



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

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



- 1 HB 1079 Overview
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- 6 Preliminary Corridor Feasibility Analysis
- 7 Identification of Potential Strategies and Solutions Work Session
- 8 Closing Discussion and Wrap-up



## HB 1079 Overview





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





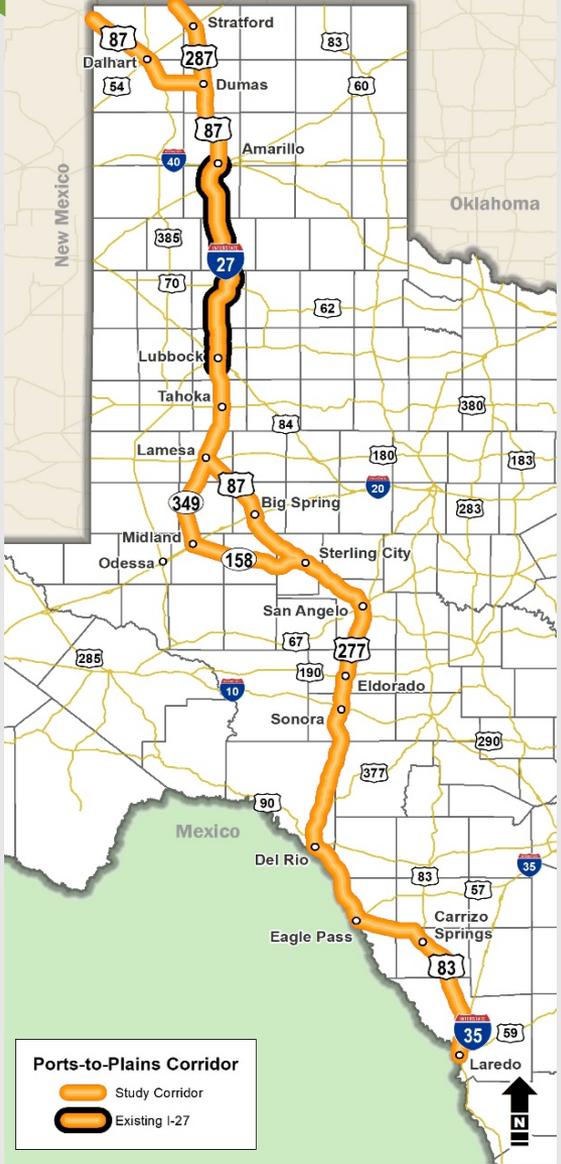
## Feasibility Study Overview



# Ports-to-Plains Corridor and Segments



## Ports-to-Plains Corridor



## Segment 1

New Mexico and Oklahoma borders to Hale/Lubbock County line

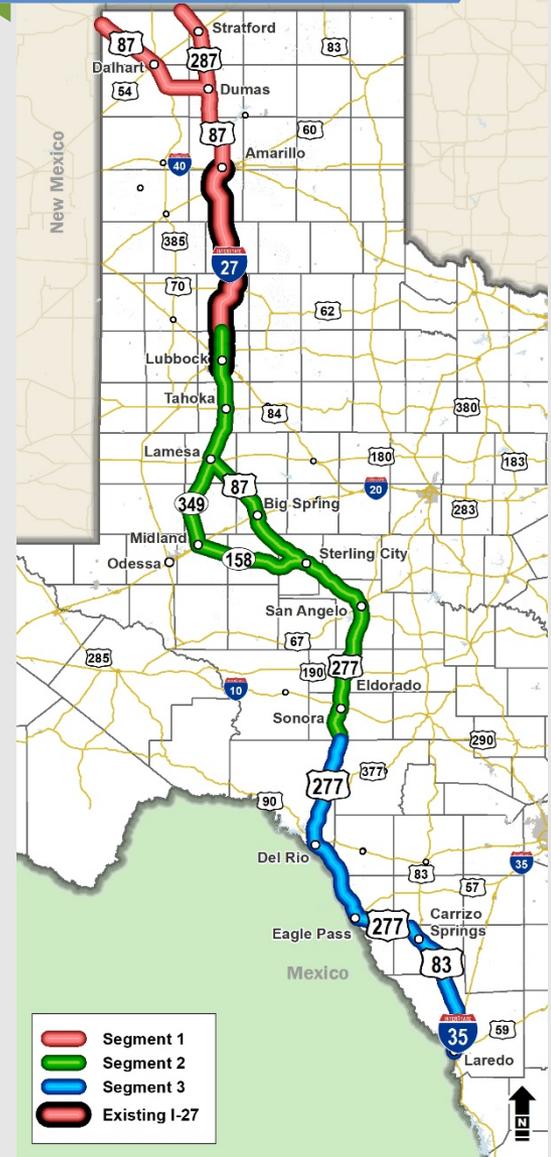
## Segment 2

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



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**

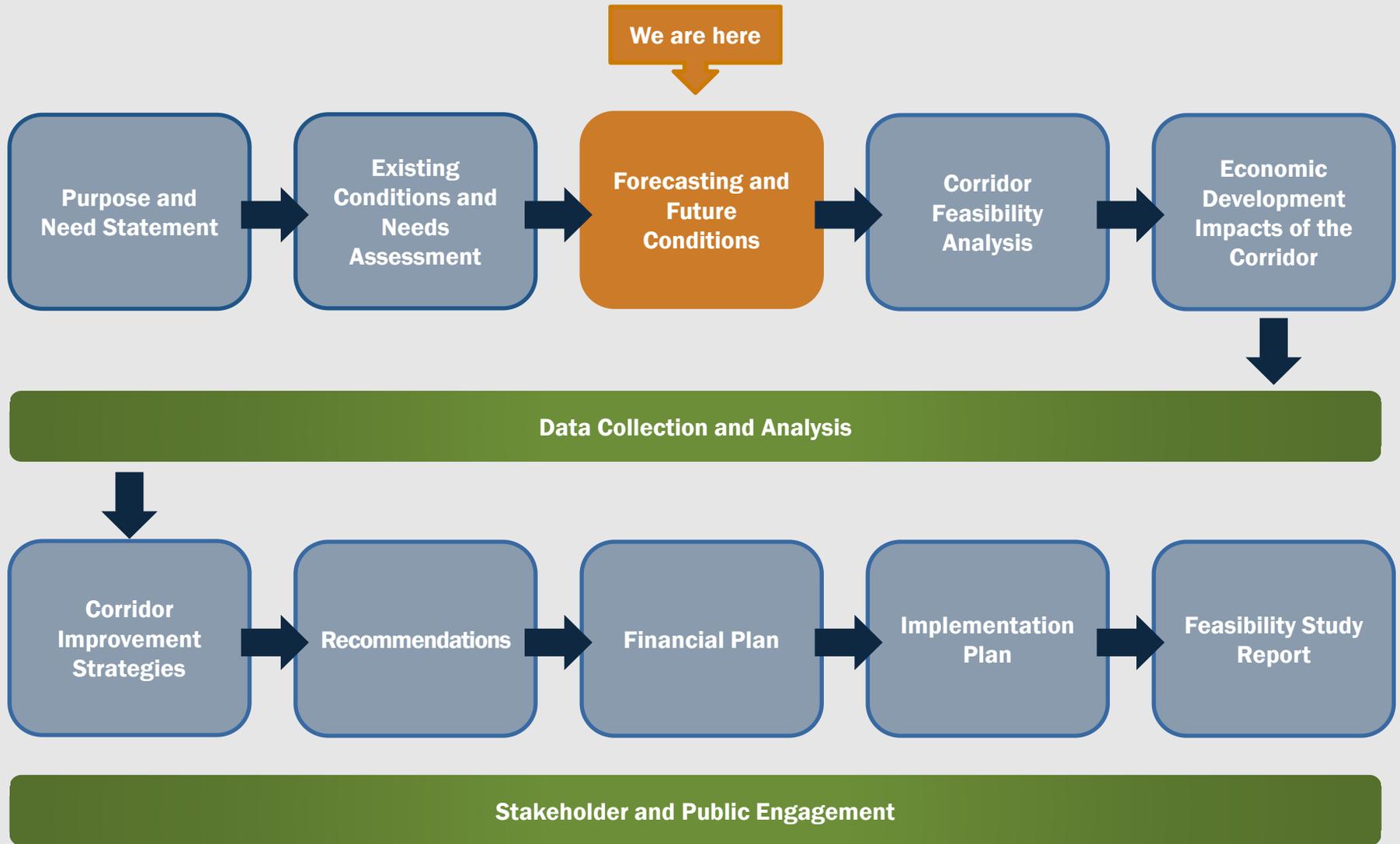


An examination of **project costs** related to the improvement or expansion of the Ports-to-Plains Corridor



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

# Ports-to-Plains Corridor Feasibility Study Scope





## Existing and Forecasted Conditions



# Current Segment #3 Characteristics



## Segment #3



## Other Modal Facilities



- 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

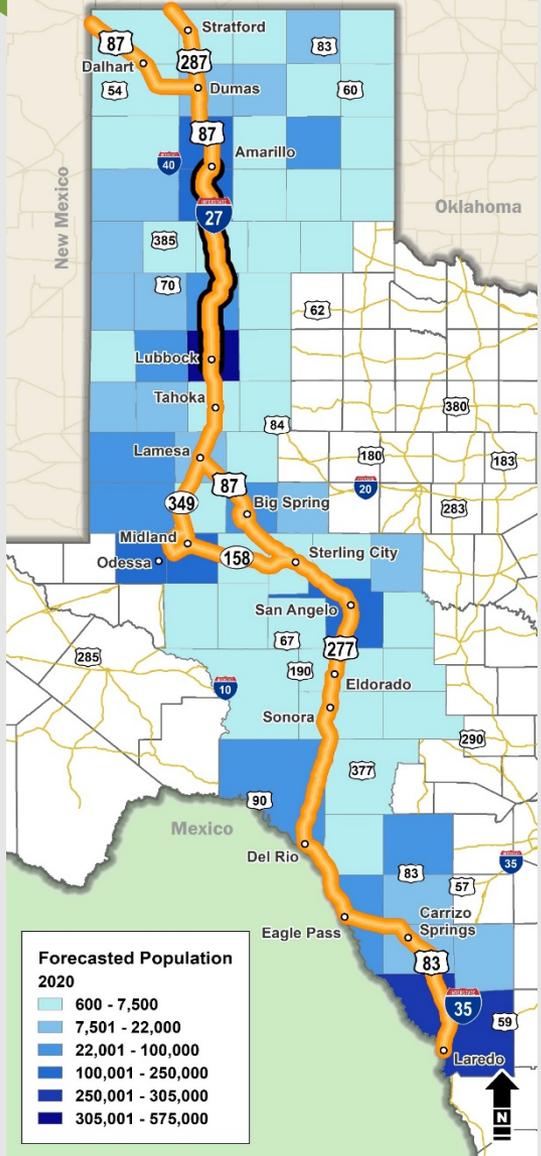
## Corridor Highways

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

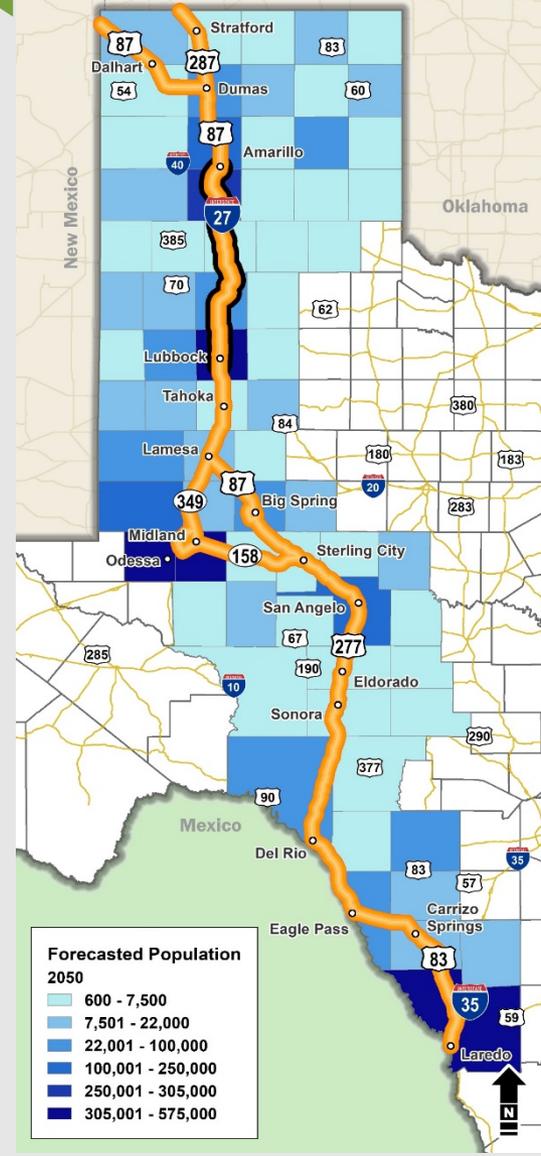
# Corridor Forecasted Total Population 2020 and 2050



2020

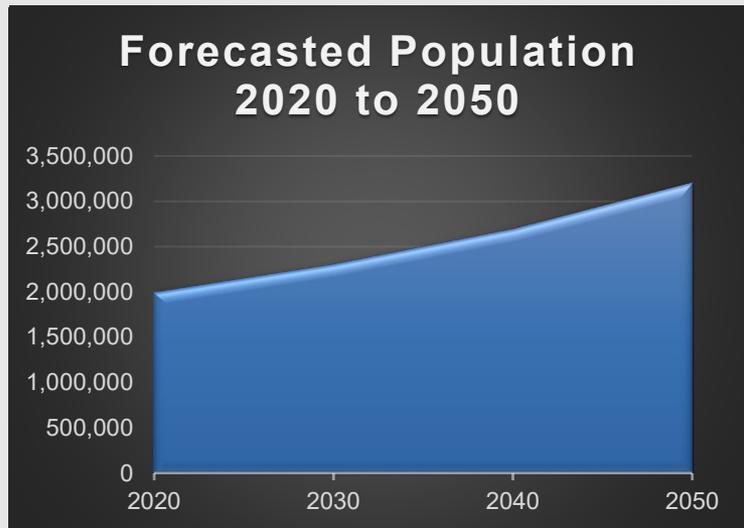


2050



**1,996,680** (2020)      **3,207,968** (2050)

- Corridor total population for all 69 counties is projected to **increase by 1,211,288 persons.**
- Overall corridor population is projected to **grow by 61%.**



Source: Texas Demographic Center

# Segment #3 Forecasted Total Population 2020 and 2050



2020



2050



**450,498**

(2020)

**500,662**

(2050)

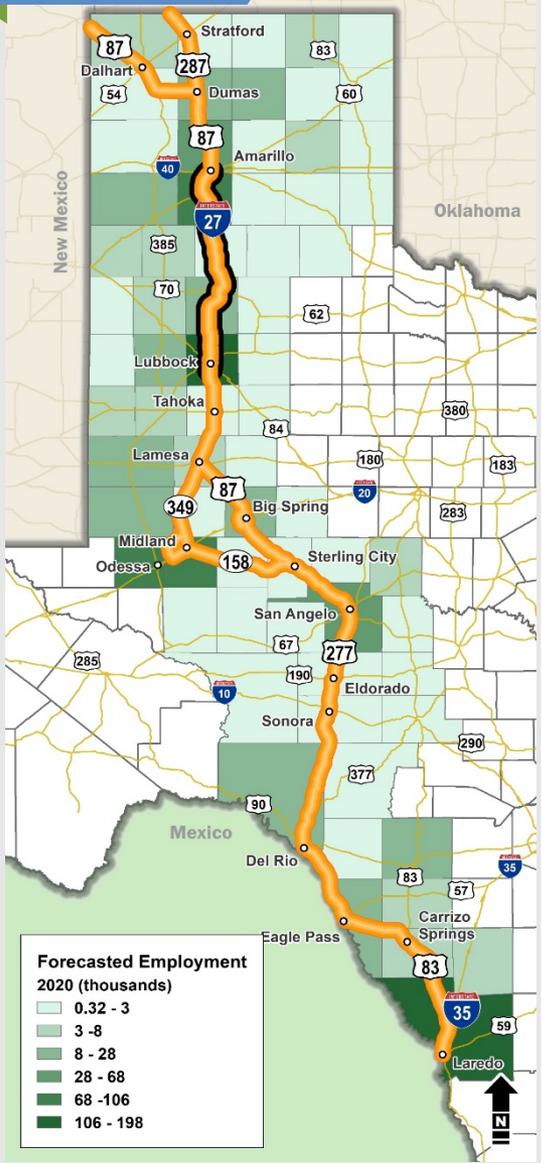
- Total population for the nine (9) counties is projected to **increase by 50,164** persons.
- **Dimmit County** (62%) and **La Salle County** (55%) have the highest projected population growth.
- **Edwards County** (-18%) and **Val Verde County** (-14%) have the largest population declines.
- Overall segment population is projected to **grow by 11%**.

Source: Texas Demographic Center

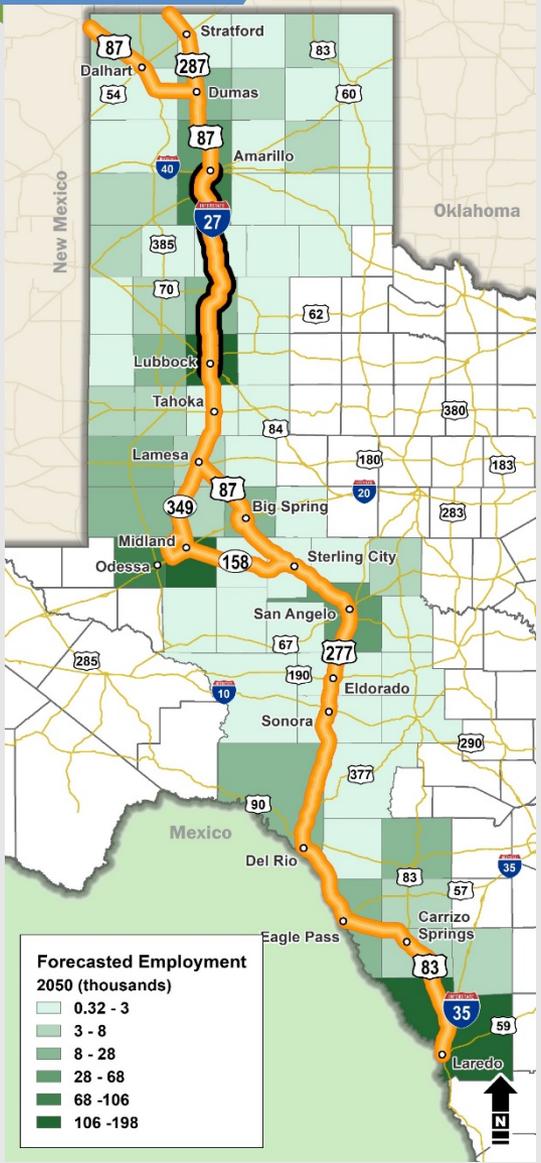
# Corridor Forecasted Employment 2020 and 2050



2020



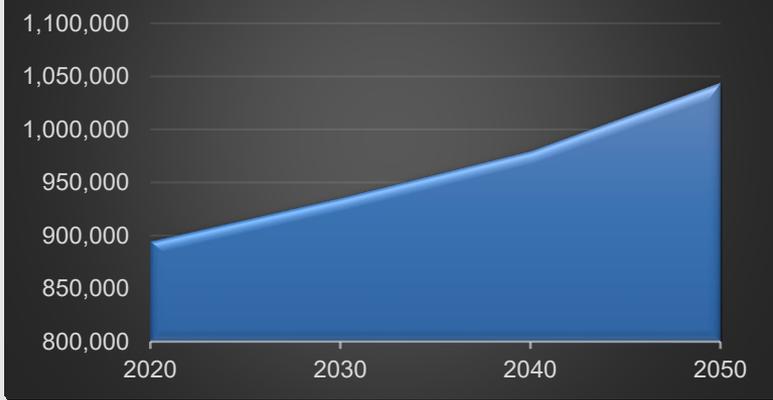
2050



**894,768** (2020)      **1,044,139** (2050)

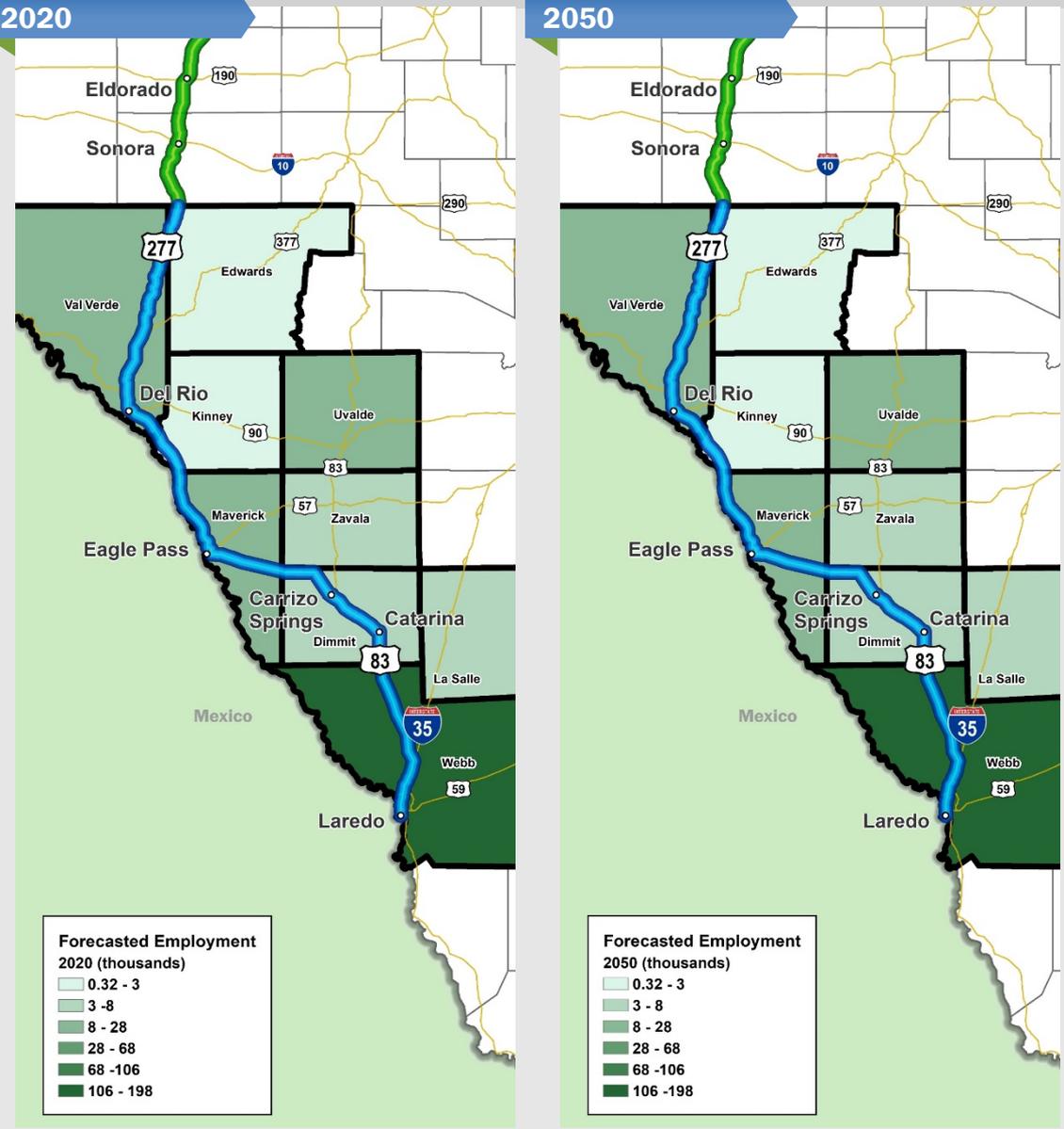
- Corridor total employment is **projected to increase by 149,372.**
- Overall corridor employment **is projected to grow by 17%.**

**Projected Employment 2020-2050**



Source: Moody's Analytics Forecasted Data

# Segment #3 Forecasted Employment 2020 and 2050



**184,891**

(2020)

**212,063**

(2050)

- Employed population projected to **increase by 27,172** persons.
- Webb County** (23%) and **La Salle County** (15%) have the highest projected growth in employment.
- Edwards County** (-14%) and **Zavala and Dimmit Counties** (-8%) have the largest projected decline in employment.
- Overall segment employment is projected to **grow by 15%**.

Source: Moody's Analytics Forecasted Data



## Existing Cross Sections



## Traffic Growth Scenarios

- **No Build**
  - Corridor lane configurations include only what is planned/programmed
- **4-lane Divided Highway**
  - Would upgrade most of US 277 & US 83
  - Route still traverses small towns and cities as urban streets
- **Interstate Highway**
  - Full control of access for entire corridor
  - Traverses urban areas via local preferred route (urban freeway or relief route)

# 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

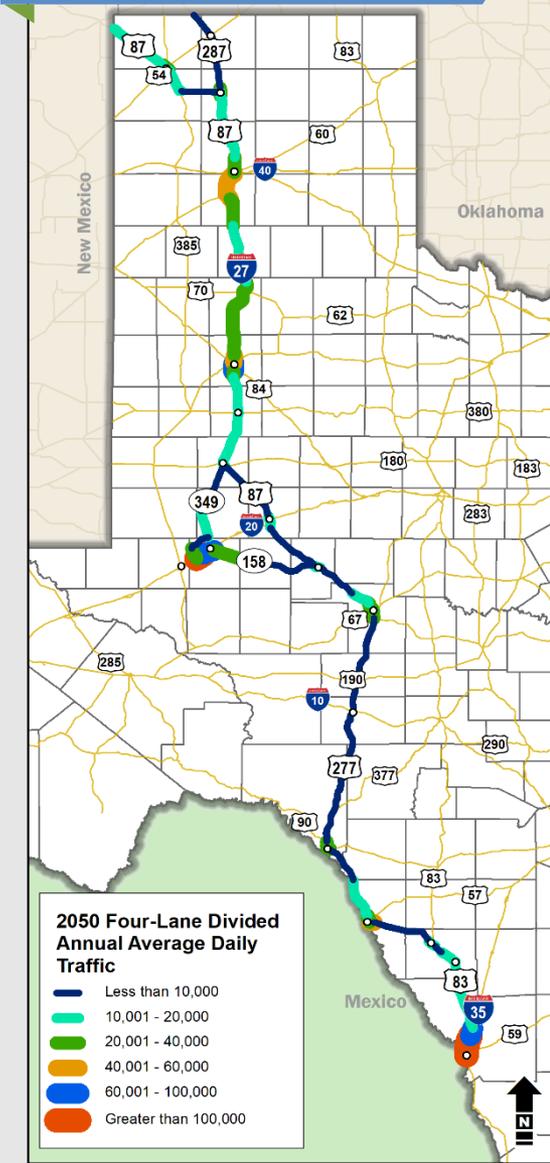
# Forecasted Traffic Conditions



2050 Traffic - No Build



2050 Traffic - 4 Lane Divided



## Overview of Findings

- **No Build Growth**
  - Solid corridor growth
  - High growth on US 83 north of Laredo (163%), SH 158 near Midland (124%)
  - Low Growth on US 287 near Oklahoma border (10%), US 87 near Big Spring (10%)
  
- **4-Lane Divided Growth**
  - Very similar to No Build
  - Doesn't attract more traffic - urban mobility/reliability still an issue

# Forecasted Traffic Conditions



2050 Traffic - No Build



2050 Traffic - Interstate



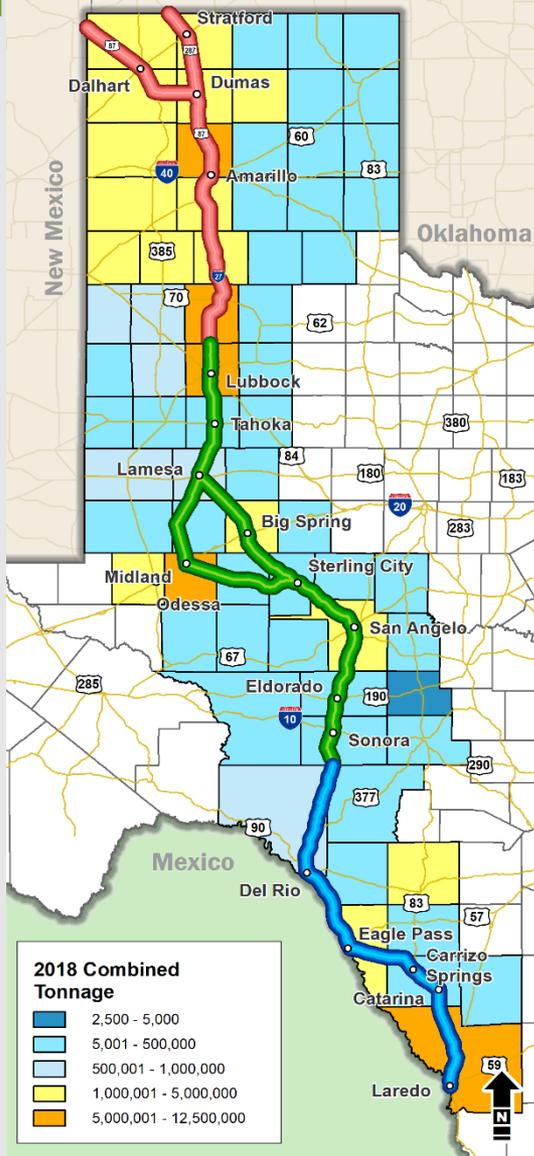
## Overview of Findings

- **Interstate Highway Growth**
  - 100-200% growth over 2018 volumes found in all three segments on arterial sections
  - US-87 provides path to I-25
  - US-287 route unimproved in Oklahoma
- **Interstate Highway Diversions**
  - Fills in National Grid
  - Most diversions from within 100 miles
  - Diversions also traced on national and statewide basis

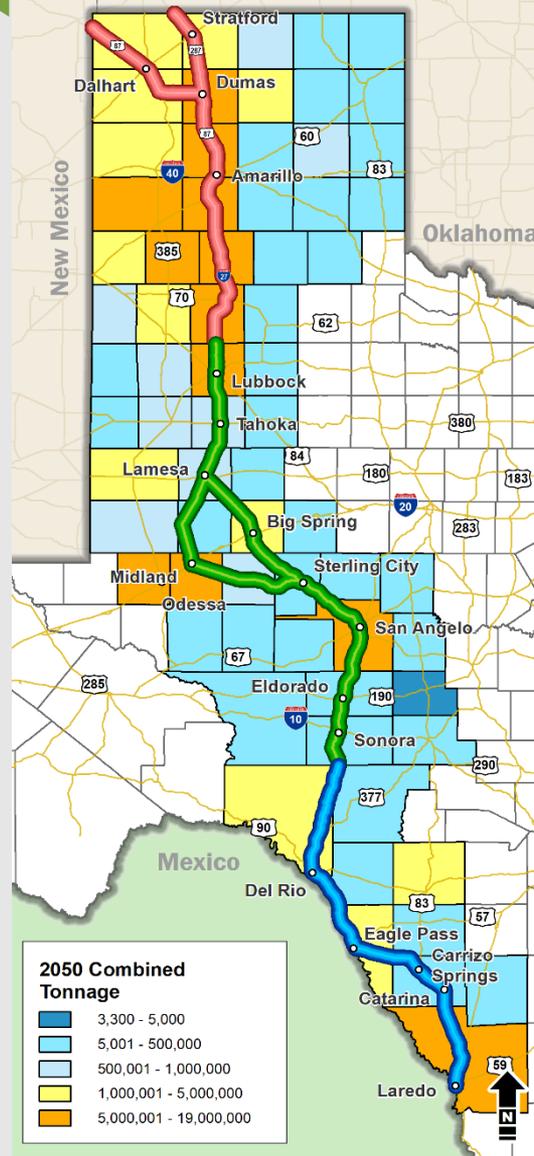
# Corridor Total Truck Freight Growth by County - 2050



2018 Total Freight Tonnage



2050 Total Freight Tonnage



- Total truck tonnage is forecast to **grow 78%** through 2050
  - 73 million tons added
  - Total volume reaches **167 million tons**
- Top locations for growth are
  - **Laredo** (Webb County)
  - **Midland/Odessa** (Midland/Ector Counties)
  - **Lubbock** (Lubbock County)
- Growth is strong generally along existing I-27, in San Angelo (Tom Green County), and along the border

Source: TXDOT SAM and TRANSEARCH database

# Segment #3 Total Freight Growth by County - 2050



2018 Total Freight Tonnage



2050 Total Freight Tonnage



- Segment 3 total truck tonnage is projected to **grow 139%** through 2050, the **fastest growth** on the corridor
  - 14 million tons added, for 20% of the new tons on the corridor
  - Total volume 25 million tons
- Fastest county growth:
  - **La Salle** - 236%
  - **Val Verde** - 209%
  - **Webb** - 168%
- Largest county growth:
  - **Webb** + 9.5 mil. tons
  - **Maverick** + 2.1 mil. tons
  - **Val Verde** +1.9 mil. tons

Source: TxDOT SAM and TRANSEARCH database

# Segment #3 Truck Trade Growth by County – 2050 Exports



- Exports are projected to grow **169%** in Segment 3, or by 3.6 million tons
- 93% of the growth is associated with Webb County, where exports are estimated to grow by 3.3 million tons
- The next highest growth is in Uvalde County where exports are expected to grow by 100K tons

Source: TxDOT SAM and TRANSEARCH database

# Segment #3 Truck Trade Growth by County – 2050 Imports



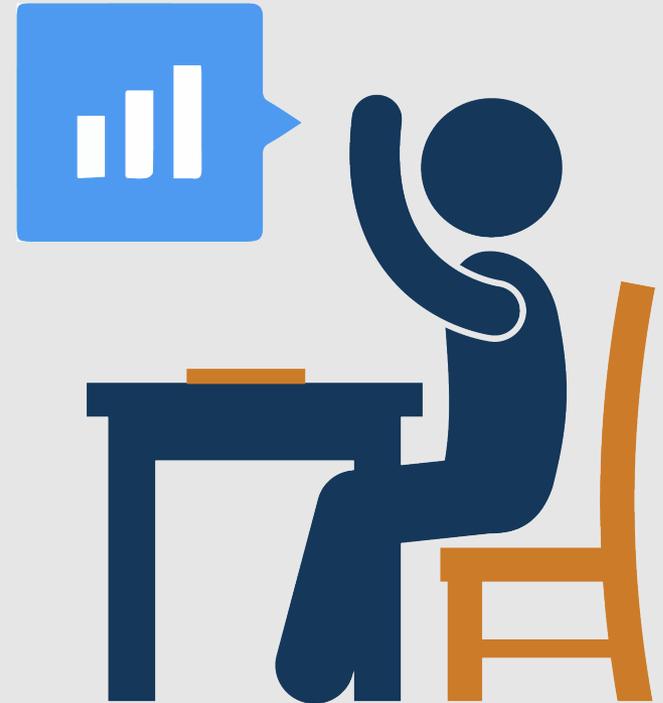
- Imports are projected to **grow 239%** in Segment 3, or by 5.4 million tons
- 64% of the growth is associated with Webb County, where imports are estimated to grow by 3.5 million tons
- Zavala and Val Verde counties also see substantial growth

Source: TxDOT SAM and TRANSEARCH database



## Public Feedback

- What factors do you think are influencing future economic, traffic, and freight conditions?
- Do you envision the local population, economy and land use changing if improvements are made to the Ports-to-Plains Corridor? If so, where?





## Preliminary Corridor Feasibility Analysis





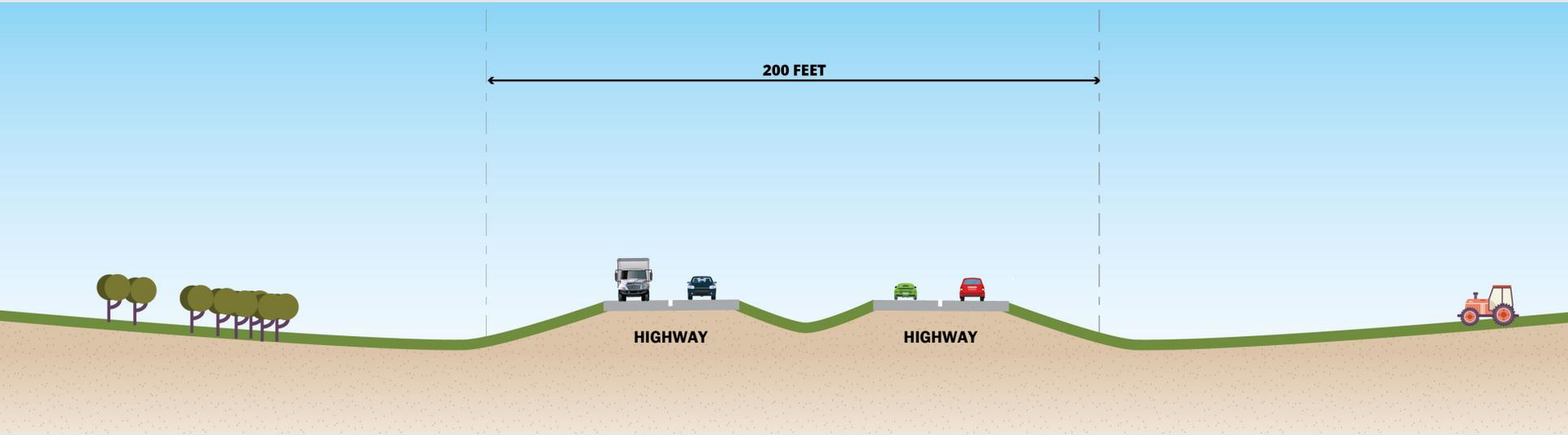
## What is a Feasibility Analysis?

A **determination if improvements** of the Ports-to-Plains corridor **to a four-lane divided highway, or interstate**, where feasible, **will achieve the goals set out in House Bill 1079.**

## How is a Feasibility Analysis Performed?

By **evaluating** how each alternative meets each goal and **comparing the results** to determine whether No Build, the four-lane divided highway, or an Interstate facility is feasible for the corridor.

# Four-Lane Divided Highway Cross Section



**Driveway access** to local businesses and residences



**Lower design speeds**

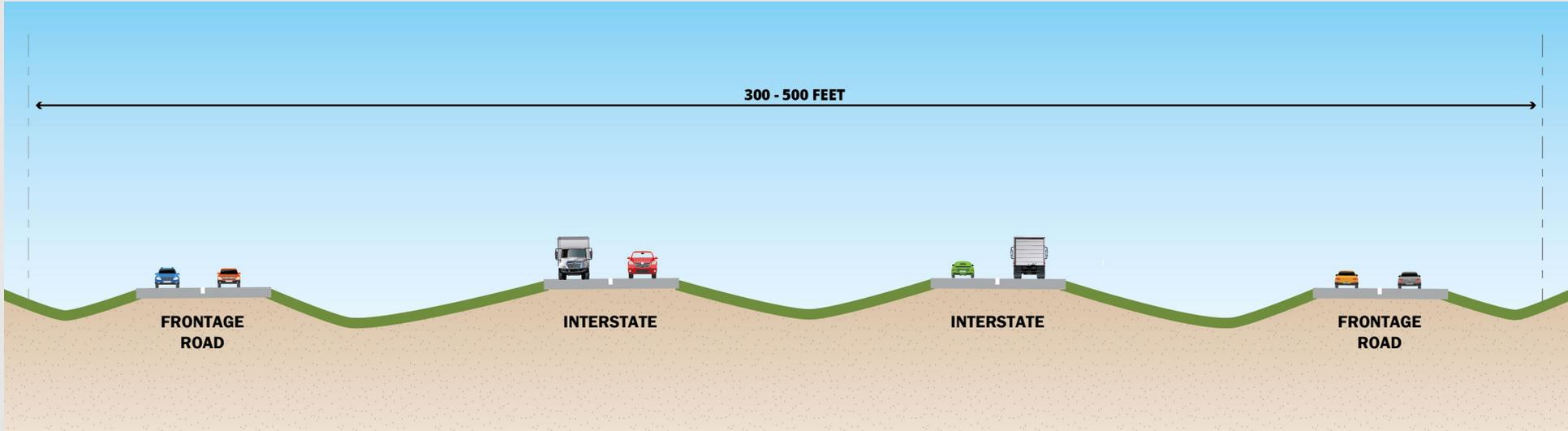


**Smaller right-of-way widths**



**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**



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



## Summary of Analysis:

### Four-Lane Divided

- Similar to No Build - does not attract more traffic
- Urban mobility/reliability an issue - without access control urban areas are subject to slower travel speeds and stops

### Interstate

- Urban congestion on route would be alleviated through controlled access
- Establishment of a continuous regional/national corridor would improve reliability and route attractiveness

# Forecasted Traffic Conditions



2050 Traffic - No Build



2050 Traffic - 4 Lane Divided



## Overview of Findings

- **No Build Growth**
  - Solid corridor growth
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  - Low Growth on US 287 near Oklahoma border (10%), US 87 near Big Spring (10%)
- **4-Lane Divided Growth**
  - Very similar to No Build
  - Doesn't attract more traffic - urban mobility/reliability still an issue

Source: TXDOT SAM and TxDOT 2018 RID

# Forecasted Traffic Conditions



2050 Traffic - No Build



2050 Traffic - Interstate



## Overview of Findings

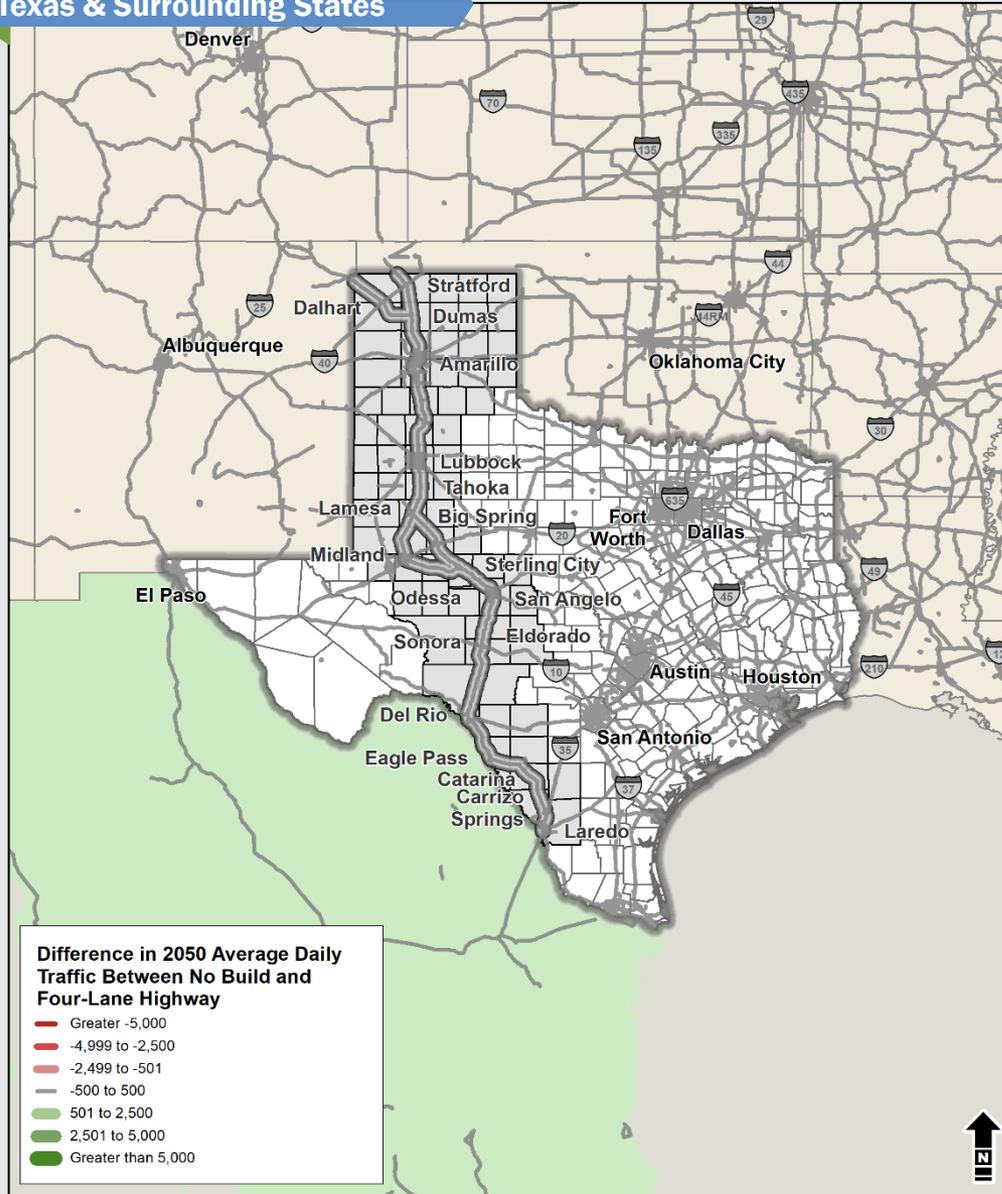
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  - US-87 provides path to I-25
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- **Interstate Highway Diversions**
  - Fills in National Grid
  - Most diversions from within 100 miles
  - Diversions also traced on national and statewide basis

Source: TxDOT SAM and TxDOT 2018 RID

# 4-Lane Option – Anticipated Total Traffic Diversions



## Texas & Surrounding States



## Diversions - Statewide

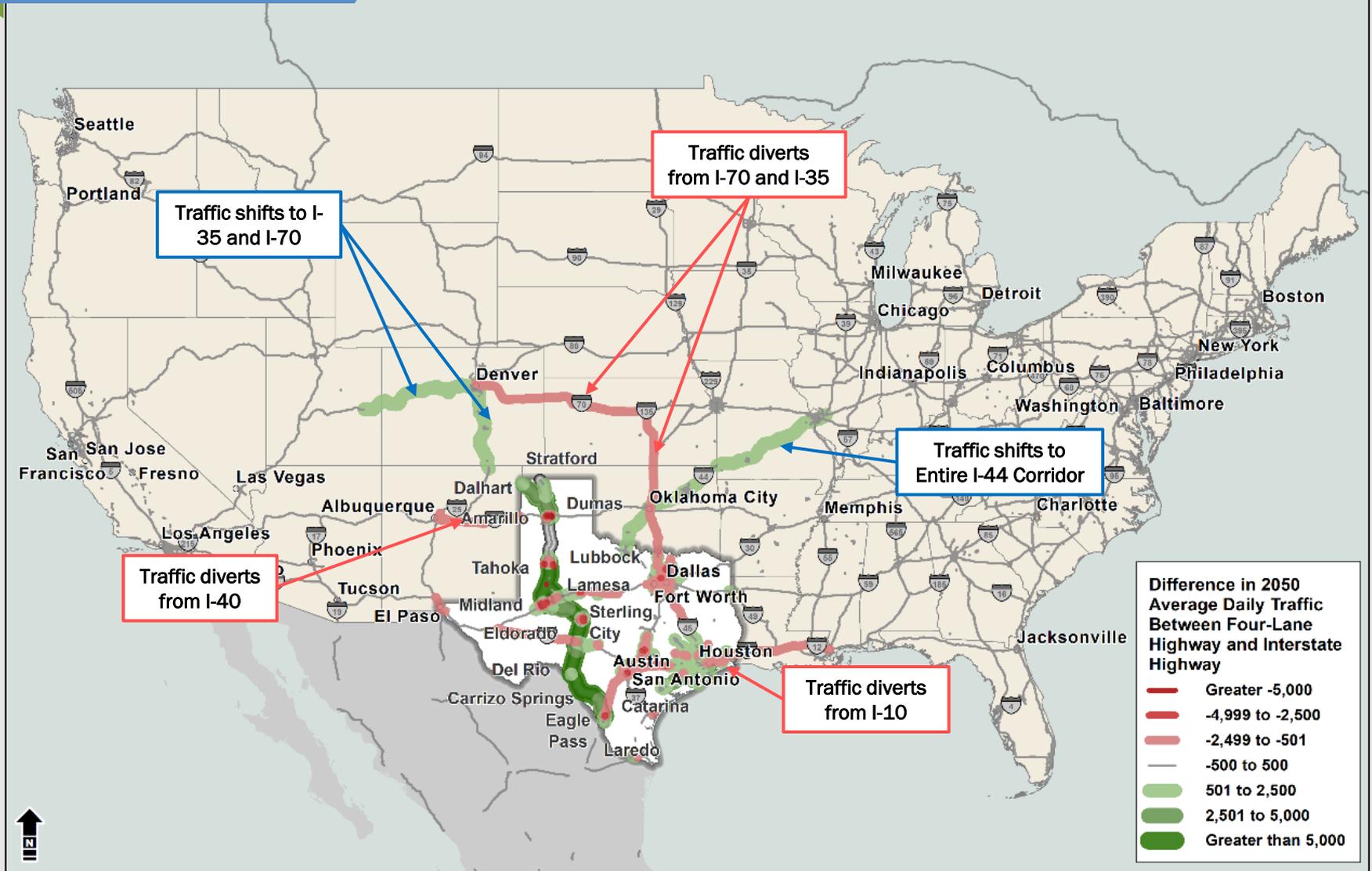
- Modeling did not show any significant diversion from other routes with 4-Lane Option versus 2050 No Build

Source: TxDOT SAM and TxDOT 2018 RID

# Interstate Option – Anticipated Total Traffic Diversions



## North America

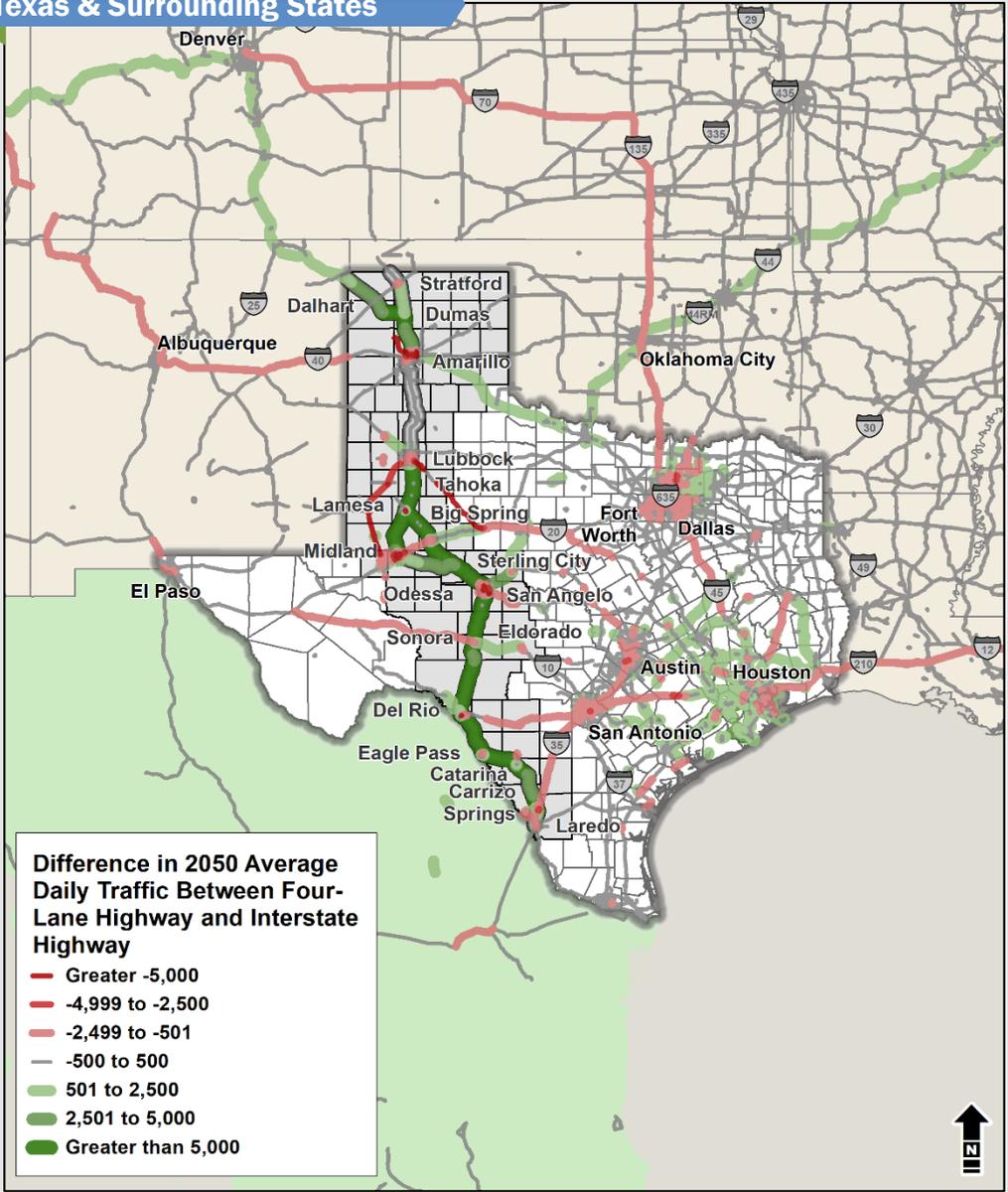


Source: TxDOT SAM and TxDOT 2018 RID

# Interstate Option – Anticipated Total Traffic Diversions



## Texas & Surrounding States



## Diversions - Statewide

- Low to Moderate Diversion from I-35 and I-45
  - No significant change between Austin and Dallas
- Moderate Diversion from I-10 and portions of I-20
- Significant diversion (more than 5,000 vehicles per day) traced from
  - US 385 south of Hartley
  - US 385 to US 62 between Odessa and Lubbock
  - US 84 between Lubbock and I-20

Source: TXDOT SAM and TxDOT 2018 RID



## Segment #3



## Diversions – Segment #3

- Corridor draws east/west trips from US 57 (Eagle Pass to San Antonio) and US 90 (Del Rio to San Antonio)
- Corridor attracts north/south trips from US 83 and SH 55
- Moderate diversion from I-35 north of US 83 to San Antonio
- Light diversion from I-35 north of San Antonio

Source: TXDOT SAM and TxDOT 2018 RID



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

## Summary of Analysis:



### Four-Lane Divided

- Lower crash rates than two-lane roadway
- Mobility challenges in urban areas

### Interstate

- Lowest crash rates of all route types
- Full access control offers the best mobility
- Travel time savings of approximately 68 minutes in Segment 3



## Evaluation

### ■ Texas State Crash Rates

- 4-Lane Divided
  - 25 to 40% fewer crashes than 2 Lane
  - 35 to 45% fewer crashes than 4 Lane Undivided
- Interstate
  - 15 to 25% fewer crashes than any other roadway type

By Highway System		
Highway System	Traffic Crashes per 100 million vehicle miles	
	Rural	Urban
Interstate	62.08	144.32
US Highway	72.08	177.84
State Highway	94.10	217.69
Farm-to-Market	118.18	225.28

By Road Type		
Road Type	Traffic Crashes per 100 million vehicle miles	
	Rural	Urban
2 lane, 2 way	102.13	213.77
4 or more lanes, divided	62.95	158.28
4 or more lanes, undivided	97.61	283.09

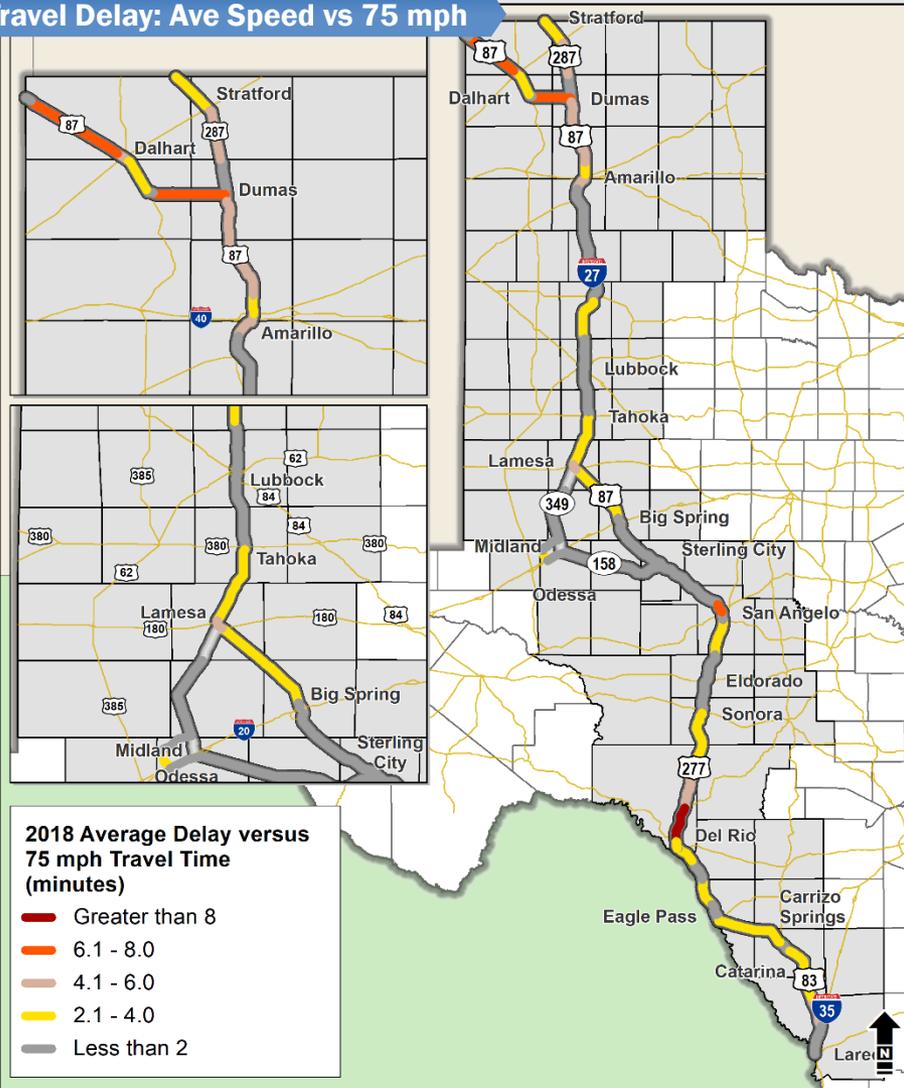
Source: TXDOT CRIS database



## Evaluation

- Average Travel Time Versus 75 mph Travel Time
  - Segment 3: 68 minutes
  - Entire Corridor: 213 minutes

Travel Delay: Ave Speed vs 75 mph





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



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



## Summary of Analysis:

### Four-Lane Divided

- Corridors without access control through urban areas are not ideal for freight transportation
- Traffic congestion from growth burdens non-freeway facilities and affects the ability to transport energy products to market

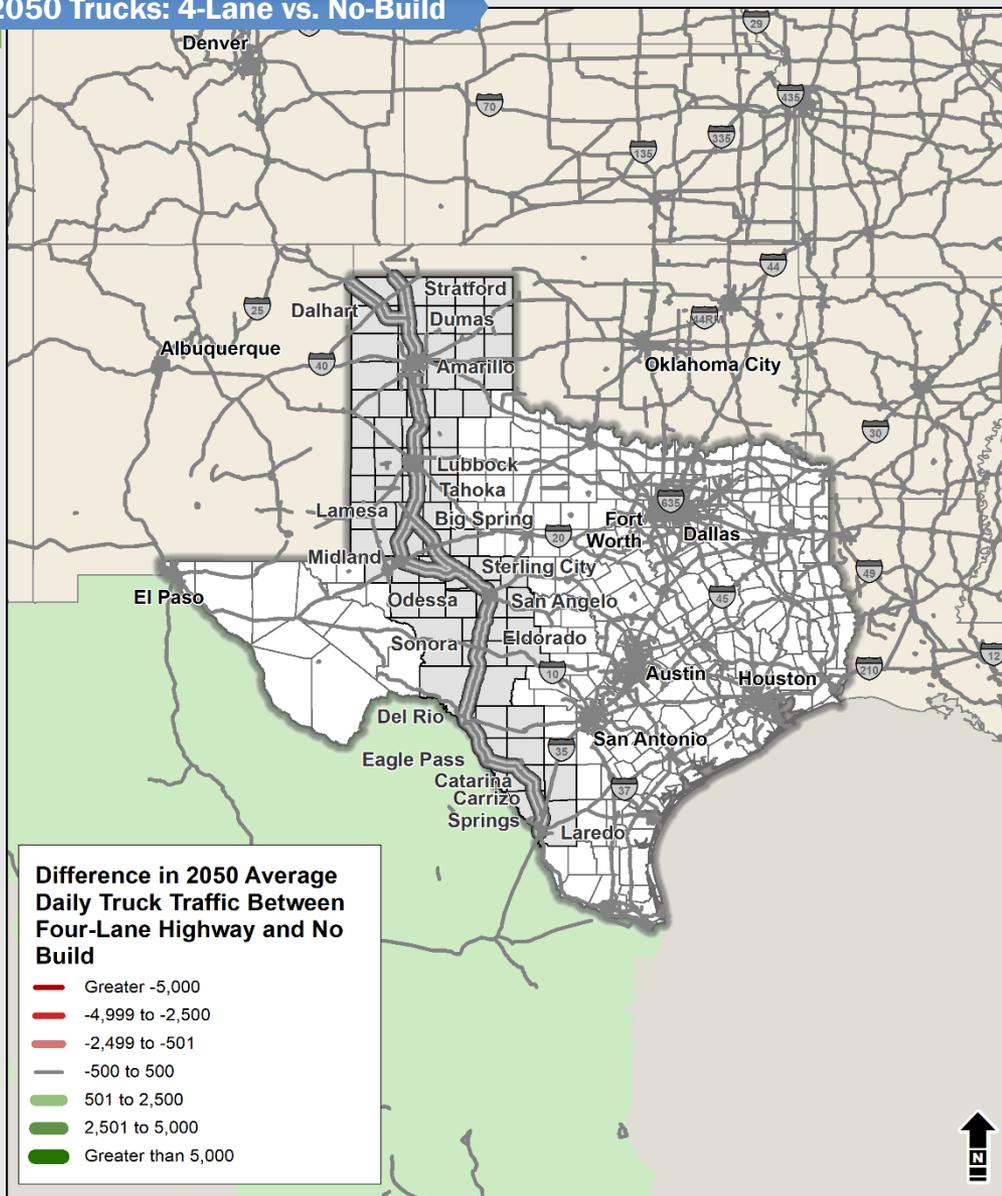
### Interstate

- Truck tonnage grows by 125% with establishment of Interstate Corridor
- Interstate facility attracts trips from parallel routes
- Energy markets supported by improvements to safety and reliability

# 2050 Truck Traffic Not Diverted by 4-Lane Corridor



## 2050 Trucks: 4-Lane vs. No-Build



- Upgrade to 4-Lane Highway has no material effect on truck tons above the 2050 forecast
  - No increase in forecast tonnage
  - Performance gains are insufficient vs. no-build
- Traffic is not diverted from other routes

Source: TxDOT SAM



# 2050 Segment #3 Truck Traffic Diverted to Interstate Corridor

2050 Trucks: 4-Lane vs. No Build



2050 Trucks: Interstate vs. No Build



- Upgrade to 4-Lane Highway diverts no tonnage to Segment #3 above the 2050 forecast
- Upgrade to Interstate adds another 131% in diverted truck tons above the 2050 forecast
  - Total volume 58 million tons
  - Diversion draws notably from I-35

Source: TXDOT SAM



Evaluate 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



Determine the areas that are preferable and suitable for **interstate designation**



Develop **recommendations** and examine **project costs** related to the improvement or expansion of the Ports-to-Plains Corridor



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



## **Caroline Mays**

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## **For General Information**

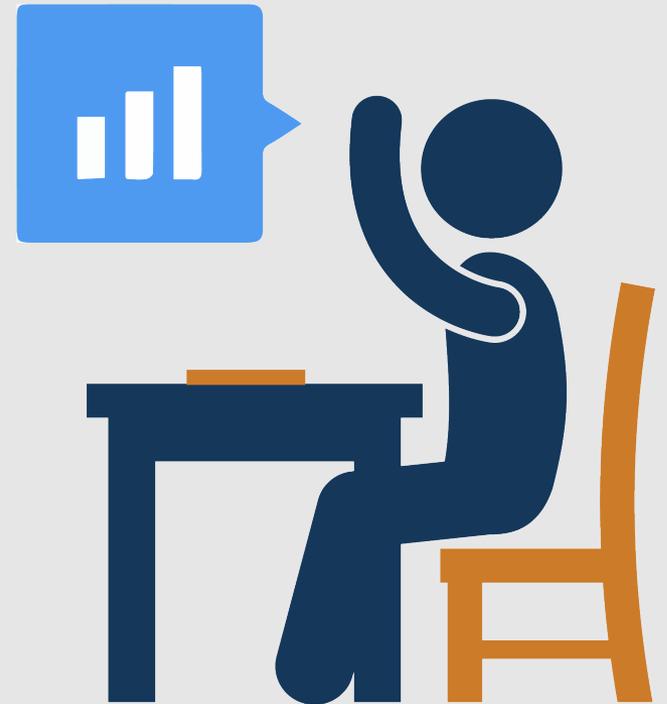
[portstoplains@txdot.gov](mailto:portstoplains@txdot.gov)





## Public Feedback

- Map Activity





THANK YOU!