumer Products** are the most prominent at the Laredo gateway and are present in all gateway counties.
- Energy and oil field products are important across the segment
 - **Other modes (i.e. pipelines)** also handle outbound shipping of energy products

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Source: TxDOT SAM and TRANSEARCH database

Distribution of Corridor Freight Commodities Inbound - 2018



- **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

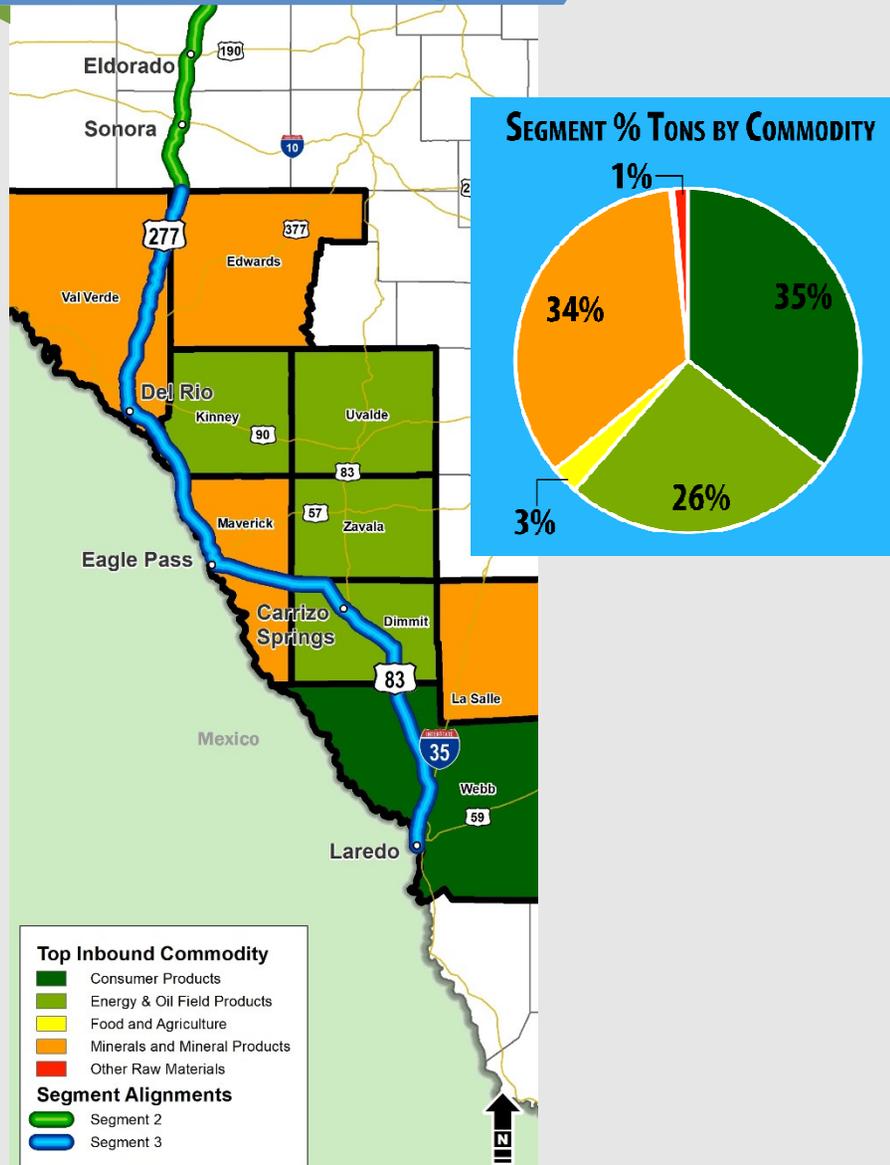
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Source: TXDOT SAM and TRANSEARCH database

Segment #3 Freight Commodities Inbound - 2018



Inbound Commodities on the Segment



- Highest tonnage of inbound freight on Segment #3
 - **Consumer Products (35%)**
 - **Mineral/Mineral Products (34%)**
 - **Energy and Oil Field Products (26%)**
- Commodities coming in by truck on Segment #3 differs from outbound:
 - **Mineral or Energy/Oil Field Products** are the top commodities in most counties
 - **Consumer Products** are the most prominent outbound product at the Laredo gateway, associated with foreign trade
 - **Food and Agricultural Product** tonnage is relatively small

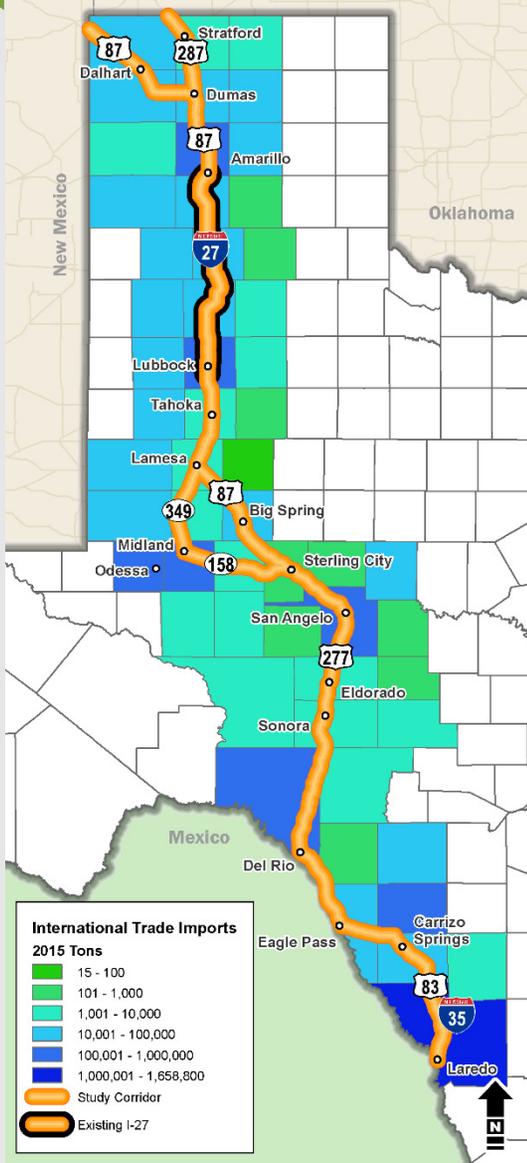
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Source: TxDOT SAM and TRANSEARCH database

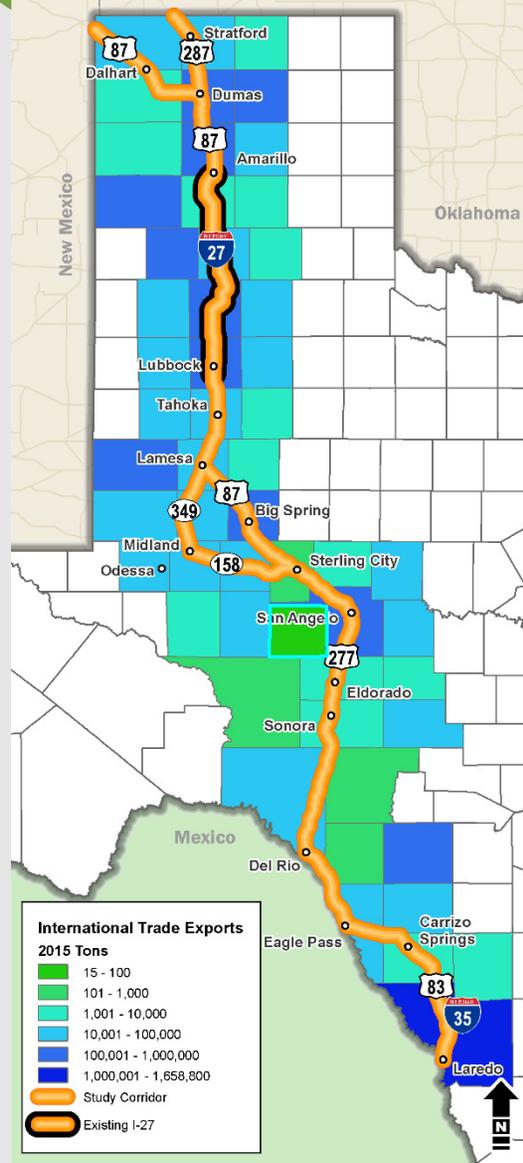
Foreign Truck Trade Across the Corridor - 2018



Import Freight



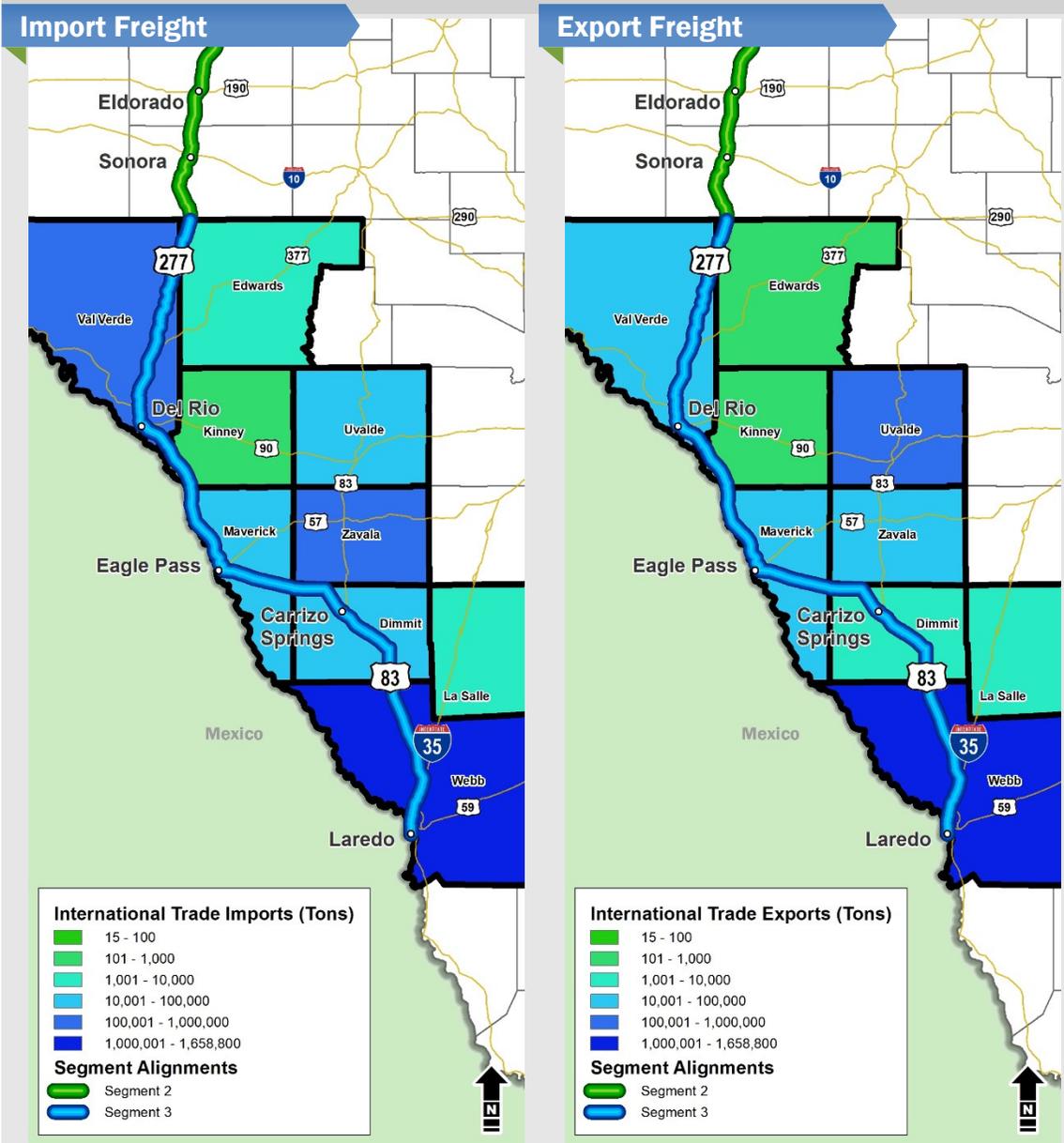
Export Freight



- 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 #3 Foreign Truck Trade - 2018



- Foreign trade chiefly **cross-border trade with Mexico**, with some Canadian and overseas traffic
- Foreign trade appears throughout the segment
- Freight is both **import and export**
- Laredo** has the most foreign trade, followed by **Del Rio** and counties near **Eagle Pass**.
- All counties have some level of involvement in foreign trade

Source: TRANSEARCH database

Segment #3 Border Crossing Truck Traffic - 2017



Border Truck Volumes



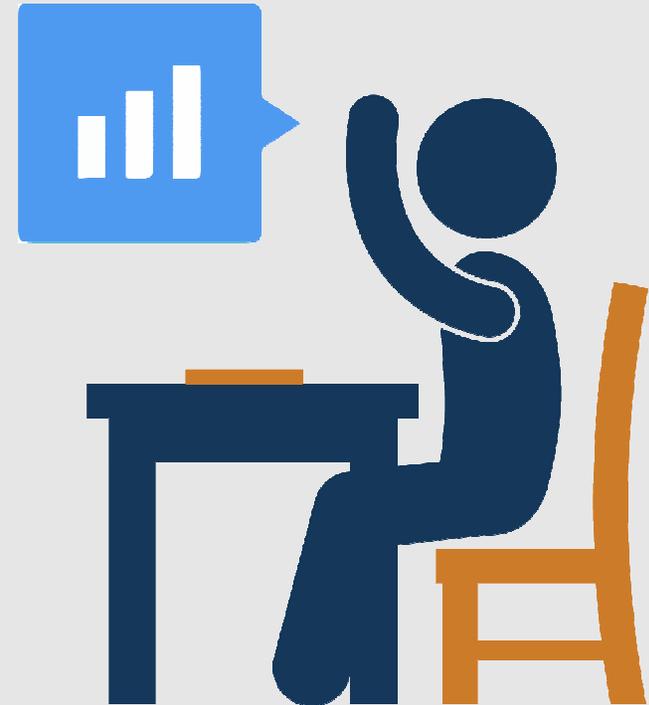
- **Laredo's** two truck crossings have the highest truck volumes:
 - **World Trade Bridge:** (12,097 Trucks/Day, 89%)
 - **Columbia Solidarity Bridge:** (2,283 Trucks/Day, 69%)
- **Eagle Pass**
 - **Camino Real International Bridge:** (954 Trucks/Day, 12%)
 - **Eagle Pass International Bridge:** (30 Trucks/Day, <1%)
- **Del Rio**
 - **Del Rio/Acuña:** (438 Trucks/Day, 11%)

Source: Texas Roadway Inventory 2017



Public Feedback

- What are the key needs and challenges for moving people and freight in Segment #3?
- What factors do you think will influence future freight movement in Segment #3?





Average Daily Traffic - 2017

Corridor Total Traffic 2017



Segment #3 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, within **Eagle Pass**

Per day on Interstate Highways in **Laredo, Lubbock, and Amarillo**

Key Takeaways

- Traffic volumes in the corridor and Segment #3 vary considerably
- US 277 carries significant volume in Segment #3 (18-25k vehicles per day) in Del Rio and Eagle Pass

Growth in Traffic Volumes - 2008 to 2017



Corridor Growth - 10 Years



Segment #3 Growth - 10 years



Growth Trends

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

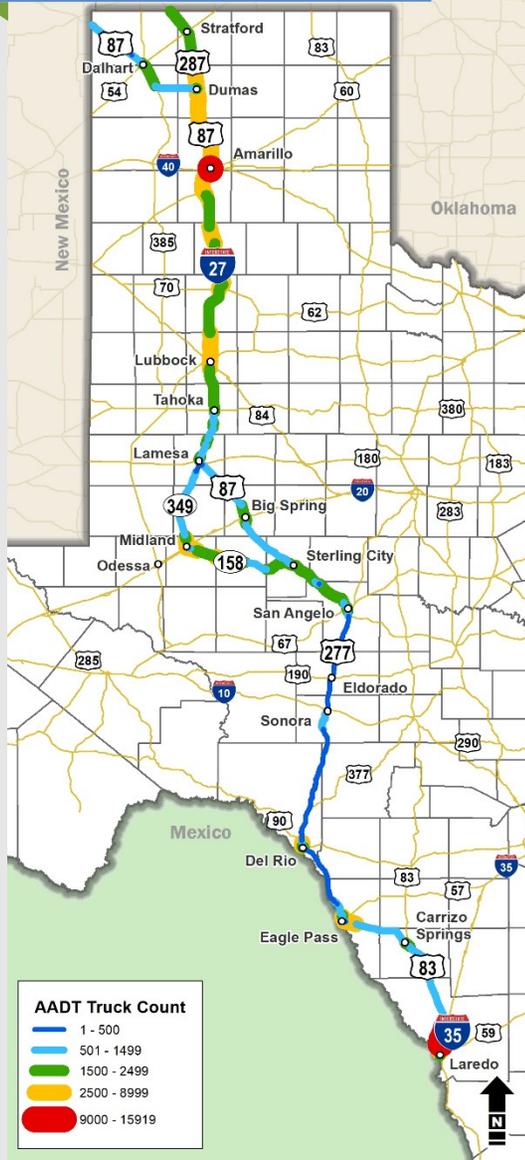
Key Takeaways

- Growth in the corridor and Segment #3 vary considerably.
- Laredo with strongest growth in Segment #3 but entirety of growth has not tracked up the segment

Corridor Average Daily Truck Traffic - 2017



Truck Traffic



Truck Percentage



- 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 #3 Average Daily Truck Traffic - 2017



- Largest Truck Volumes and % of Total Volumes: **North of Laredo**
- **Eagle Pass and Del Rio** with significant truck volumes
- Trucks are a large component of traffic mix in several rural segments
 - **Val Verde/Edwards County**
 - **Between Eagle Pass and Carrizo Springs**
 - **Between Catarina and Laredo**

Source: TxDOT TPP Roadway Inventory 2017

Average Speeds - 2018



Corridor Average Speed



Segment #3 Average Speed



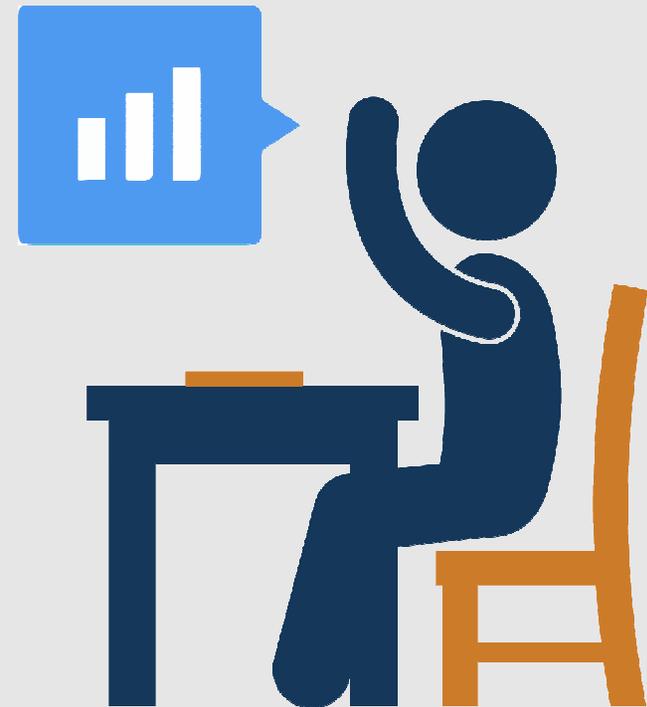
- Map shows **average speeds** along Ports-to-Plains routes
- Majority of corridor with travel speeds **60-70 mph**
- Rural segments **lower than 60 mph** (lack of passing lanes, topography, truck %)
 - North of Dumas, Stratford
 - **Val Verde County, Dimmit County**
- City segments are typically **lower than 30 mph** (due to traffic signals, driveways)
 - Midland, San Angelo
 - **Eagle Pass, Del Rio**

Source: National Performance Management Research Data Set - FHWA



Public Feedback

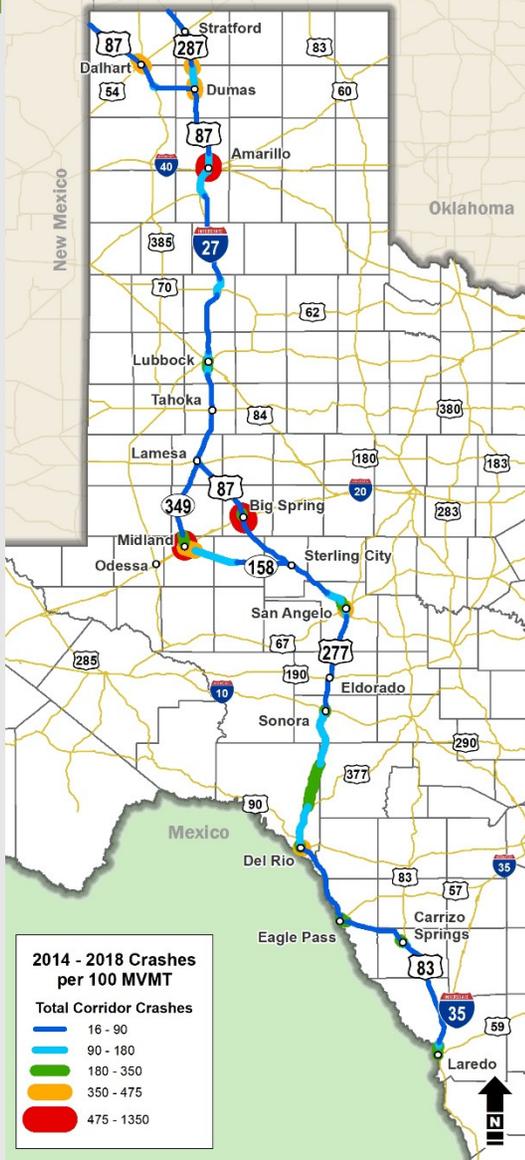
- Where are the bottlenecks for traffic in Segment #3 and what is the cause?
- What do you think will influence future traffic conditions in Segment #3?



Total Crashes – 2014-2018



Corridor Total Crashes



Segment #3 Total Crashes



Source: TxDOT Crash Records Inventory

Key Corridor Takeaways

- 17,741 Total Crashes
- Highest rates in cities (Midland, Big Spring, Amarillo)
- Lubbock with relatively low rates

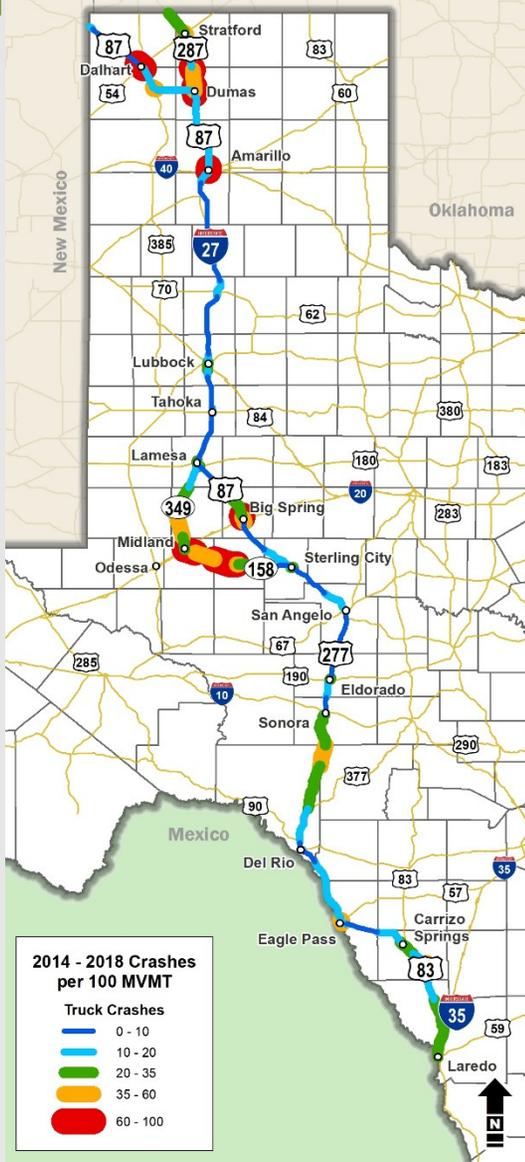
Key Segment #3 Takeaways

- 4,378 Total Crashes
- Highest crash rate through Del Rio
- Low crash rates on rural segments between Laredo and Del Rio

Truck Crashes – 2014-2018



Corridor Truck Crashes



Segment #3 Truck Crashes



Source: TxDOT Crash Records Inventory

Key Corridor Takeaways

- 2,593 total truck crashes
- High rates near northern limits (Dumas, Dalhart, Amarillo)
- Segments between Midland and Garden City have high rates

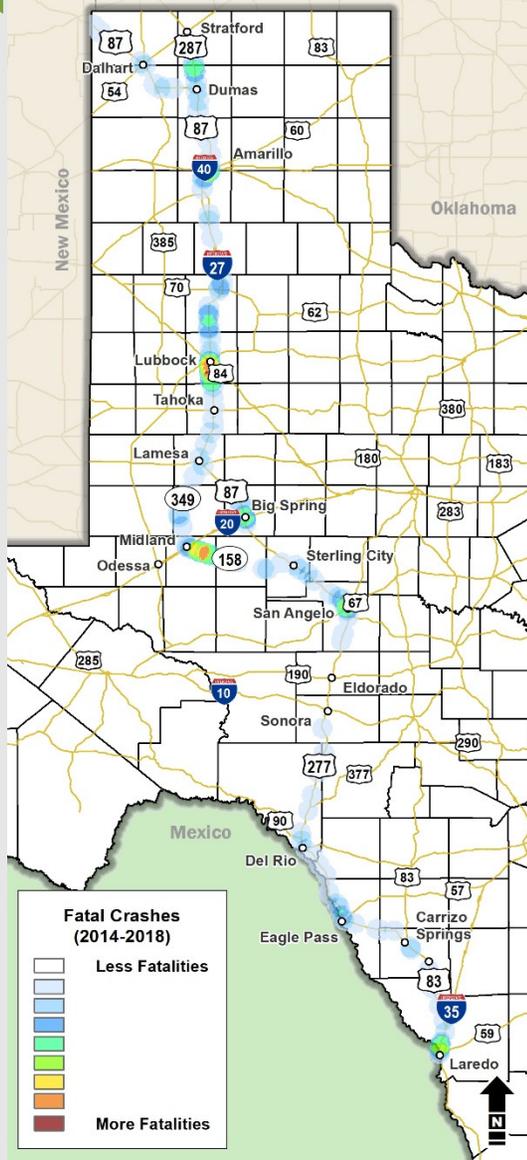
Key Segment #3 Takeaways

- 651 total truck crashes
- Higher truck crash rates in Catarina (30 mph curve)
- Higher truck crash rates around Eagle Pass and Edwards County
- Del Rio with low truck crash rates

Fatal Crashes – 2014-2018



Corridor Fatal Crashes



Segment #3 Fatal Crashes



Source: TxDOT Crash Records Inventory

Key Corridor Takeaways

- 220 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 #3 Takeaways

- 49 fatal crashes
- Higher concentrations near Eagle Pass and Laredo

Contributing Factors to Crashes – 2014-2018



Corridor Wide

-  **27%**
Speeding
-  **25%**
Failure to Stop/Yield
-  **9%**
Impaired or
Distracted Driver
-  **9%**
Improper Use of Lanes

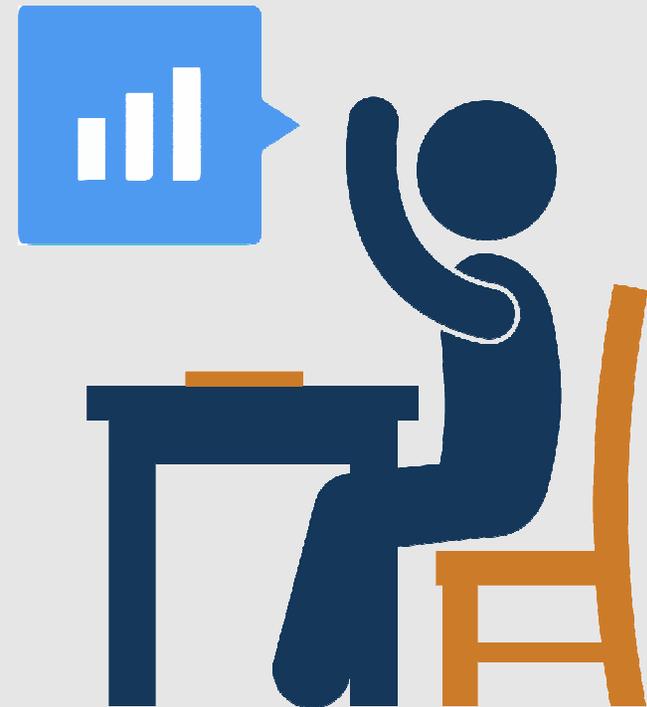
Segment #3

-  **26%**
Speeding
-  **23%**
Failure to Stop/Yield
-  **13%**
Impaired or
Distracted Driver
-  **13%**
Improper Use of Lanes



Public Feedback

- What areas and issues contribute to safety needs and challenges in Segment #3?





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THANK YOU!