



Mentimeter

Committee Members: Information to access Mentimeter is located on the inside folder of your packet.

WiFi Password

WifiName: WTTC

No password required



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

Advisory Committee, Meeting #2
San Angelo, TX



Welcome

**Honorable Dan Pope, Mayor, City of Lubbock,
Ports-to-Plains Advisory Committee Chair**

**Alvin New, Commissioner,
Texas Transportation Commission**

TxDOT Leadership

**Caroline Mays,
Director, Freight, Trade and Connectivity, TxDOT**



- 1 Welcome and Opening Remarks
- 2 Update from Segment Committee Meetings Rounds #1 and #2
- 3 Forecasted Corridor Conditions
- 4 Break
- 5 Planned and Programmed Projects and Gaps
- 6 Discussion of Preliminary Corridor Feasibility Analysis
- 7 Overview of Advisory Committee Meeting #3
- 8 Adjourn



Advisory Committee Meeting #2

Update from Meetings Rounds #1 and #2

- Segment Committee Meetings
- Public Meetings

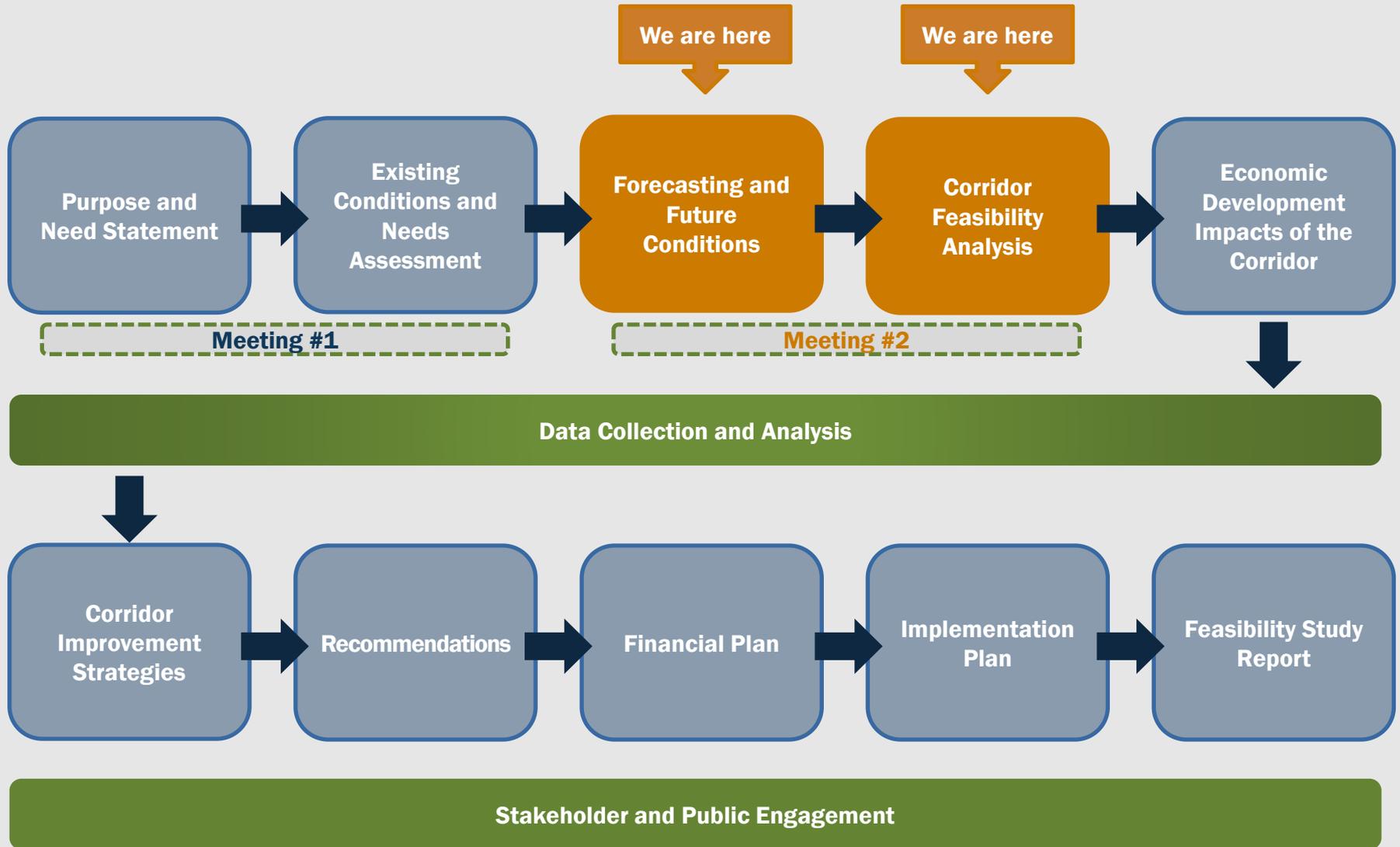
Jared Miller, Amarillo City Manager,
Segment #1 Committee Chair

Honorable Brenda Gunter, Mayor of San Angelo,
Segment #2 Committee Chair

Honorable Bruno Lozano, Mayor of Del Rio,
Segment #3 Committee Chair

Caroline Mays, TxDOT

Ports-to-Plains Corridor Feasibility Study Scope





Committee Meeting #1

November 20, 2019
Amarillo



- Overview of the study
- Study goals, scope and schedule
- Existing conditions and needs
- Interstate facility design features
- Committee members and chair
- Report outline

Public Meeting

November 20, 2019
Amarillo



- 57 Attendees/29 General Public
- Use of Mentimeter
- Comments/Input
 - Economic development
 - Safety and mobility
 - Truck traffic and access
 - Relief Route to bypass local cities in the segment
 - Congestion relief

Committee Meeting #2

February 6, 2020
WebEx



- Forecasted Conditions
- Planned and Programmed Projects
- Identification of Gaps
- Preliminary Corridor Feasibility Analysis
- Review and Discussion of Report Chapters 1 and 2



Committee Meeting #1

November 18, 2019
Big Spring



- Overview of the study
- Study goals, scope and schedule
- Existing conditions and needs
- Interstate facility design features
- Committee members and chair
- Report outline

Public Meeting

February 4, 2020
San Angelo



- 54 Attendees/27 General Public
- Use of Mentimeter
- Comments/Input
 - Economic development
 - Safety and mobility
 - Truck traffic and access
 - Relief Route to bypass local cities in the segment
 - Congestion relief

Committee Meeting #2

February 5, 2020
San Angelo/WebEx



- Forecasted Conditions
- Planned and Programmed Projects
- Identification of Gaps
- Preliminary Corridor Feasibility Analysis
- Review and Discussion of Report Chapters 1 and 2



Committee Meeting #1

November 3, 2019
Del Rio



- Overview of the study
- Study goals, scope and schedule
- Existing conditions and needs
- Interstate facility design features
- Committee members and chair
- Report outline

Public Meetings

November 4, 2019 (Del Rio)
and February 3, 2020 (Laredo)



- Meeting 1 - 58 Attendees/36 General Public
 - Use of Mentimeter
- Meeting 2 - 40 Attendees/14 General Public
 - Map Exercise
 - Input: Safety and mobility, economic development, freight movement, safer and wider roads, challenging terrain

Committee Meeting #2

February 3, 2020
Laredo



- Forecasted Conditions
- Planned and Programmed Projects
- Identification of Gaps
- Preliminary Corridor Feasibility Analysis
- Review and Discussion of Report Chapters 1 and 2



Advisory Committee Meeting #2

Forecasted Corridor Conditions

Caroline Mays, TxDOT

Consultant Team



1 Population Forecasts

2 Economic Forecasts

3 Land Use Forecasts

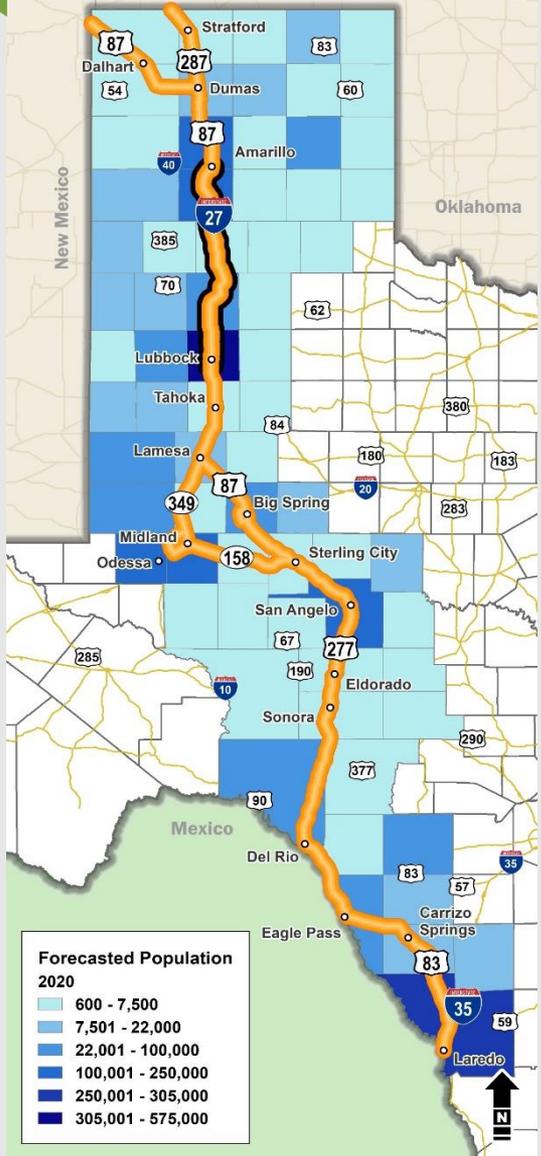
4 Traffic Forecasts

5 Freight Forecasts

Corridor Forecasted Total Population 2020 and 2050



2020

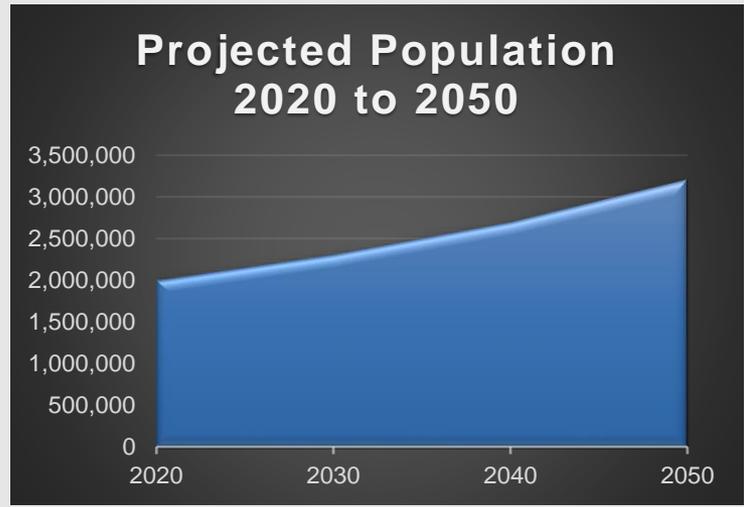


2050



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%**
- Segment #1 population is projected to **grow by 21%**, Segment #2 by **101%**, and Segment #3 by **11%**

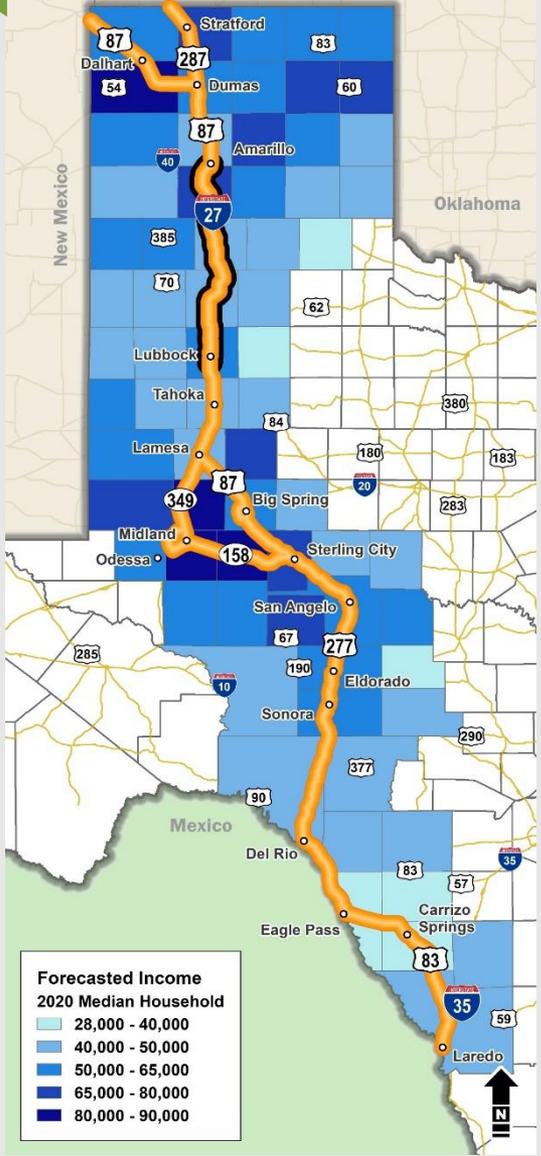


Source: Texas Demographic Center

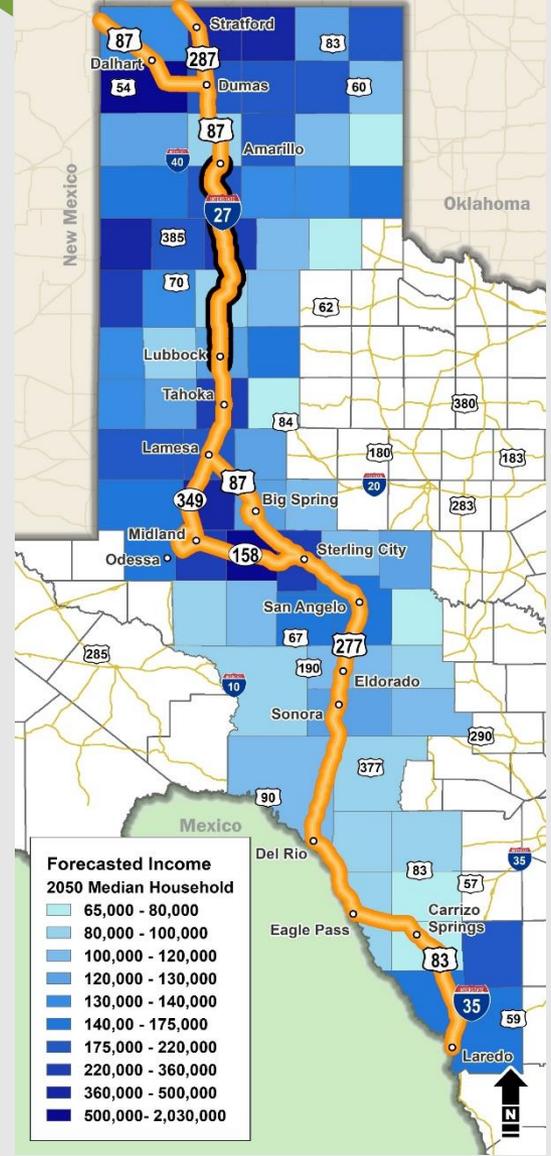
Corridor Forecasted Median Incomes 2020 and 2050



2020



2050



\$50,460

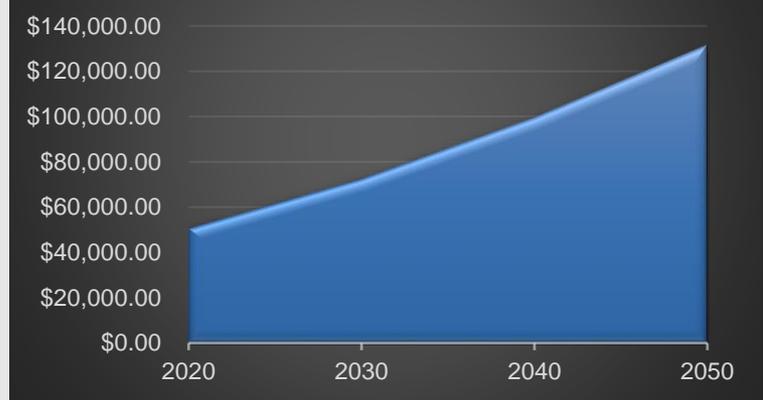
(2020)

\$131,467

(2050)

- Corridor median household income is projected to **increase by \$81,006**
- Overall corridor median household income projected to **grow by 161%**
- Segment #1 median household income is projected to **grow by 186%**, Segment #2 by **137%**, and Segment #3 by **116%**

Forecasted Median Income 2020-2050

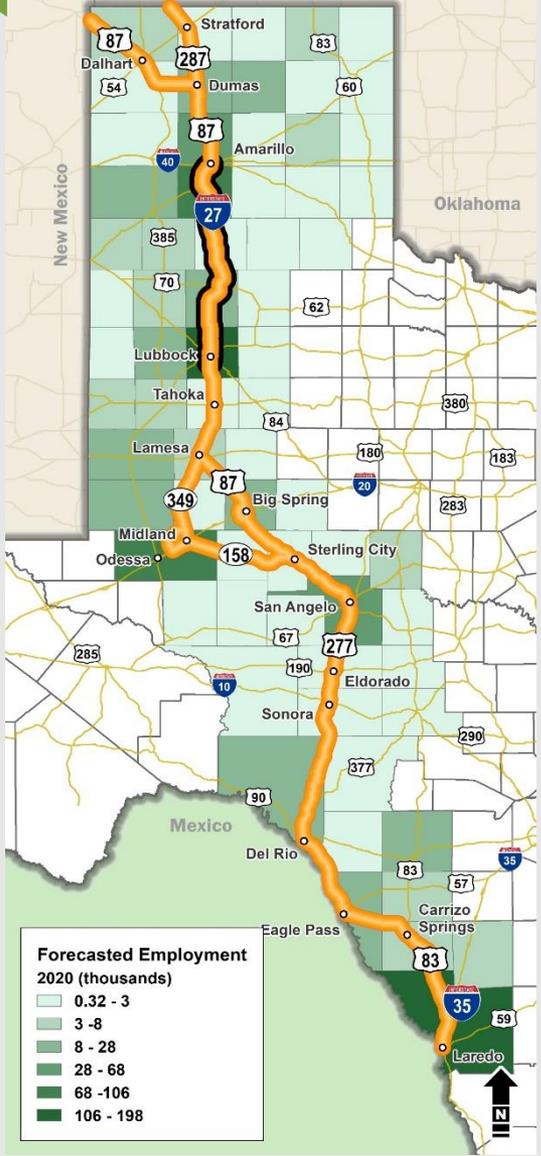


Source: Moody's Analytics Forecasted Data

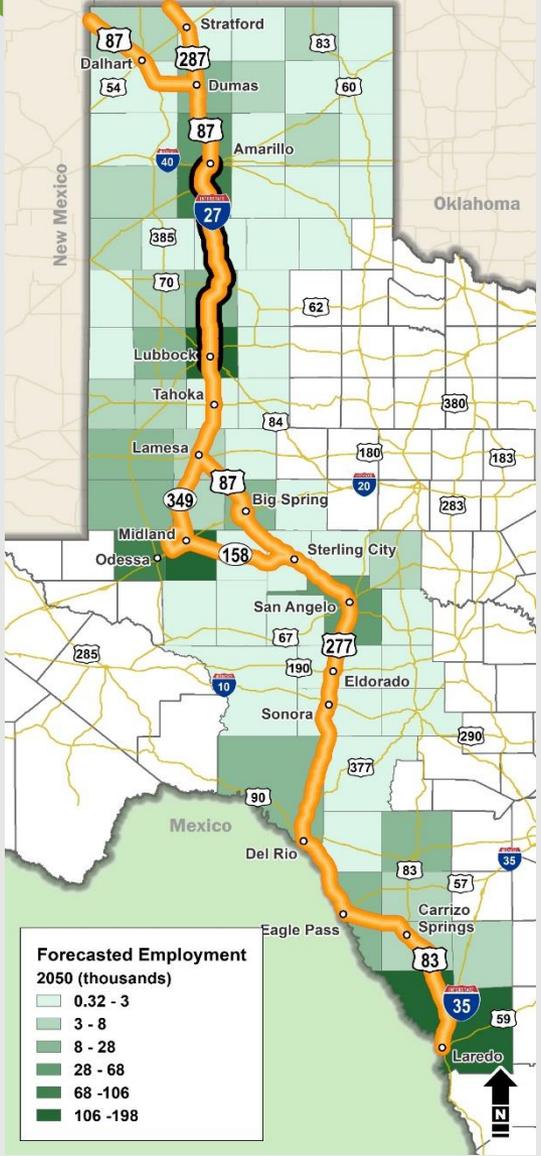
Corridor Forecasted Employment 2020 and 2050



2020

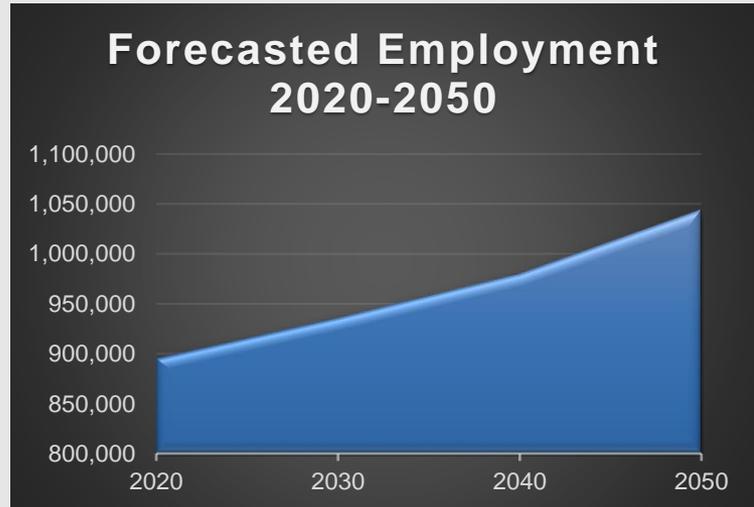


2050



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

- Corridor total employment is **projected to increase by 149,372**
- Overall corridor employment **is projected to grow by 17%**
- Segment #1 employment is projected to **grow by 8%**, Segment #2 by **22%**, and Segment #3 by **15%**

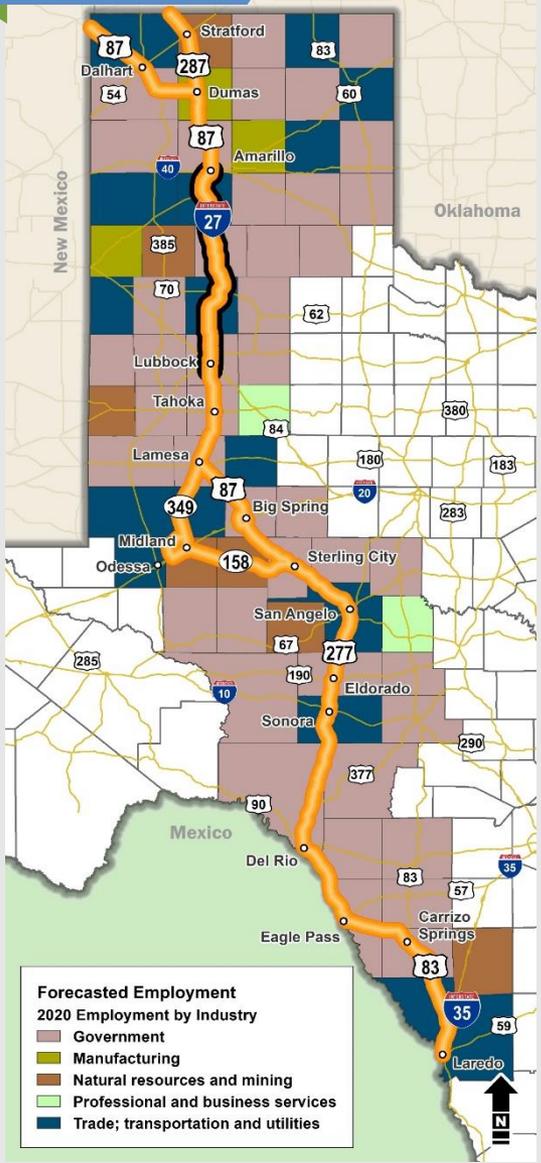


Source: Moody's Analytics Forecasted Data

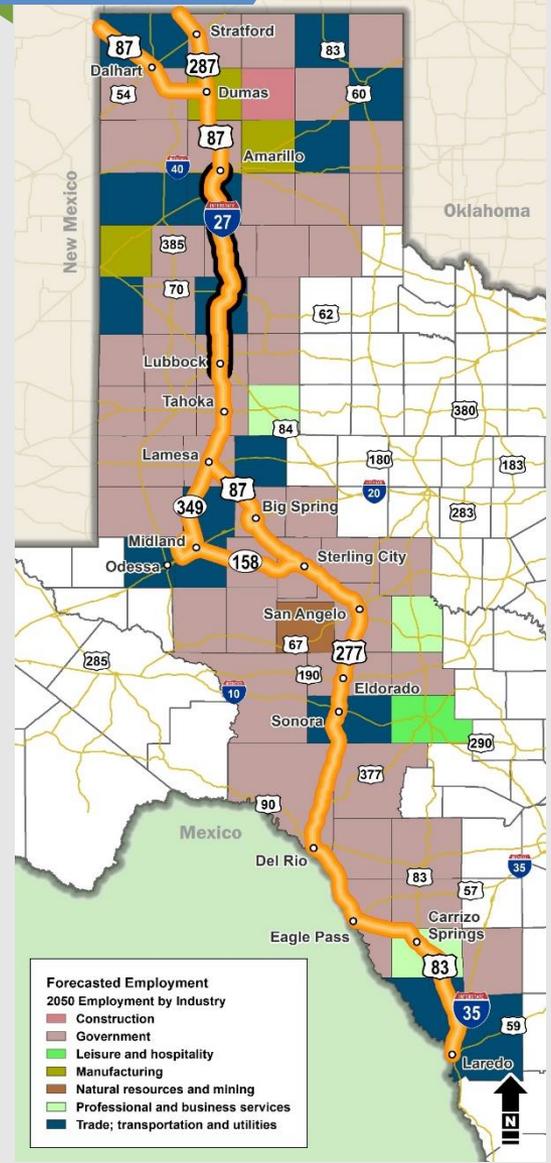
Corridor Forecasted Employment by Industry 2020 and 2050



2020



2050



- Corridor highest **industries for employment** are projected to be:
 - Government (42 counties in 2020 and 46 counties in 2050), and
 - Trade; transportation and utilities (15 counties in 2020 and 14 counties in 2050)

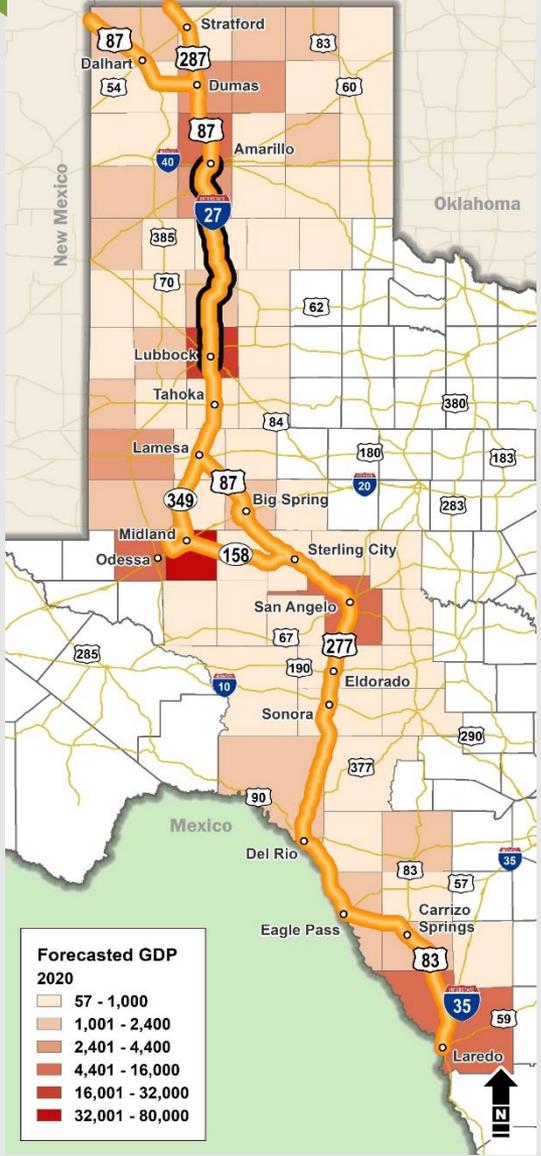
Other Top Employment Industries	2020 (# of Counties)	2050 (# of Counties)
Natural Resources and Mining	7	1
Manufacturing	3	3
Professional and Business Services	2	3
Construction	0	1
Leisure and hospitality	0	1

Source: Moody's Analytics Forecasted Data

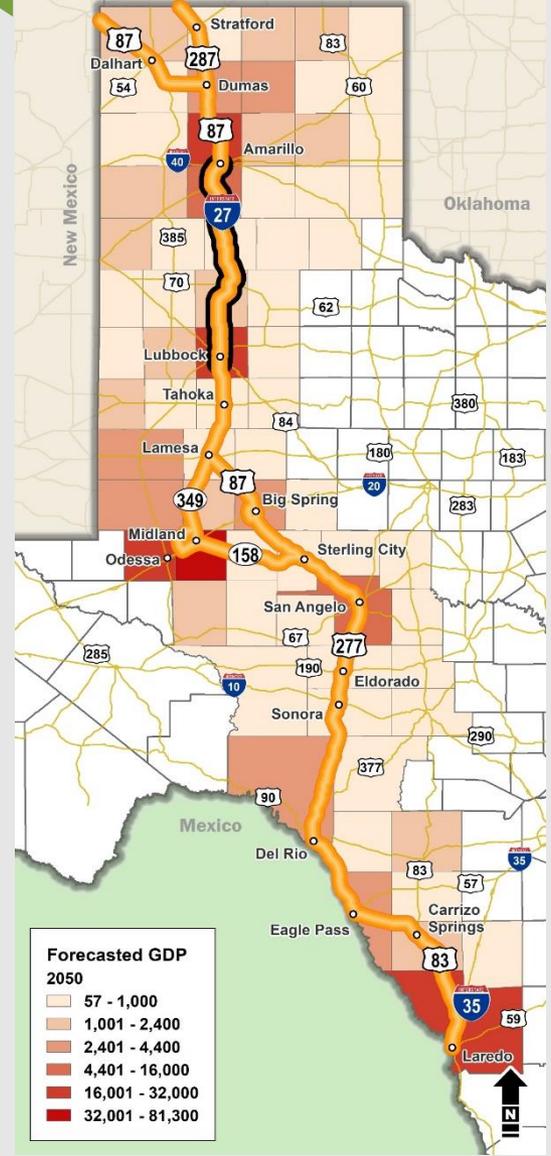
Corridor Forecasted Gross Domestic Product 2020 and 2050



2020



2050



155,377
million
(2020)

263,243
million
(2050)

- Corridor Gross Domestic Product (GDP) is projected to **increase by 107,866 million**
- Overall corridor GDP is projected to **grow by 69%**
- Segment #1 GDP is projected to **grow by 47%**, Segment #2 by **76%**, and Segment #3 by **80%**

Source: Moody's Analytics Forecasted Data



- **76% Developable**

- Segment #1 (81%)
- Segment #2 (78%)
- Segment #3 (57%)

- **19% Developed**

Areas consist of:

- Cities' and towns' existing developed areas

- **5% Not Developable**

Areas constrained by:

- Floodplains (3%)
- Wetlands (1%)
- Parks (0.4%)
- Historic sites, cemeteries, and hazardous material sites (<0.01%)

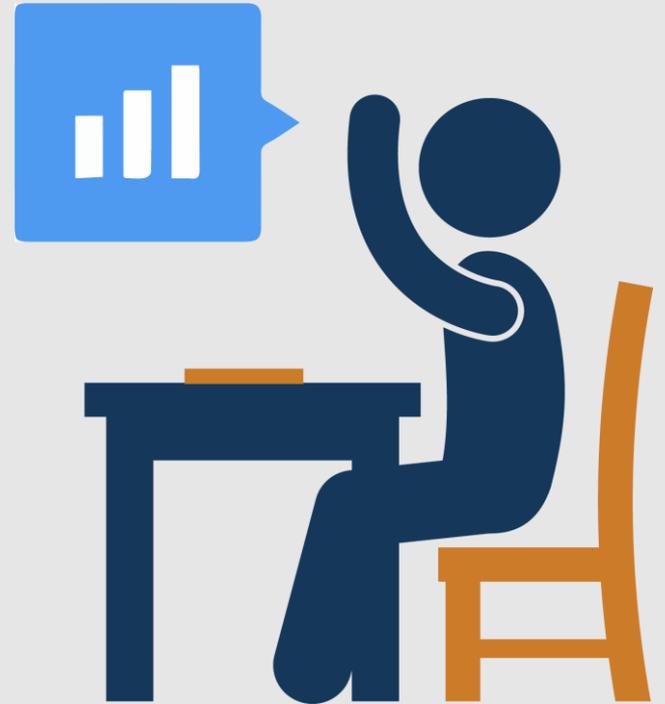


Source: ESRI Aerial Imagery, NWI, FEMA, THC, and EPA data.



Committee Feedback

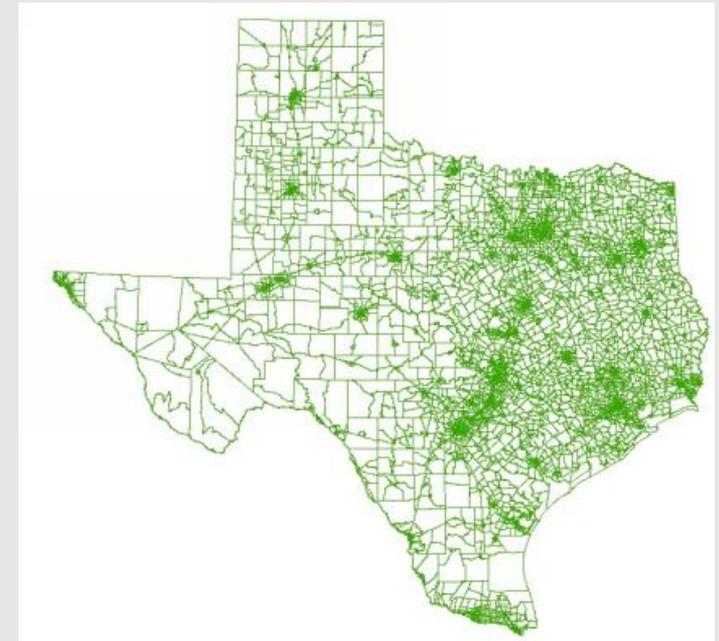
- What factors do you think are influencing future population, economic and land use conditions?
- Do you envision the local population, economy and land use changing if improvements are made to the Ports-to-Plains Corridor? If so, where?





Traffic Forecasting Process

- Use baseline traffic from TxDOT 2018 daily traffic counts
- Deploy TxDOT Statewide Travel Demand Model (SAM) for future traffic volumes
- Compute growth between base year and 2050 horizon year within SAM
- Add growth to baseline traffic to predict 2050 traffic forecasts
- Repeat for alternative improvement scenarios





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

■ 4-lane Divided Hybrid

- Provide 4-lane divided through all rural areas
- Provide access-controlled freeway in urban areas via local preferred route

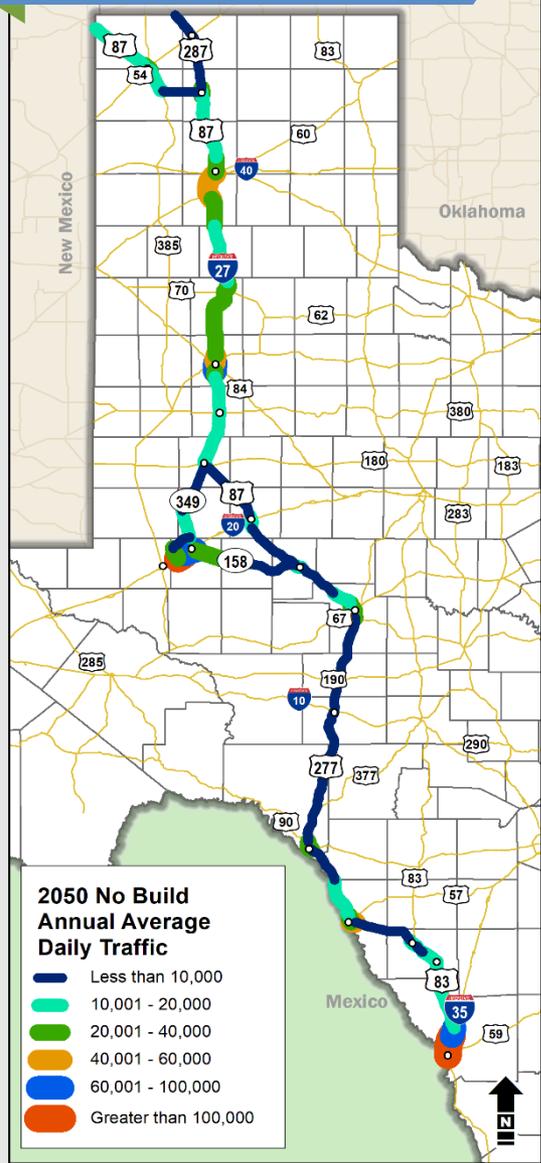
■ Interstate Highway

- Full control of access for entire corridor (75 mph)
- Traverses urban areas via local preferred route

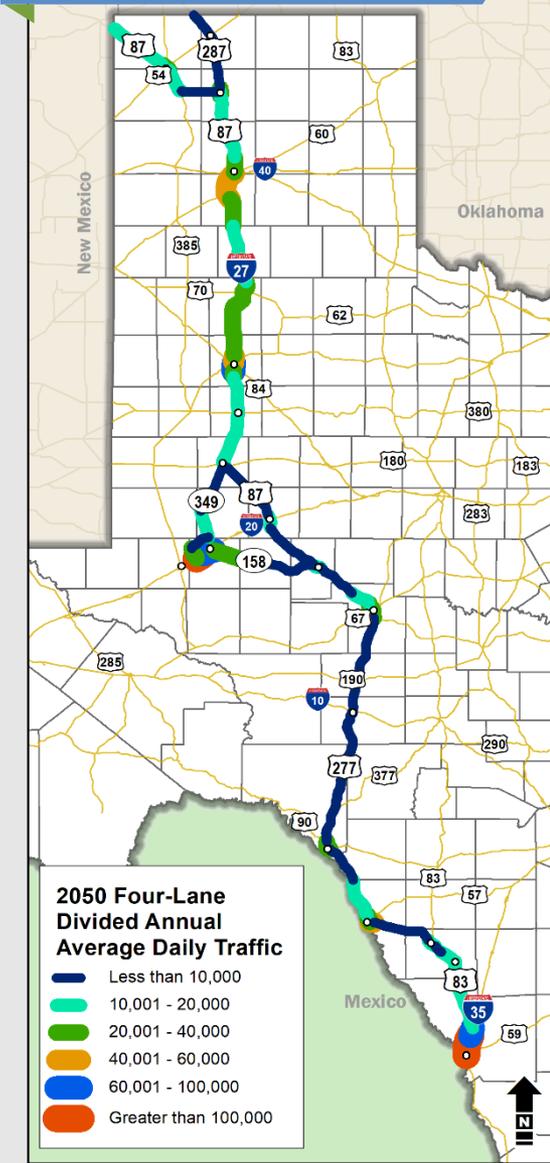
Forecasted Traffic Conditions



2050 Traffic - No Build



2050 Traffic - 4 Lane Divided



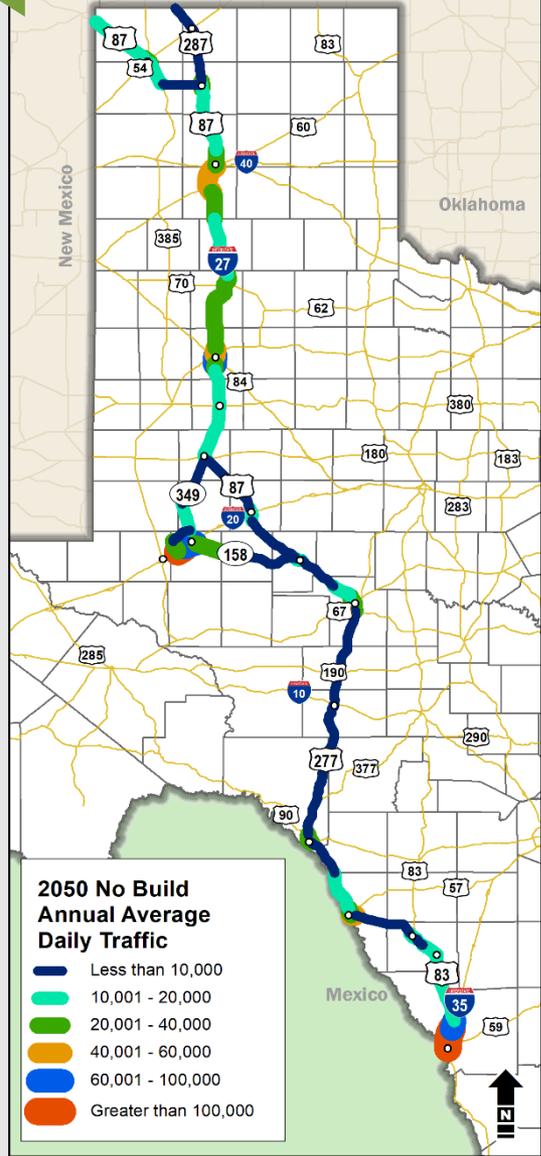
- **No Build Growth**
 - Traffic growth due to local population and employment growth only
 - High growth on US 83 north of Laredo (163%), SH 158 near Midland (124%)
 - Low Growth on US 287 near Oklahoma border (10%), US 87 near Big Spring (10%)
- **4-Lane Divided Growth**
 - Very similar to No Build
 - Doesn't attract more traffic - urban mobility/reliability still an issue
- **4-lane Divided Hybrid**
 - Would attract moderate additional growth over No Build or 4-Lane Divided Options

Source: TxDOT SAM and TxDOT 2018 RID

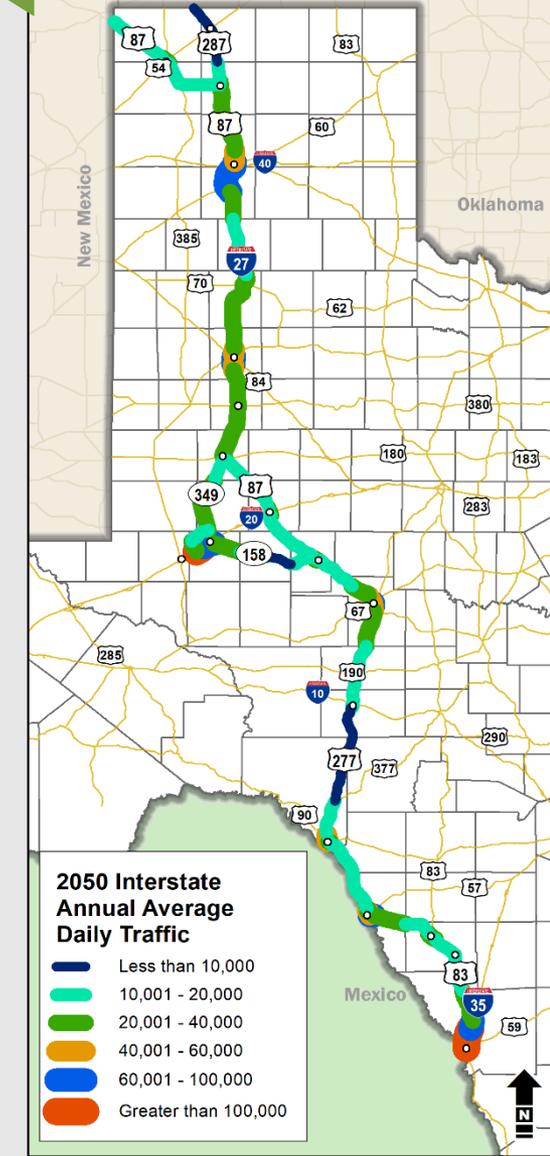
Forecasted Traffic Conditions



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 mostly two-lanes in Oklahoma and Colorado

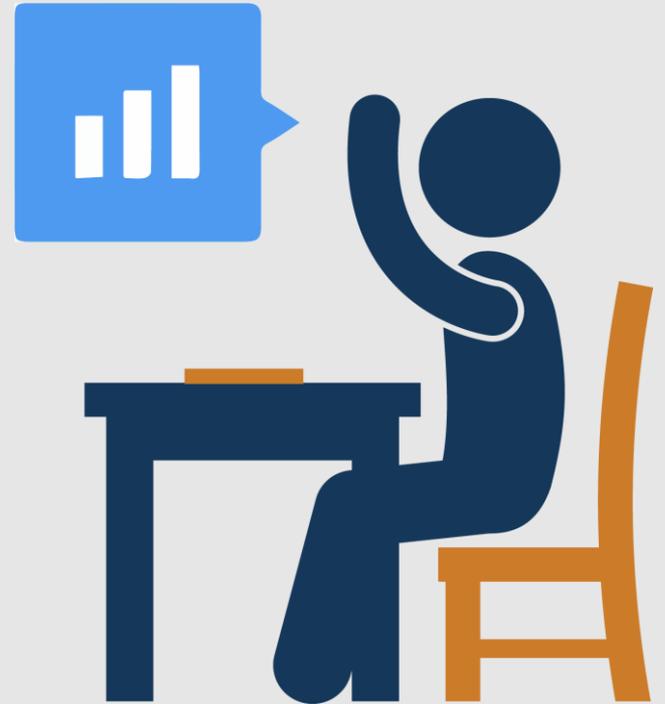
- **Interstate Highway Diversions**
 - Fills in National Grid
 - Most diversions from within 100 miles
 - Diversions also traced on national and statewide basis

Source: TxDOT SAM and TxDOT 2018 RID



Committee Feedback

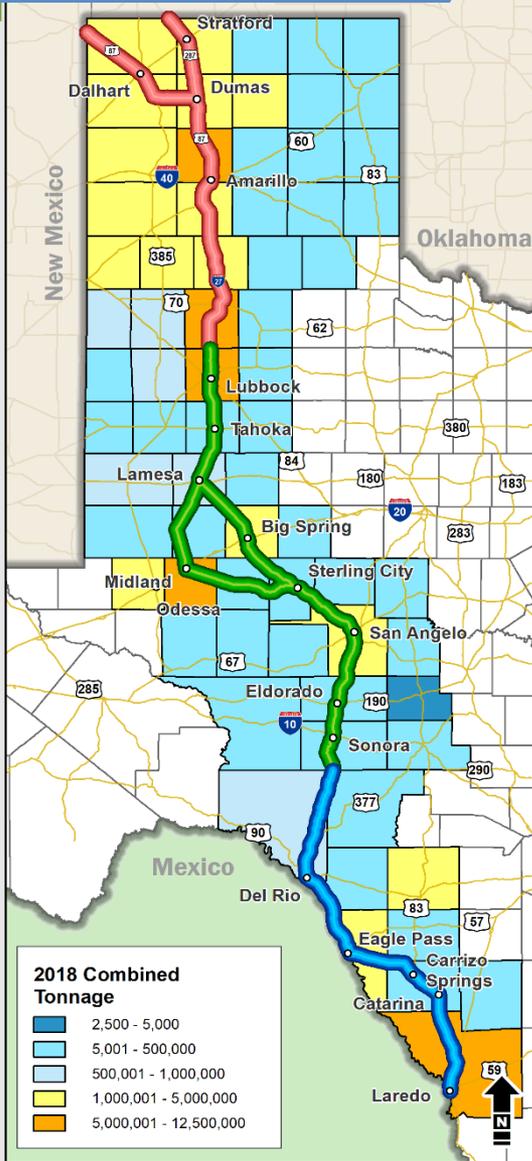
- What are the opportunities and challenges related to the differences in traffic volumes between the 4-lane divided and interstate options?



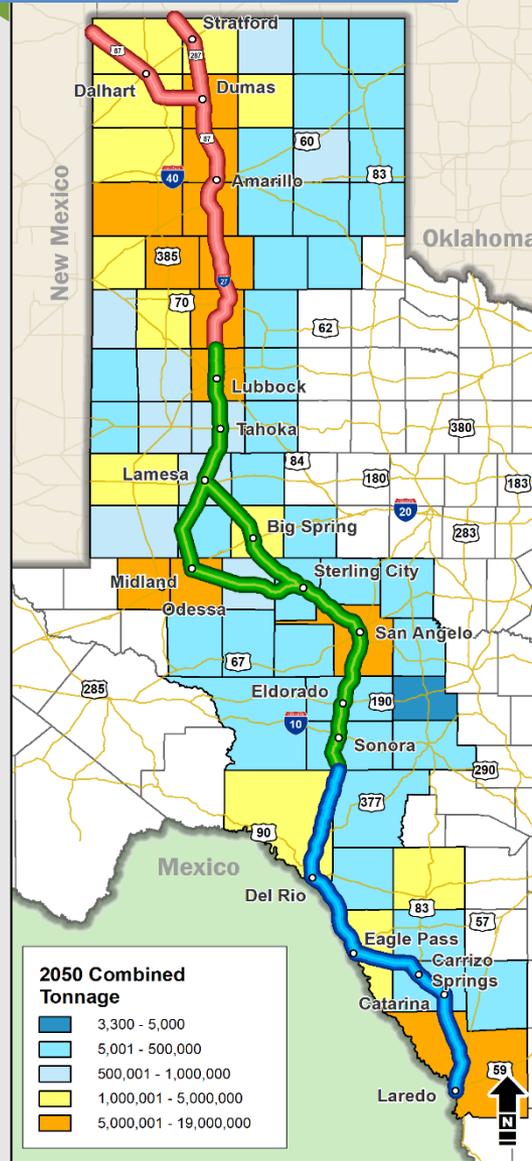
Corridor Total Truck Freight Growth by County - 2050



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
- Segment #1 total truck tonnage is forecast to grow 59%, Segment #2 87%, and Segment #3 139%
- 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

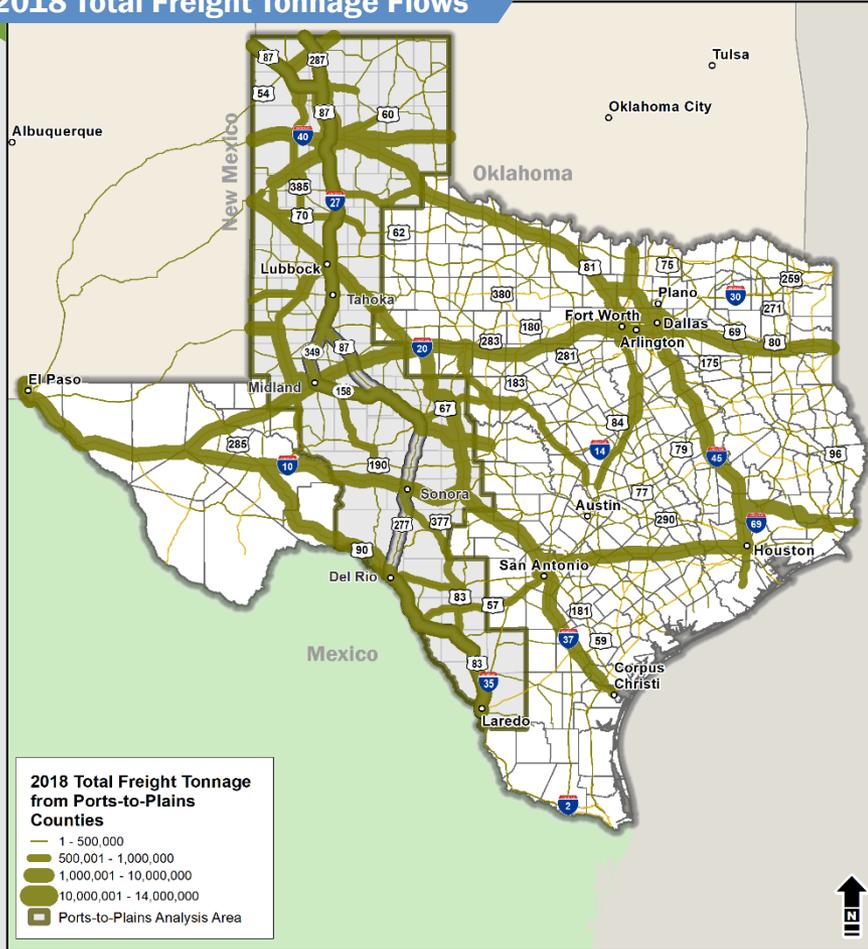
Source: TxDOT SAM and TRANSEARCH database

Corridor Total Truck Freight Growth in Texas Network – 2050

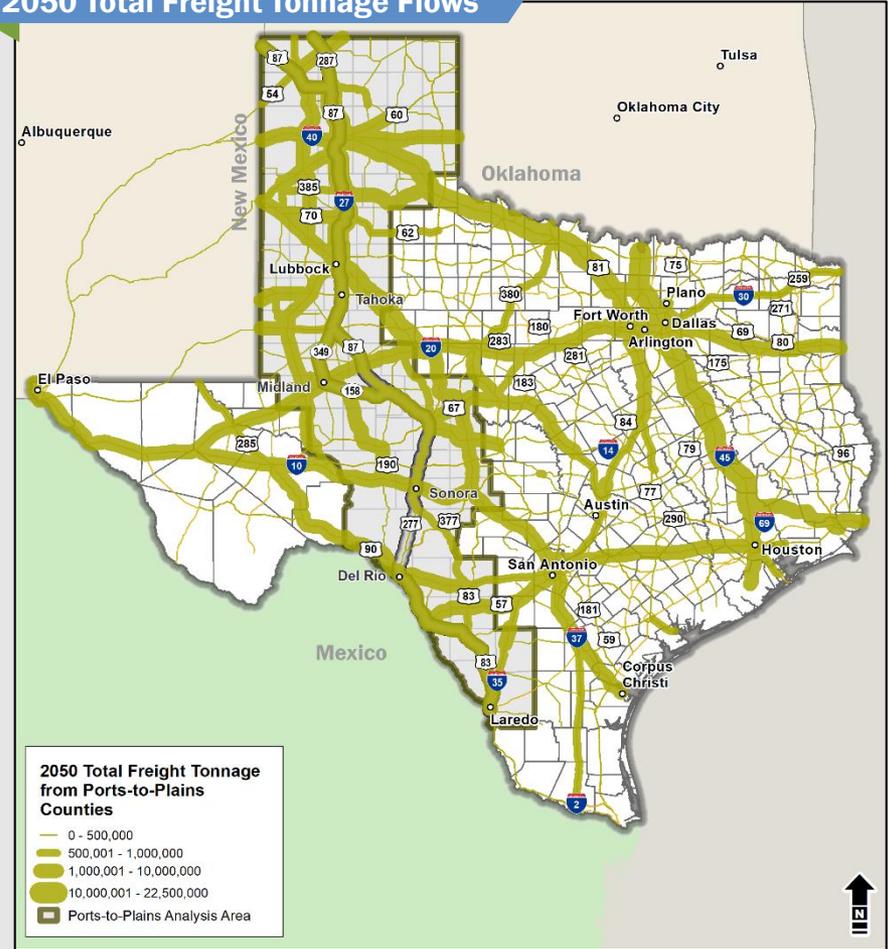


- Corridor truck traffic connects across the state and is forecast to grow broadly

2018 Total Freight Tonnage Flows



2050 Total Freight Tonnage Flows

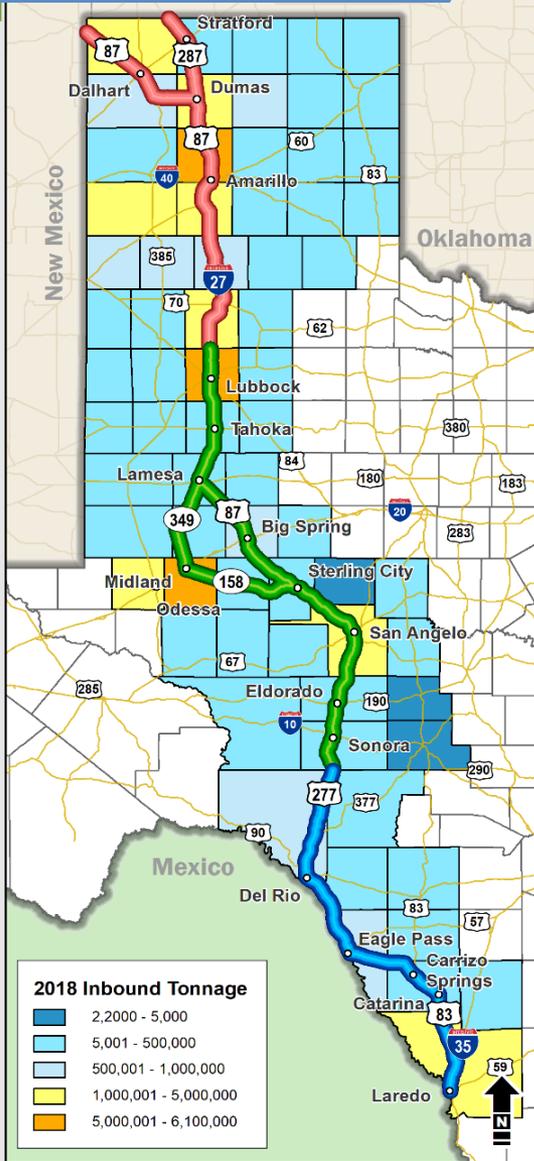


Source: TxDOT SAM and TRANSEARCH database

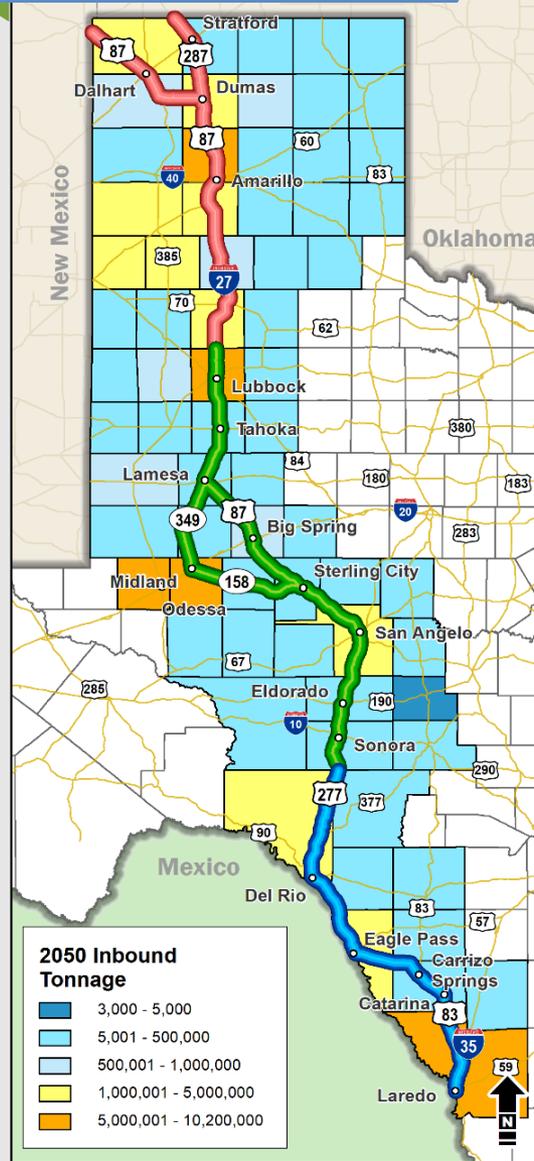
Corridor Inbound Freight Growth by County - 2050



2018 Inbound Freight Tonnage



2050 Inbound Freight Tonnage



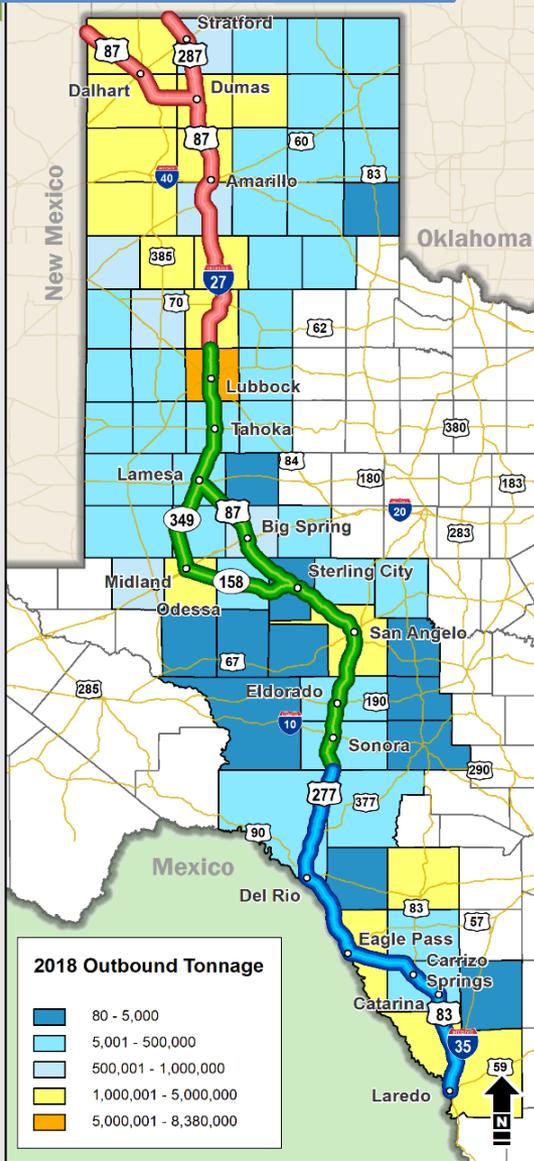
- Corridor inbound truck tonnage is projected to **grow 73%** through 2050
 - 35 million tons added
 - Total inbound volume reaches 84 million tons
- Segment #1 inbound truck tonnage is project to **grow 43%**, Segment #2 **81%**, and Segment #3 **155%**
- Fastest county growth:
 - **La Salle** - 237%
 - **Ector** - 193%
 - **Webb** - 173%
- Largest county growth:
 - **Ector** + 6.5 mil. tons
 - **Webb** + 6.4 mil. tons
 - **Midland** +4.3 mil. Tons

Source: TxDOT SAM and TRANSEARCH database

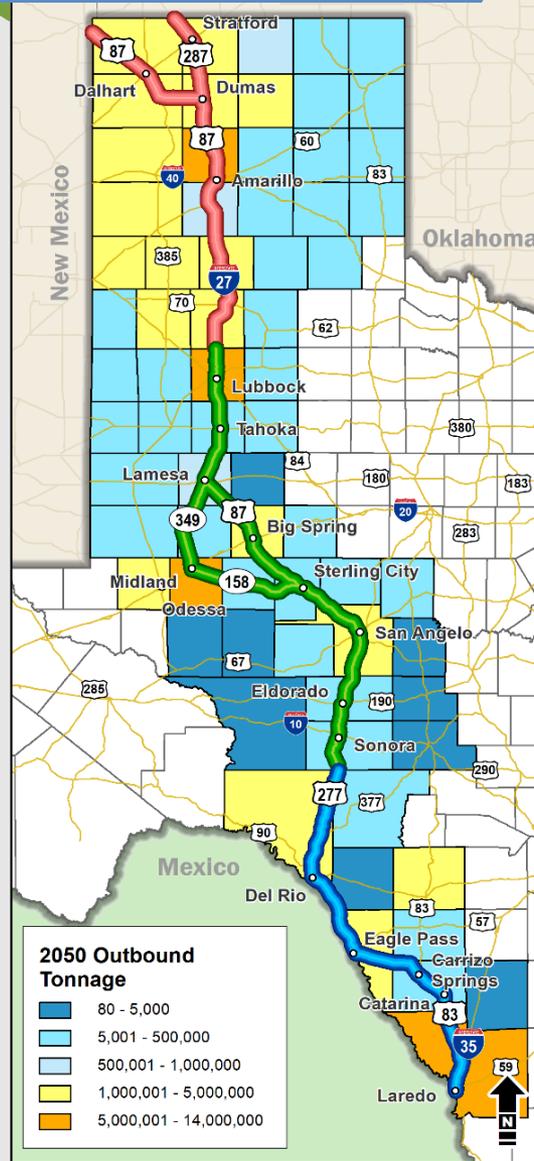
Corridor Outbound Freight Growth by County - 2050



2018 Outbound Freight Tonnage



2050 Outbound Freight Tonnage



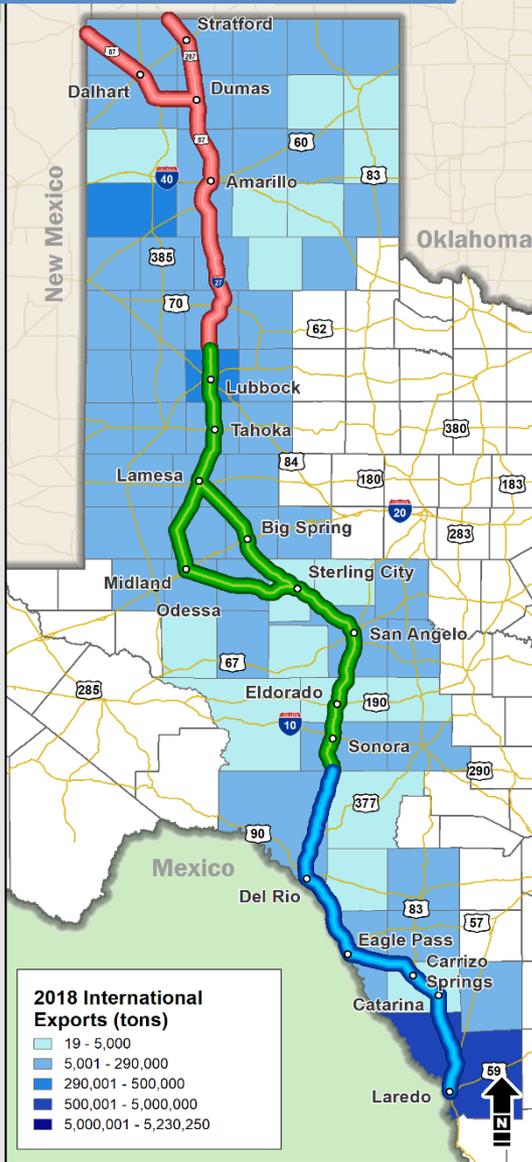
- Corridor outbound truck tonnage is projected to **grow 89%** through 2050
 - 48 million tons added
 - Total outbound volume reaches 101 million tons
- Segment #1 outbound truck tonnage is projected to **grow 73%**, Segment #2 **85%**, and Segment #3 **153%**
- Fastest county growth:
 - **Val Verde** - 291%
 - **Howard** - 277%
 - **Sutton** - 213%
- Largest county growth:
 - **Webb** + 9.1 mil. Tons
 - **Midland** + 5.6 mil. tons
 - **Potter** + 4.7 mil. Tons

Source: TxDOT SAM and TRANSEARCH database

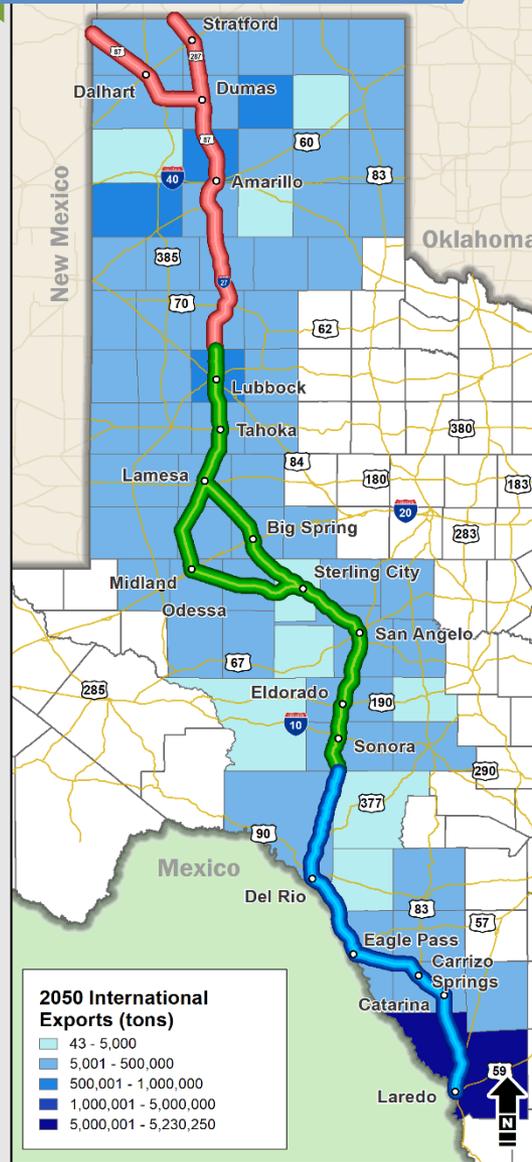
International Truck Trade Growth by County – 2050 Exports



2018 Export Tons



2050 Export Tons



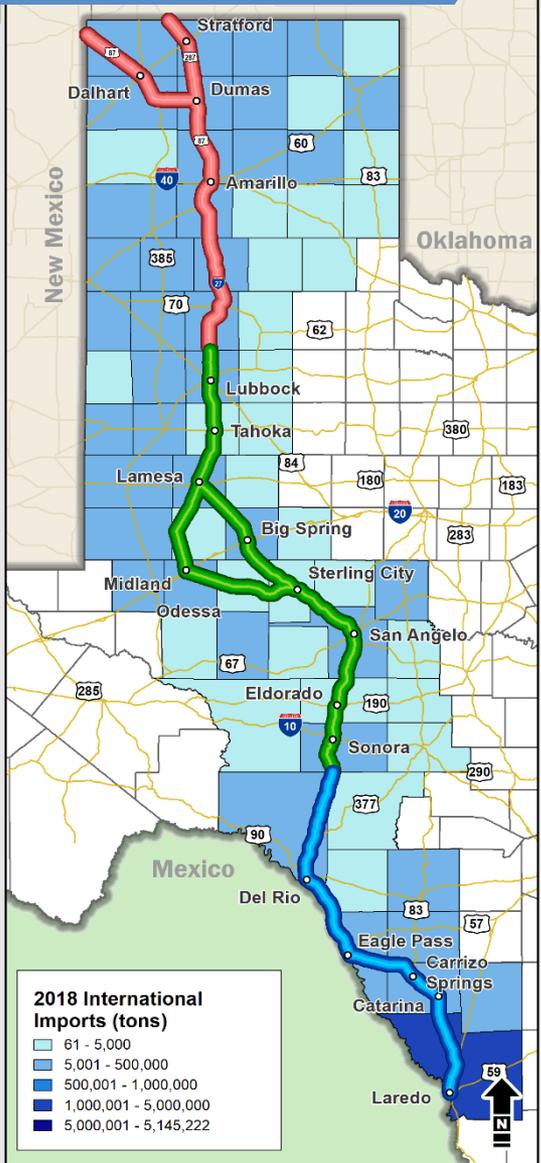
- Export truck tonnage is projected to **grow 116%** through 2050
 - 7 million tons added
 - Total export volume reaches 12 million tons
- Segment #1 export truck tonnage is projected to **grow 88%**, Segment #2 **78%**, and Segment #3 **169%**
- Half of export growth is at Laredo (Webb County)
- Other significant export growth is widespread, affecting all 3 segments

Source: TxDOT SAM and TRANSEARCH database

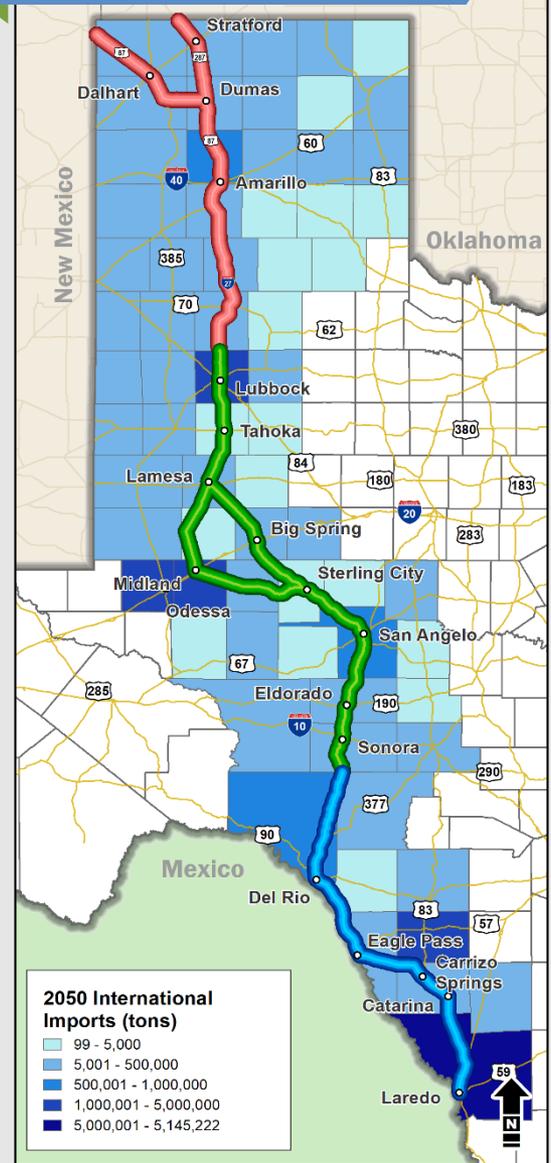
International Truck Trade Growth by County – 2050 Imports



2018 Import Tons



2050 Import Tons

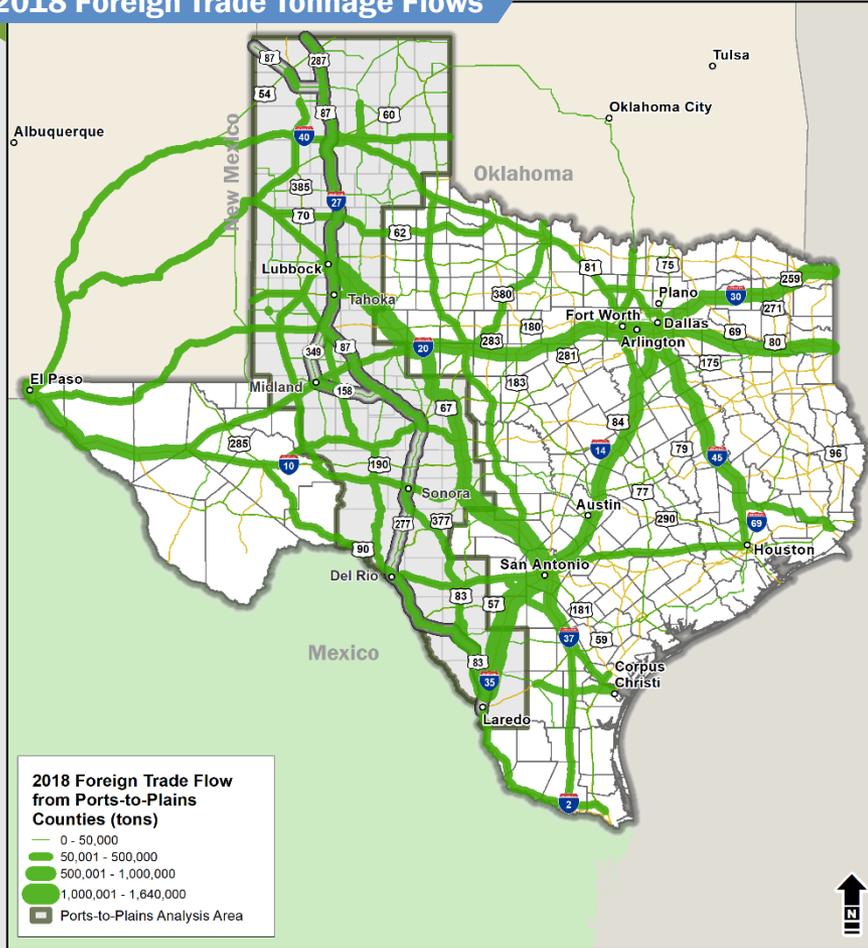


- Import truck tonnage is projected to **grow 214%** through 2050
 - 11 million tons added
 - Total import volume reaches 16 million tons
- Segment #1 import truck tonnage is projected to **grow 135%**, Segment #2 **227%**, and Segment #3 **239%**
- One-third of the import growth is at Laredo (Webb County)
- Other significant import growth is in Lubbock, Zavala, Midland/Ector, Tom Green, and Val Verde counties

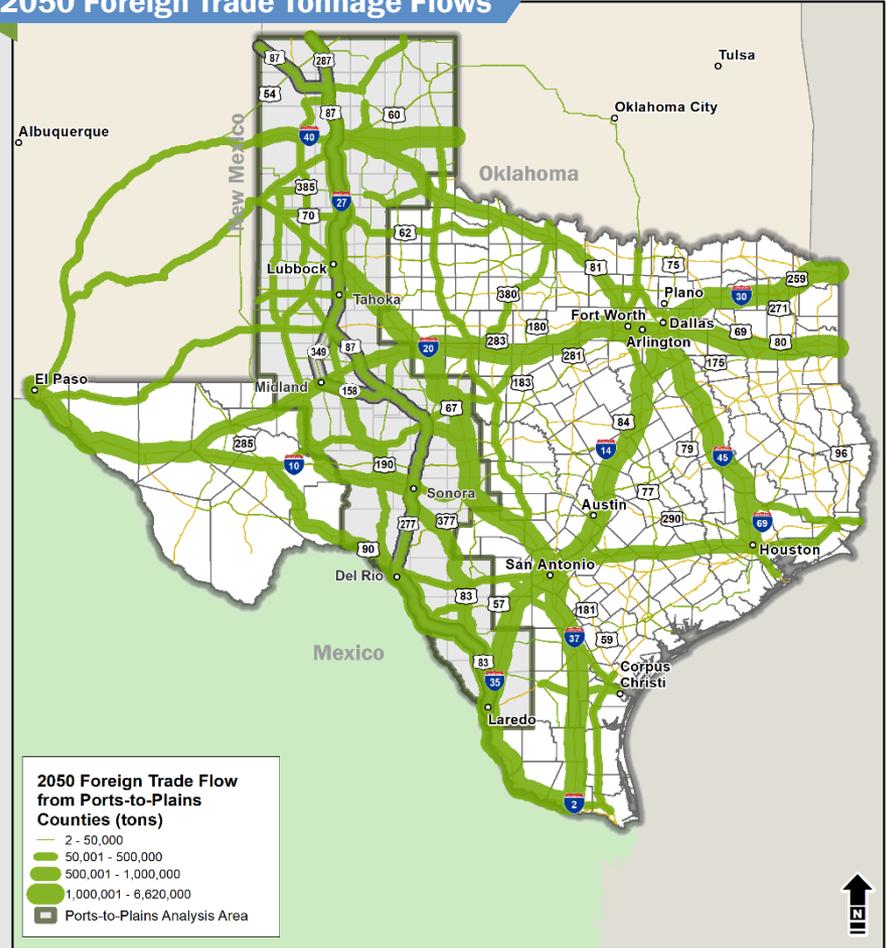
Source: TXDOT SAM and TRANSEARCH database

- Corridor trade network is extensive and is forecast to grow everywhere

2018 Foreign Trade Tonnage Flows



2050 Foreign Trade Tonnage Flows

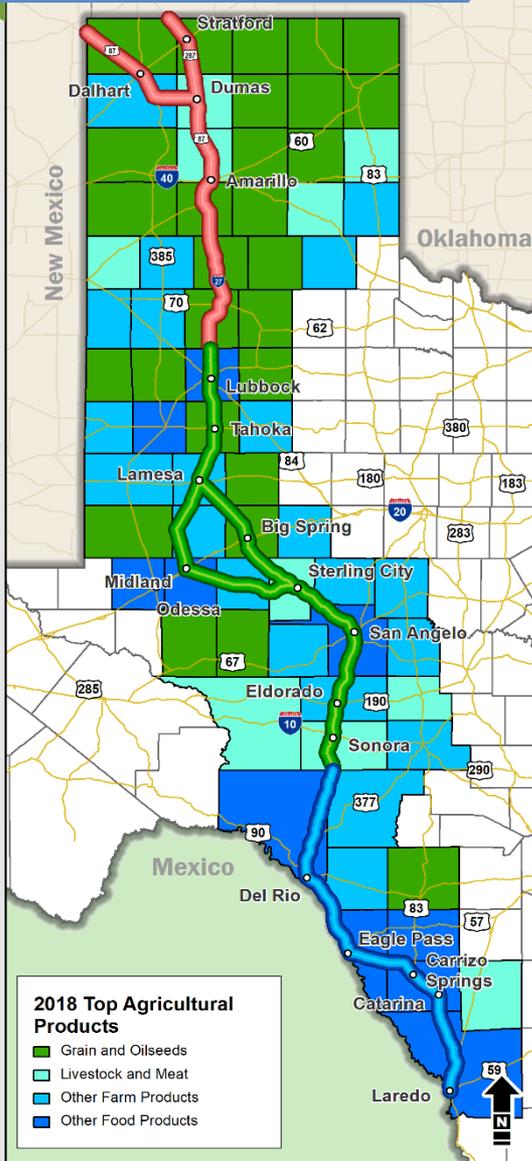


Source: TXDOT SAM and TRANSEARCH database

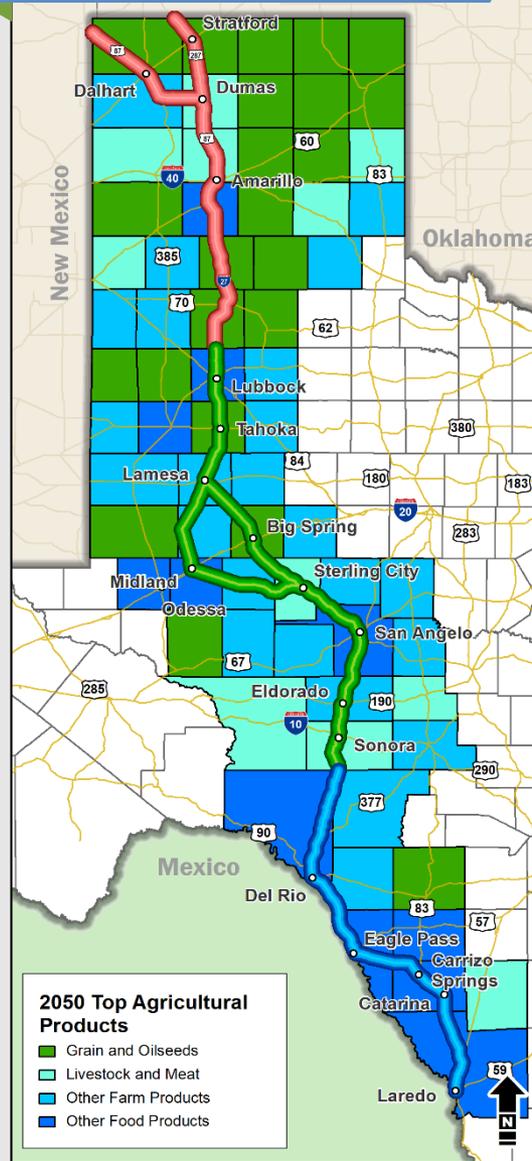
Food/Agriculture Total Tonnage Growth by County - 2050



2018 Top Agricultural Products



2050 Top Agricultural Products



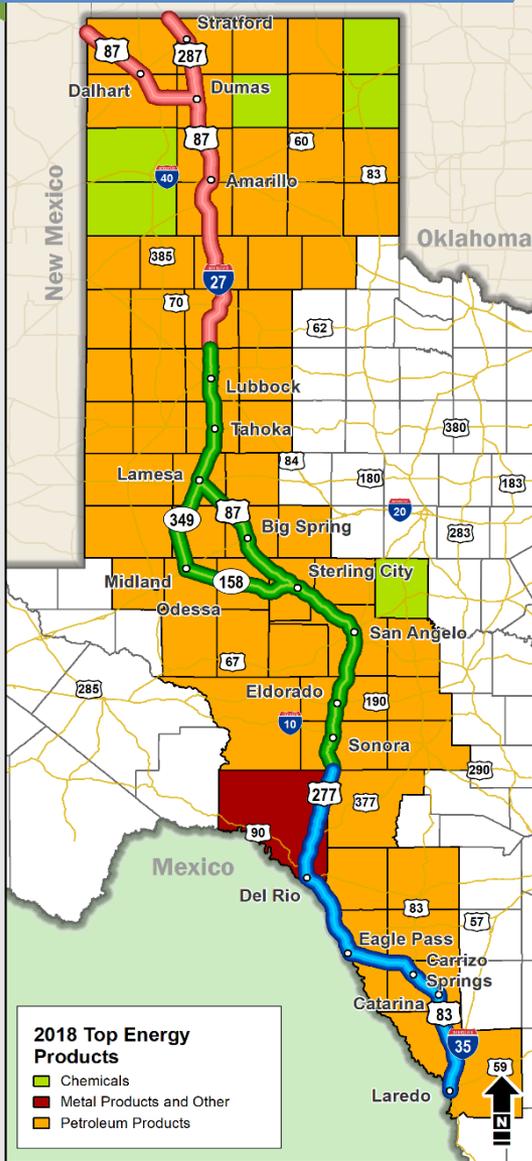
- Food/Agriculture tons by truck grow through most of the corridor, rising 72% outbound, 42% inbound through 2050
 - 11 million tons added outbound, 4 million inbound
- Growth is concentrated in the Panhandle
 - +2 million total tons of Livestock & Meat in Moore & Potter counties
 - +2 million total tons of Grain & Oilseeds in Deaf Smith, Dallam, & Sherman counties
 - +1 million total tons of Other Farm Products (e.g. hay) in Hartley & Castro counties
- Food products grow +1 million total tons in Lubbock & San Angelo

Source: TXDOT SAM and TRANSEARCH database

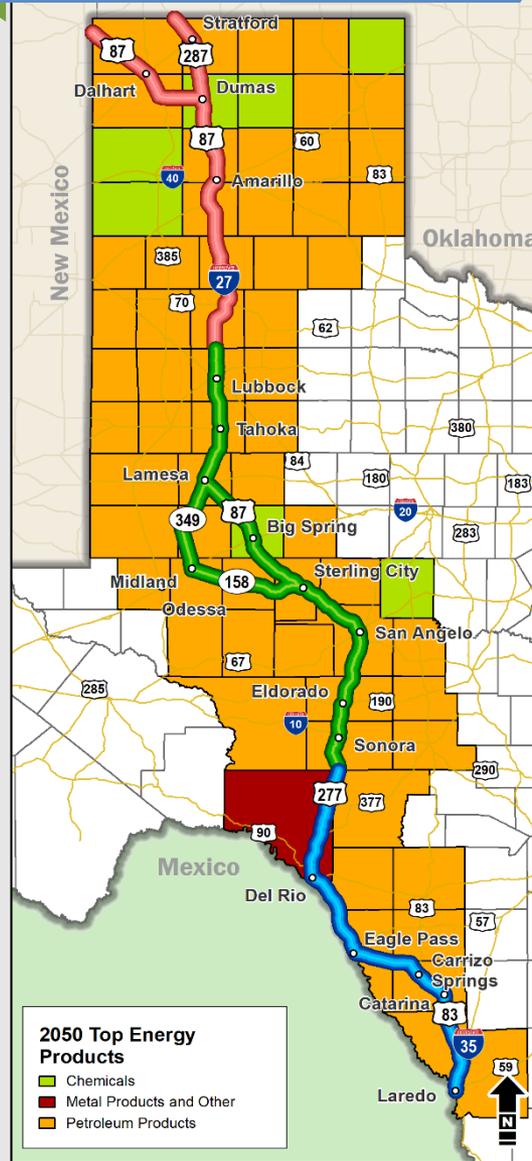
Energy/Oil Field Total Tonnage Growth by County - 2050



2018 Top Energy Products



2050 Top Energy Products



- Energy tonnage by truck increases through most of the corridor, **growing 35% outbound, 43% inbound** through 2050
 - 3 million tons added outbound, 4 million inbound
- Petroleum products remain the primary type
 - Laredo (Webb County) projected to see the largest growth, followed by Lubbock and Midland
- Metal products grow at Del Rio (Val Verde County), and chemicals notably in Hutchinson County
 - Chemicals decline in Deaf Smith County, and petroleum products in San Angelo (Tom Green County)

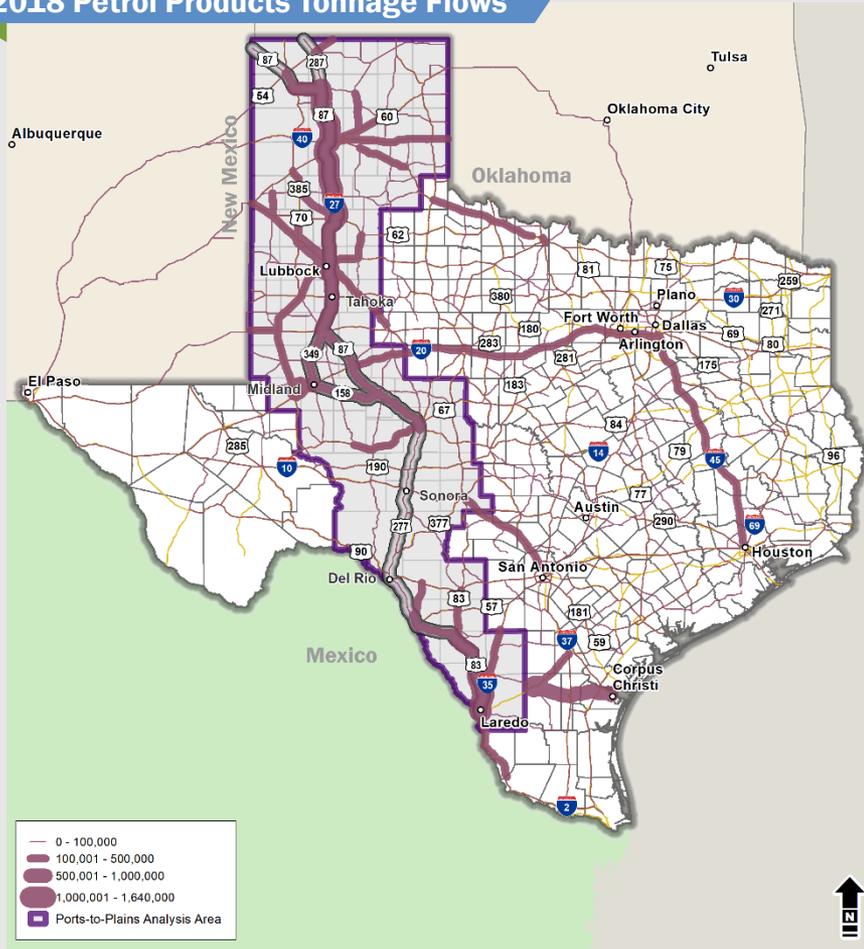
Source: TxDOT SAM and TRANSEARCH database

Corridor Supply Chain Network: 2050 Growth in Petrol Products

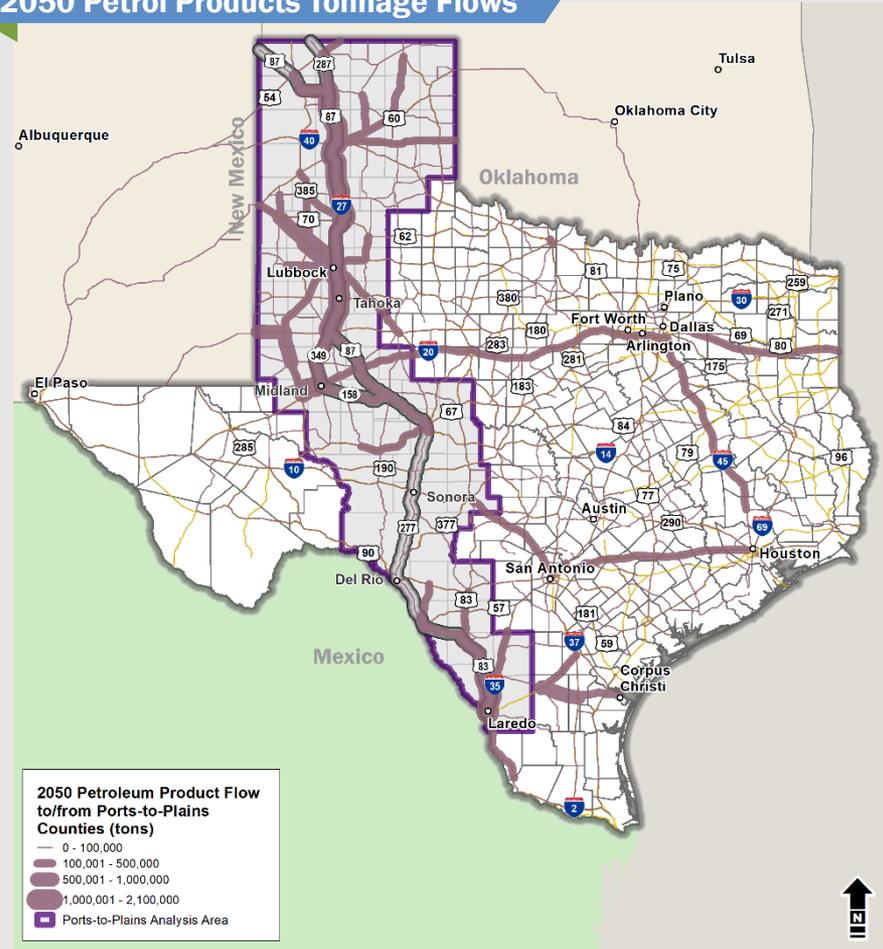


- Petroleum products are trucked mainly within the corridor. Growth by truck is moderate

2018 Petrol Products Tonnage Flows



2050 Petrol Products Tonnage Flows

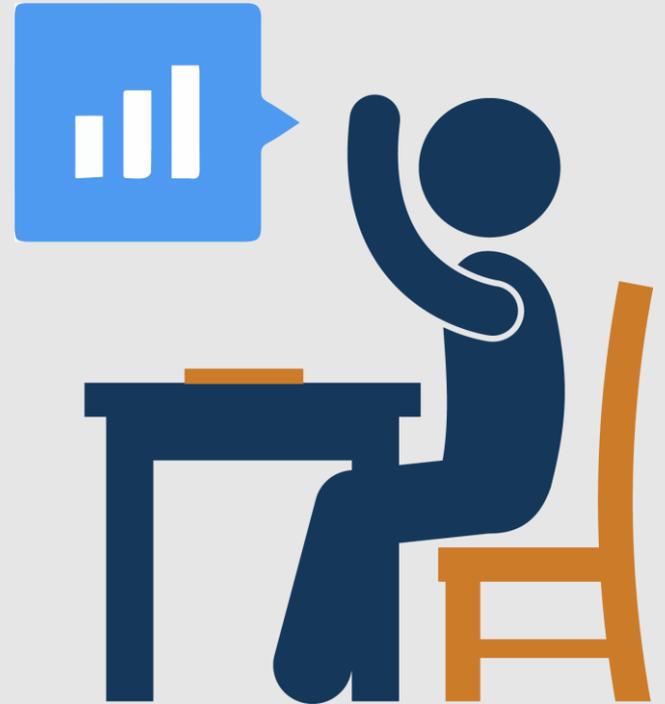


Source: TxDOT SAM and TRANSEARCH database



Committee Feedback

- What are the opportunities and challenges related to the increase of freight within the corridor?





Advisory Committee Meeting #2

Planned and Programmed Projects and Gaps

Akila Thamizharasan, TxDOT
Consultant Team



Overall Corridor



- **963** total corridor miles
- **143** Interstate miles
- **455** miles 4-lane divided or controlled access roadway
- **365** miles remaining of the corridor
- **27** miles of programmed projects that will be upgraded to 4-lane divided or better
- **16** projects - total cost estimate \$319,563,210
- Total Funded = \$235,862,532
- Total Unfunded = \$83,700,678

What are Planned and Programmed Projects?

- A planned project is a project identified in a TxDOT or Metropolitan Planning Organization Plan
- A programmed project has been completely or partially funded

Segment #1 Project Analysis



Planned/Programmed Projects



Divided and Controlled Access



- 274 total segment miles
- 125 miles of Interstate
- 112 miles of 4-lane divided or controlled access roadway
- 37 miles remaining of segment
- 21 miles of planned and programmed projects that will be upgraded to 4-lane divided or more
- 4 projects and total costs \$105,630,828
- Total Funded = \$105,604,439
- Total Unfunded = \$26,389

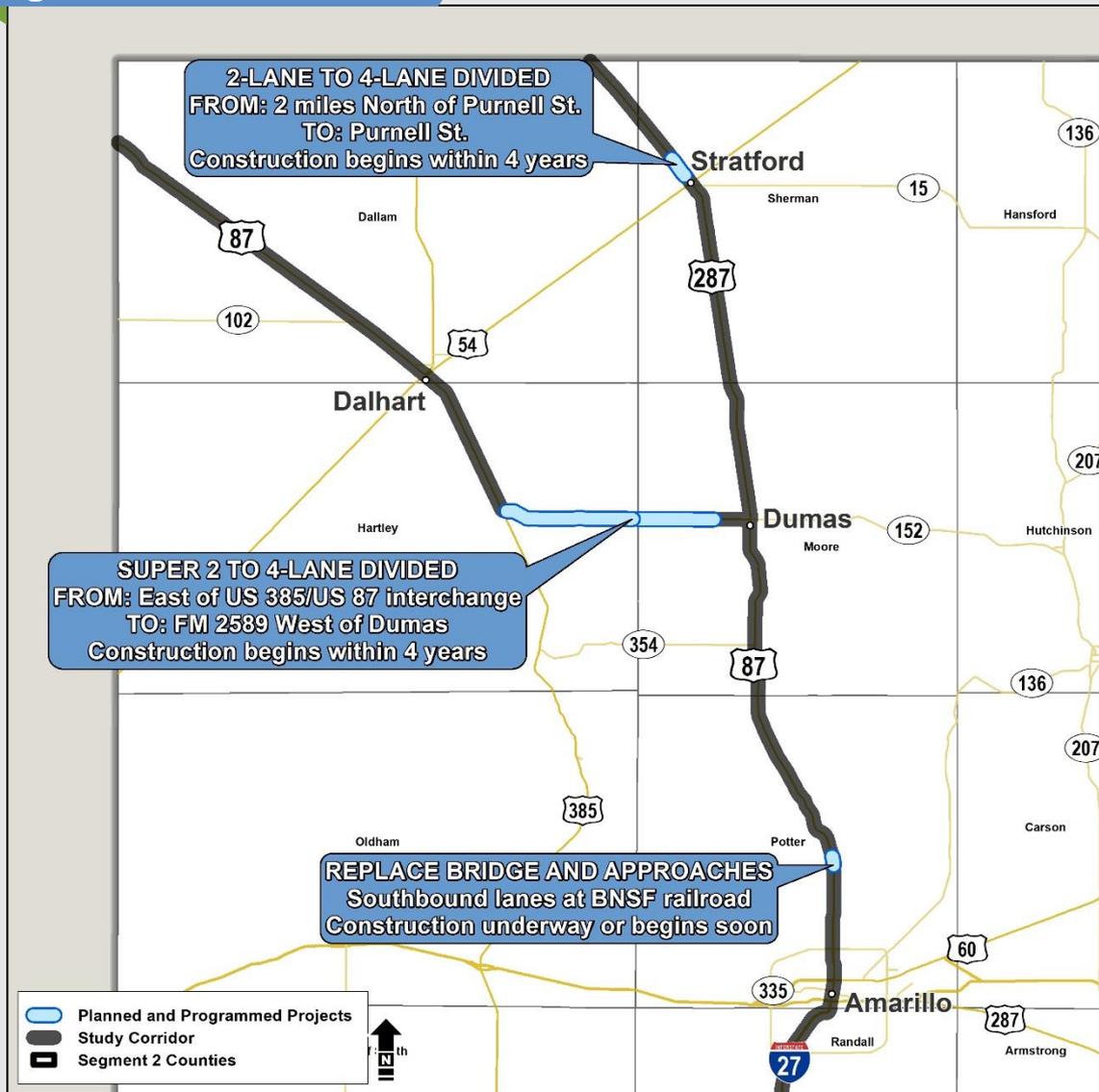
What are Planned and Programmed Projects?

- A planned project is a project identified in a TxDOT or Metropolitan Planning Organization Plan
- A programmed project has been completely or partially funded

Segment #1 Planned and Programmed Projects



Segment 1 - North



Segment #1 Other Planned and Programmed Projects



- **Other non-widening projects** along the corridor in Segment 1 include rehabilitation, operational, and safety projects.
- **Total planned and programmed amounts** for these projects include:
 - Rehabilitation Projects: \$56,463,636
 - Safety Projects: \$4,576,170
 - Operational Projects: \$580,420

Source: TxDOT 2020 Unified Transportation Program and Project Tracker

Note: These planned and programmed amounts do not include projects on Interstate portions of the corridor.

Segment #2 Project Analysis



- 442 total segment miles
- 0 miles of Interstate
- 172 miles of 4-lane divided or controlled access roadway
- 270 miles remaining of segment
- 5 miles of planned and programmed projects that will be upgraded to 4-lane divided or more
- 7 projects and total costs \$82,587,898
- Total Funded = \$82,587,898
- Total Unfunded = \$ 0

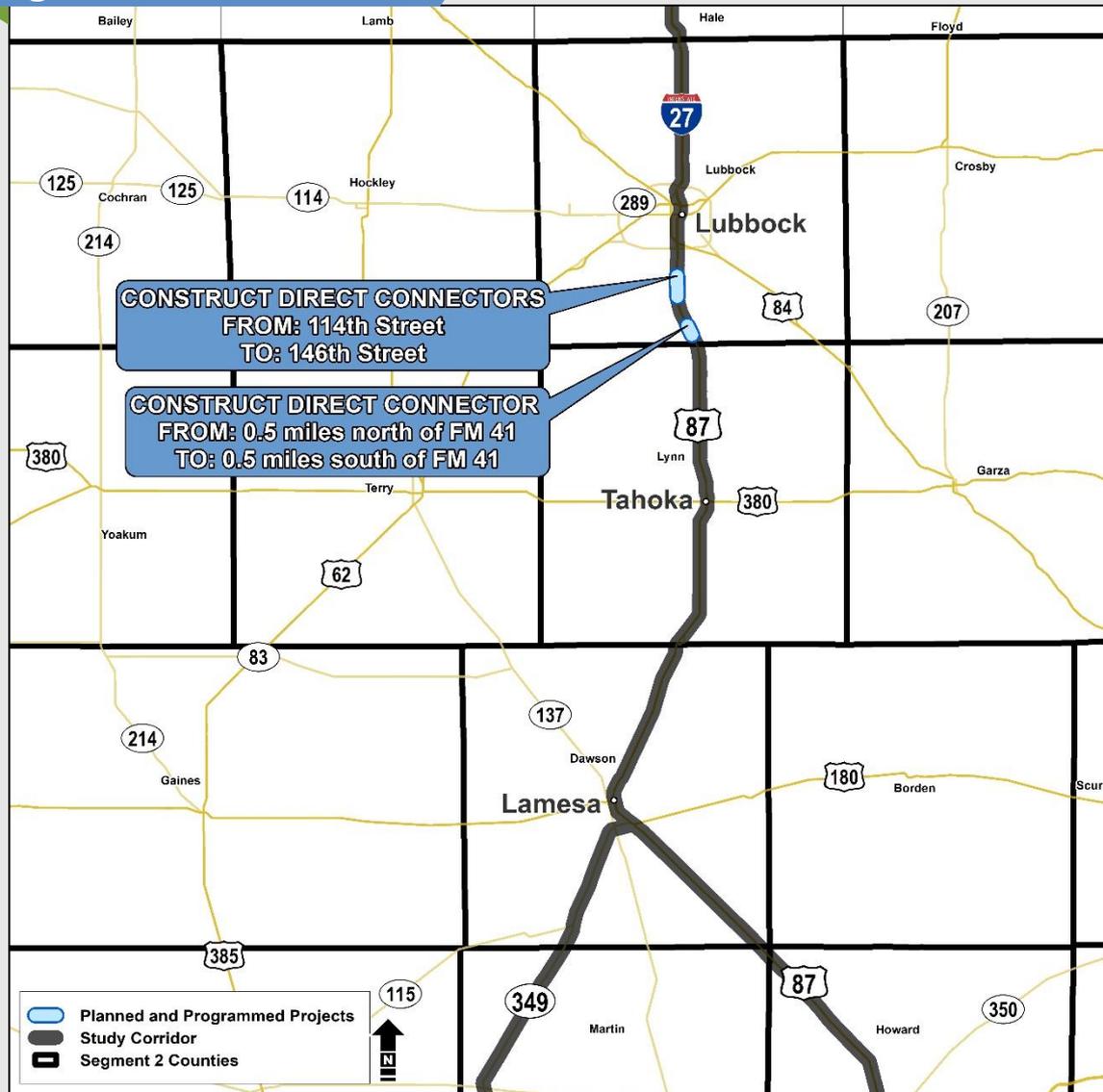
What are Planned and Programmed Projects?

- A planned project is a project identified in a TxDOT or Metropolitan Planning Organization Plan
- A programmed project has been completely or partially funded

Segment #2 Planned and Programmed Projects



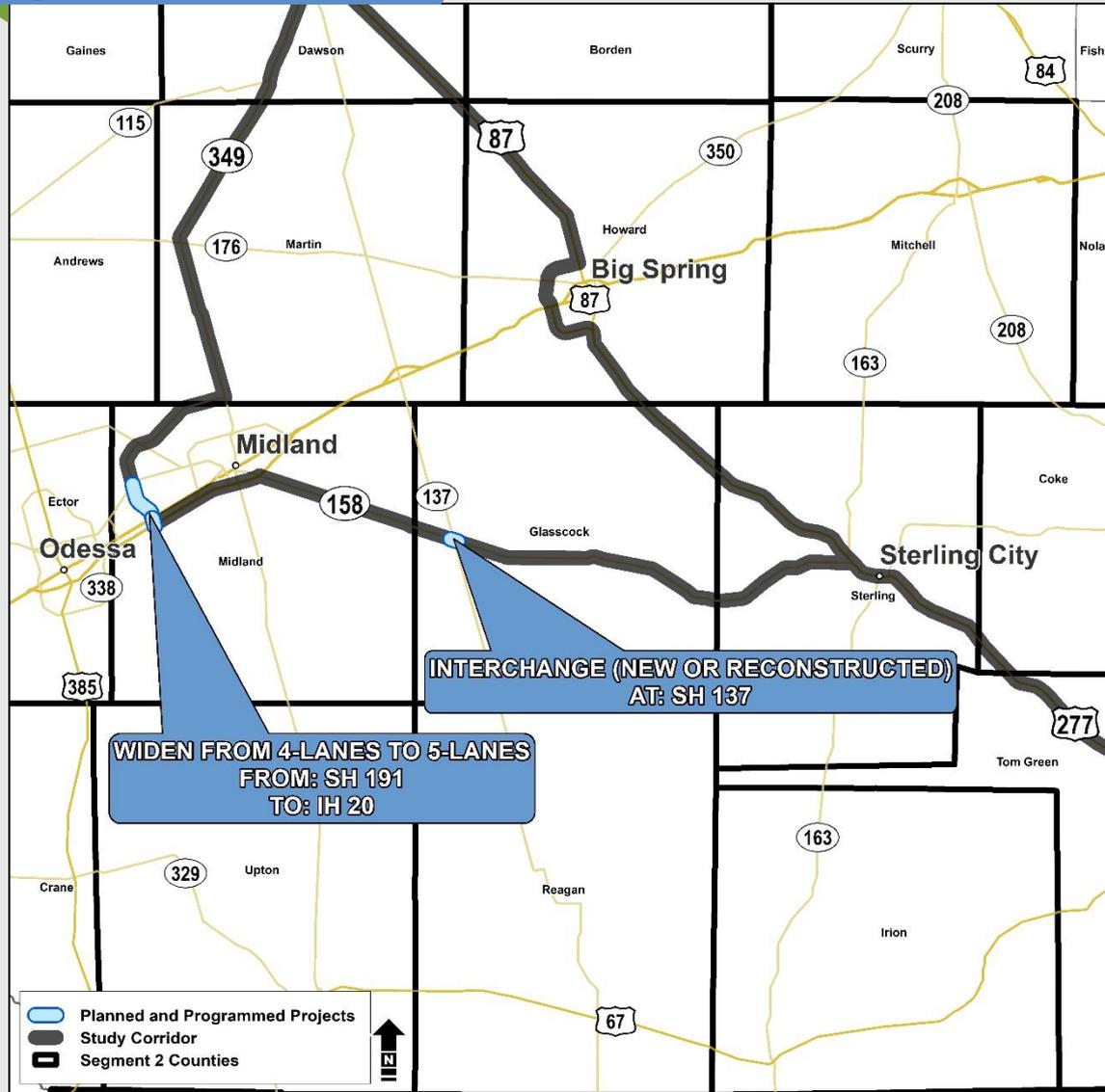
Segment 2 - North



Segment #2 Planned and Programmed Projects



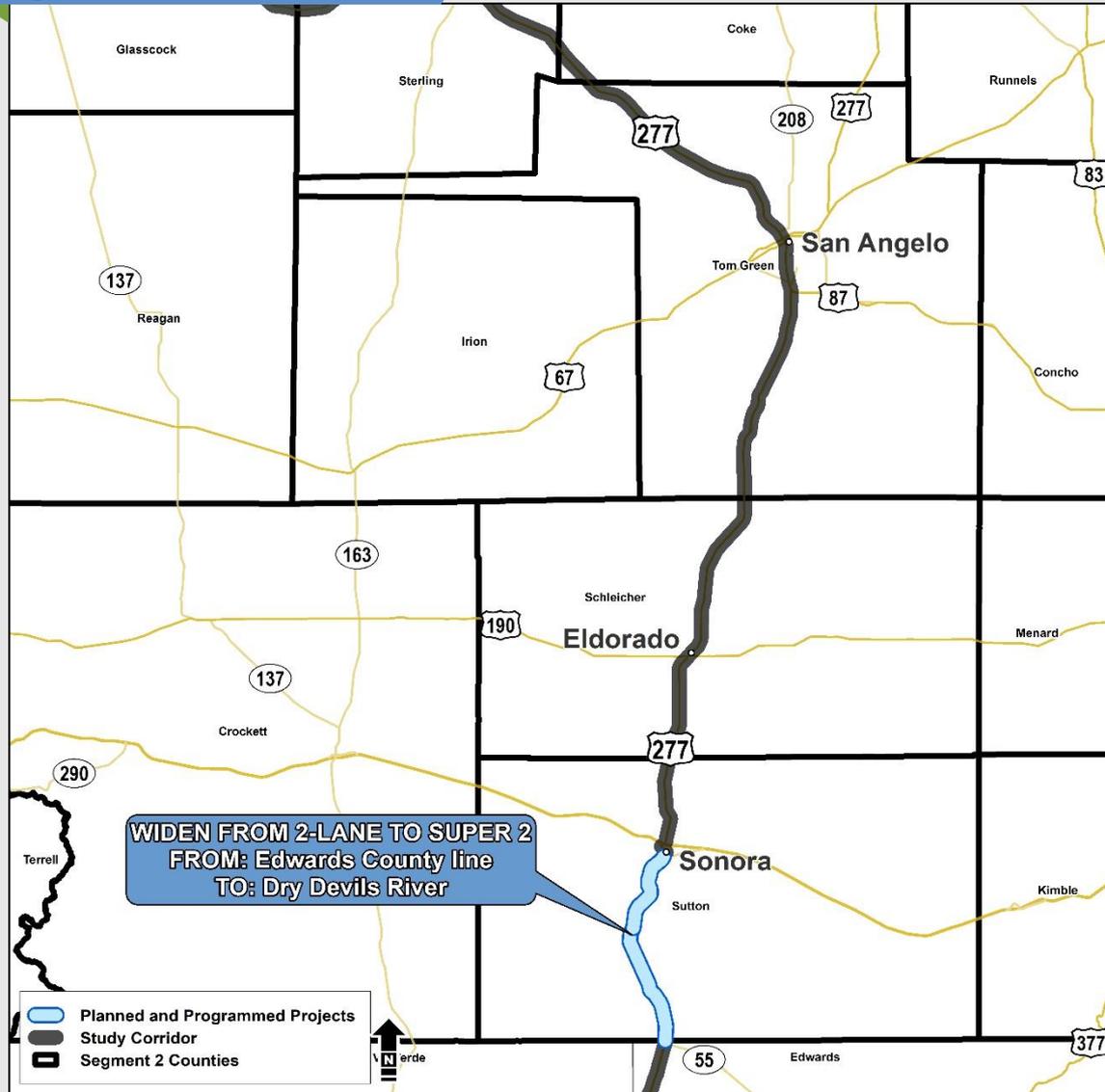
Segment 2 - Central



Segment #2 Planned and Programmed Projects



Segment 2 - South



Segment #2 Other Planned and Programmed Projects



- **Other non-widening projects** along the corridor in Segment 2 include rehabilitation, operational, and safety projects.

- **Total planned and programmed amounts** for these projects include:
 - Rehabilitation Projects: \$29,350,312
 - Safety Projects: \$3,455,203
 - Operational Projects: \$25,256,987

Source: TxDOT 2020 Unified Transportation Program and Project Tracker

Note: These planned and programmed amounts do not include projects on Interstate portions of the corridor.

Segment #3 Project Analysis



Planned/Programmed Projects



Divided and Controlled Access



- **247** total segment miles
- **18** miles of Interstate
- **0** miles of 4-lane divided or controlled access roadway
- **229** miles remaining of segment
- **1** mile of a planned and programmed project that will be upgraded to 4-lane divided or more
- **5** Projects and total costs \$131,317,484
- Total Funded = \$47,643,204
- Total Unfunded = \$83,674,280

What are Planned and Programmed Projects?

- A planned project is a project identified in a TxDOT or Metropolitan Planning Organization Plan
- A programmed project has been completely or partially funded

Segment #3 Planned and Programmed Projects



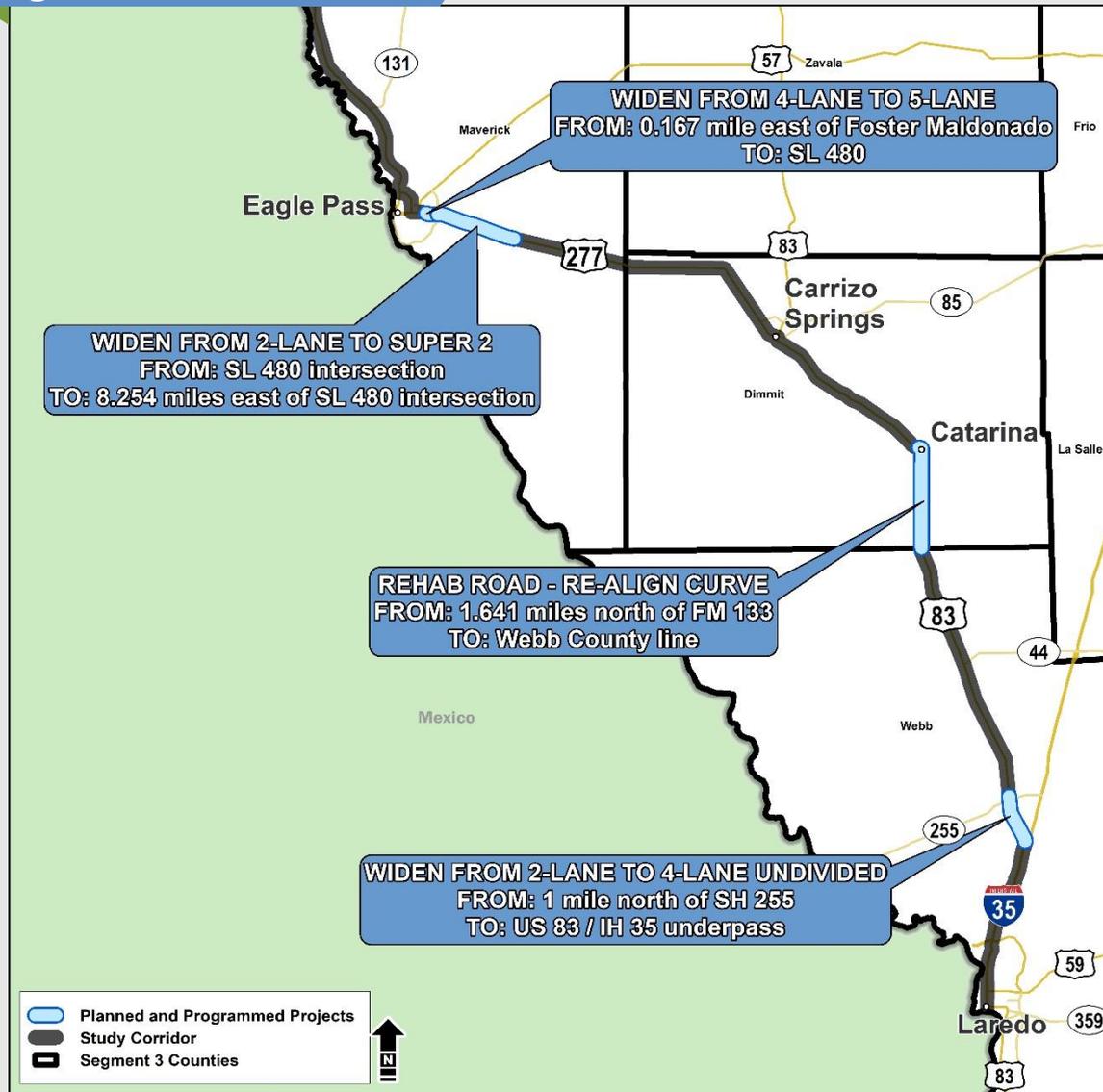
Segment 3 - North



Segment #3 Planned and Programmed Projects



Segment 3 - South



Segment #3 Other Planned and Programmed Projects



- **Other non-widening projects** along the corridor in Segment 3 include rehabilitation, operational, and safety projects.
- **Total planned and programmed amounts** for these projects include:
 - Rehabilitation Projects: \$208,143,409
 - Safety Projects: \$3,803,742
 - Operational Projects: \$32,597

Source: TxDOT 2020 Unified Transportation Program and Project Tracker

Note: These planned and programmed amounts do not include projects on Interstate portions of the corridor.



Overall Corridor



What is a Gap in the Corridor?

- Where the existing roadway IS NOT a 4-lane divided roadway or Interstate.
- Where there are no projects that will upgrade the existing roadway to a 4-lane divided roadway or Interstate.

- **963** total corridor miles
- **480** miles of corridor gaps (50% of total corridor mileage)
- **455** miles 4-lane divided or controlled access roadway
- **27** miles of programmed projects that will be upgraded to 4-lane divided or more

Segment #1 Corridor Gap Analysis



Segment 1



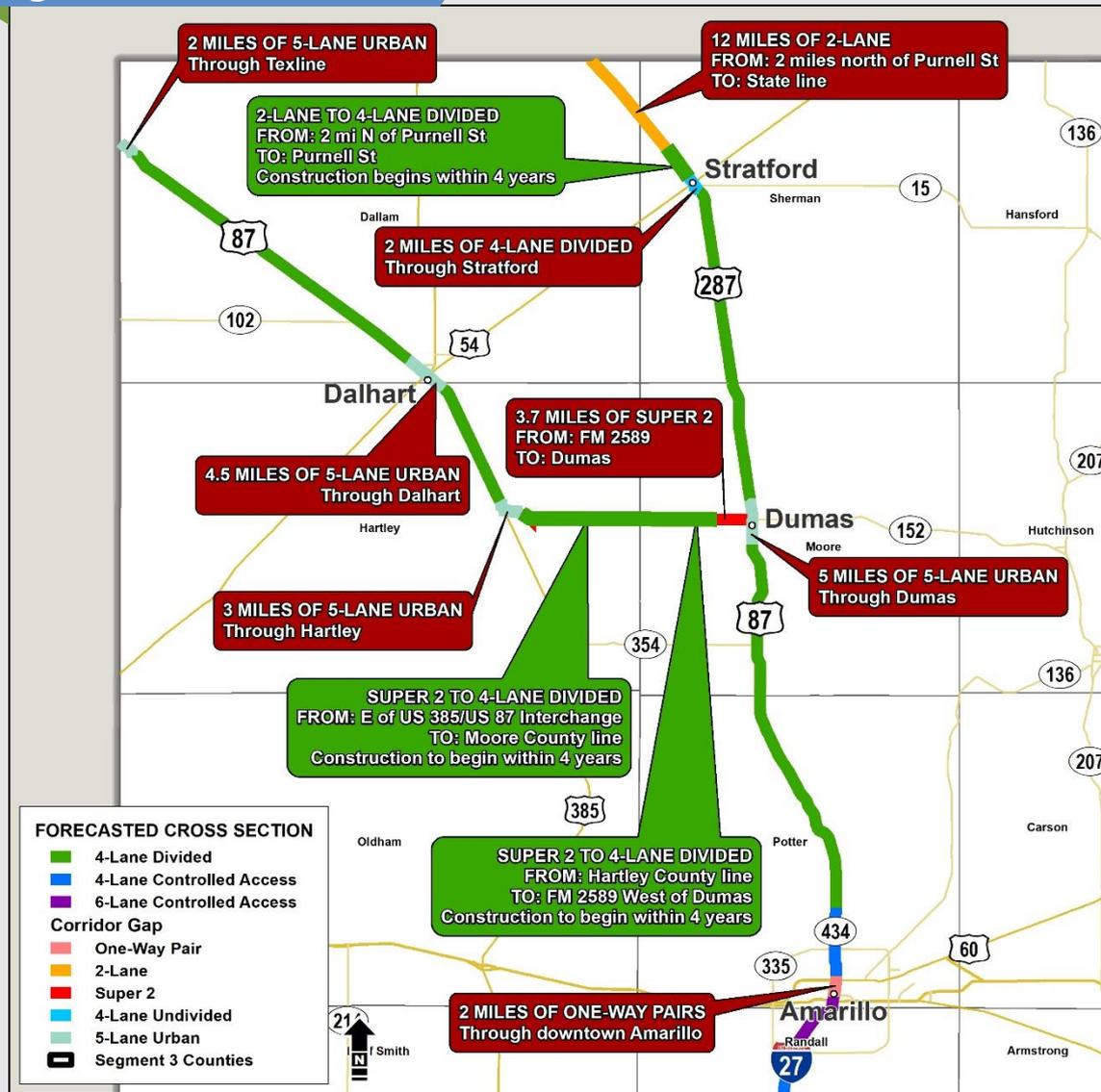
What is a Gap in the Corridor?

- Where the existing roadway IS NOT a 4-lane divided roadway or Interstate.
 - Where there are no projects that will upgrade the existing roadway to a 4-lane divided roadway or Interstate.
-
- **274** total corridor miles in Segment 1
 - **32** miles of corridor gaps (11% of total segment mileage)
 - **222** miles 4-lane divided or controlled access roadway
 - **21** miles of programmed projects that will be upgraded to 4-lane divided or more

Segment #1 Corridor Gaps



Segment 1 - North



Segment #2 Corridor Gap Analysis



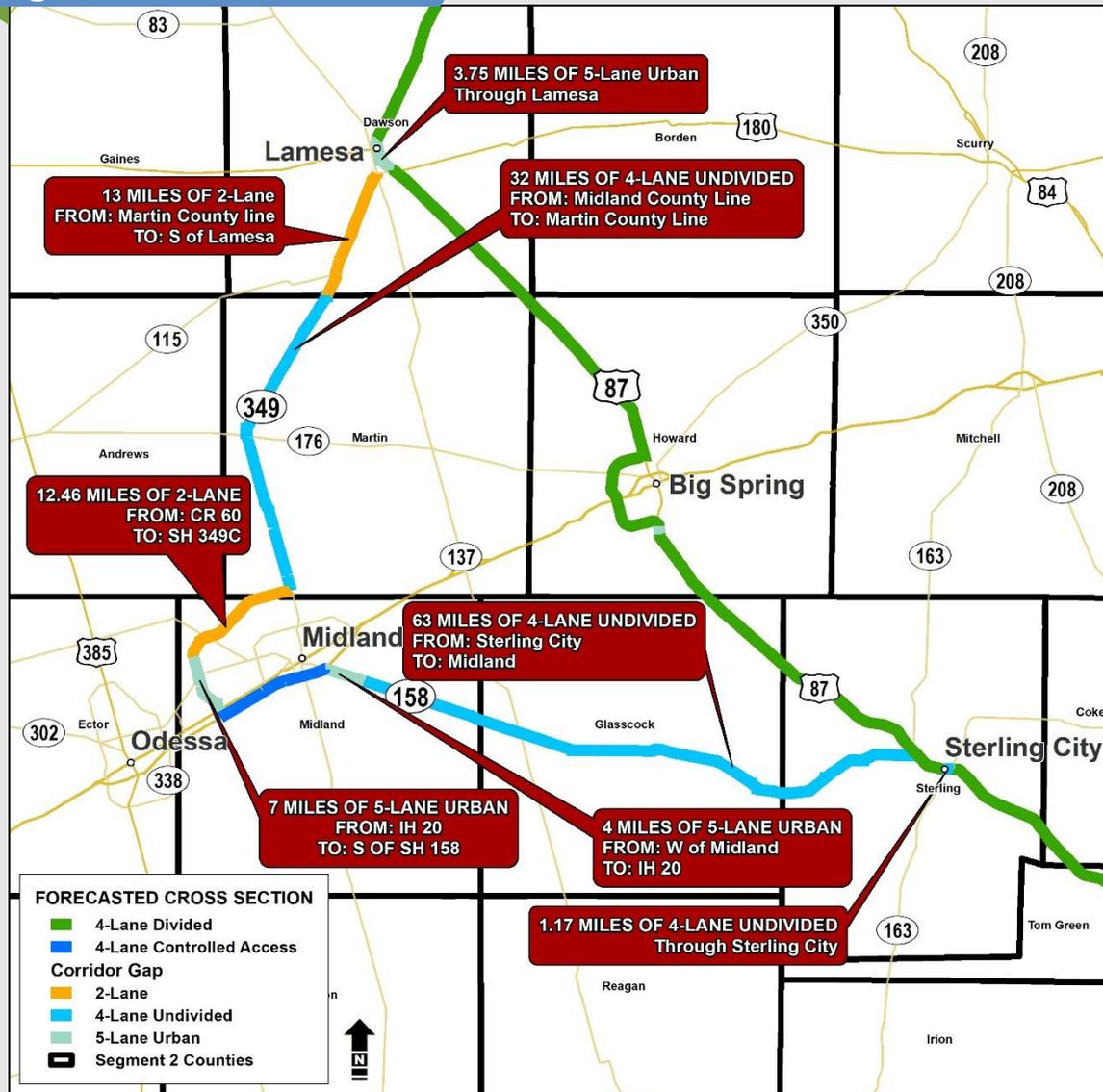
What is a Gap in the Corridor?

- Where the existing roadway IS NOT a 4-lane divided roadway or Interstate.
 - Where there are no projects that will upgrade the existing roadway to a 4-lane divided roadway or Interstate.
-
- **441** of total corridor miles in Segment 2
 - **224** miles of corridor gaps (51% of total segment mileage)
 - **212** miles 4-lane divided or controlled access roadway
 - **5** miles of programmed projects that will be upgraded to 4-lane divided or more

Segment #2 Corridor Gaps



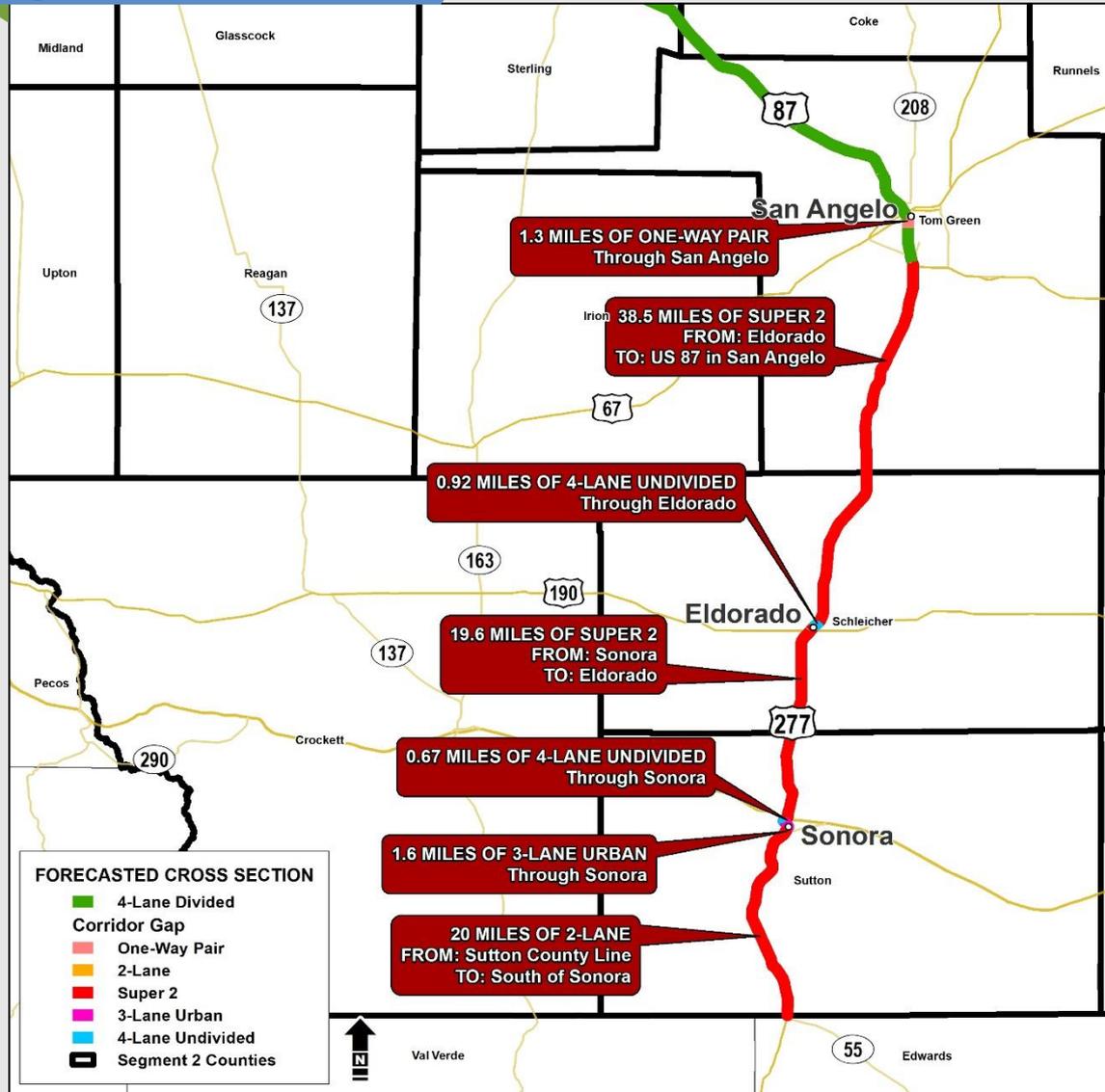
Segment 2 - Central



Segment #2 Corridor Gaps



Segment 2 - South



Segment #3 Corridor Gap Analysis



What is a Gap in the Corridor?

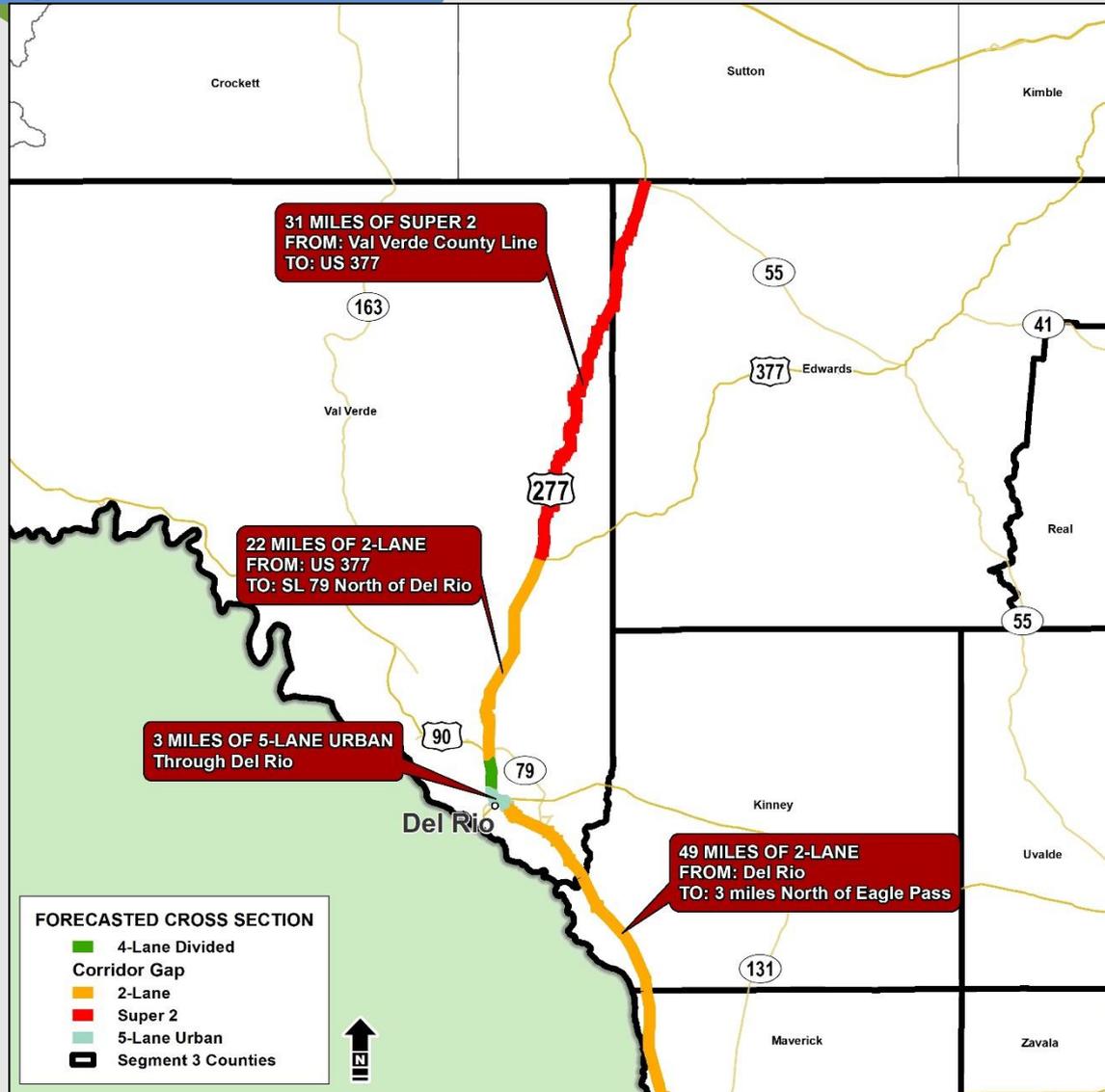
- Where the existing roadway IS NOT a 4-lane divided roadway or Interstate.
- Where there are no projects that will upgrade the existing roadway to a 4-lane divided roadway or Interstate.

- **247** of total corridor miles in Segment 3
- **225** miles of corridor gaps (91% of total segment mileage)
- **21** miles 4-lane divided or controlled access roadway
- **1** mile of programmed projects that will be upgraded to 4-lane divided or more

Segment #3 Corridor Gaps



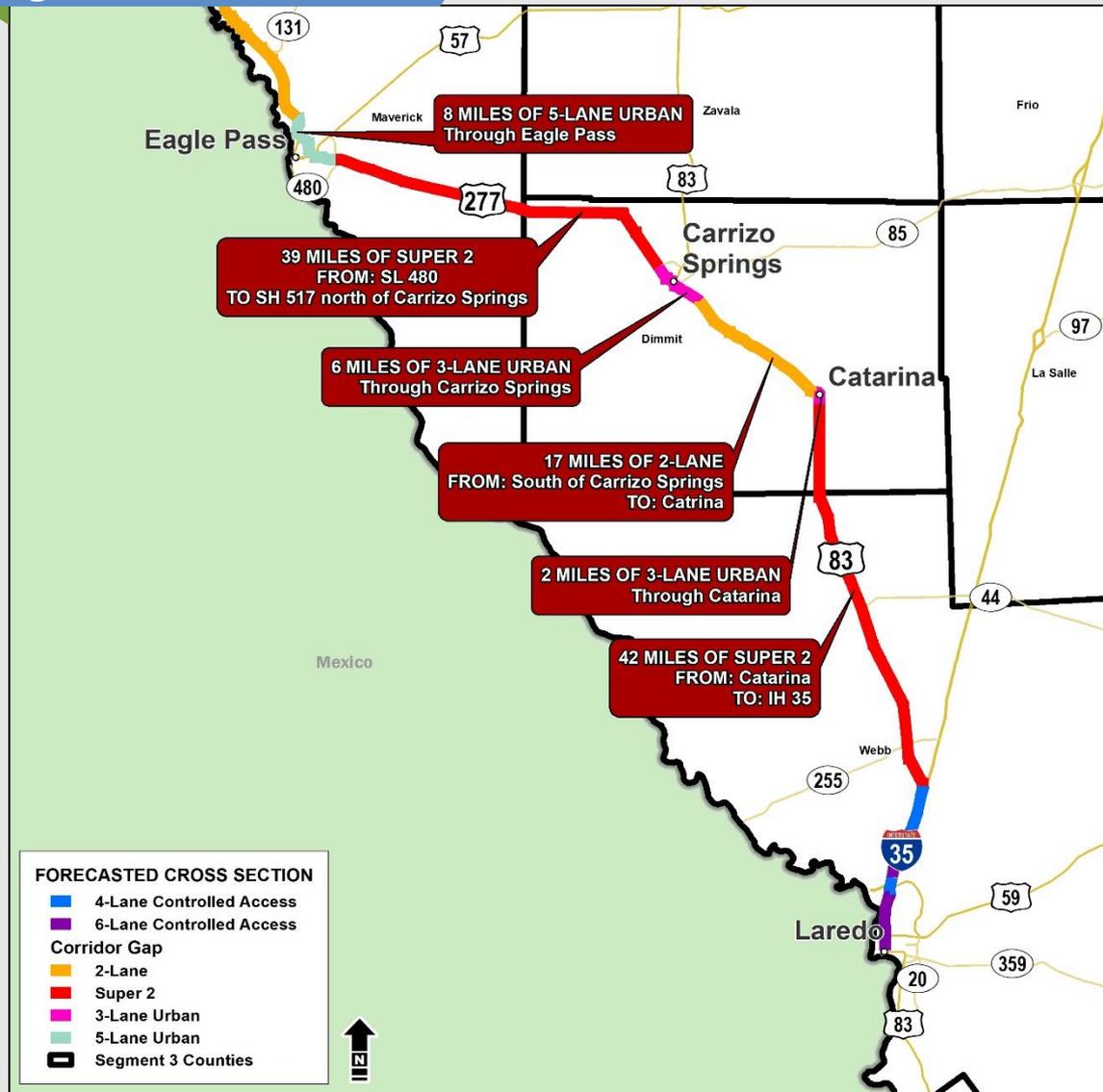
Segment 3 - North



Segment #3 Corridor Gaps

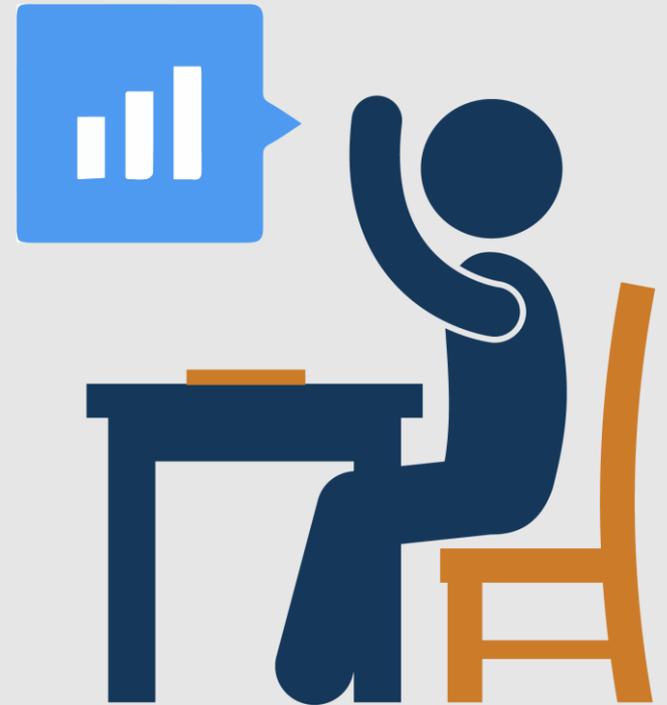


Segment 3 - South





Committee Corridor Gap Analysis Work Session





Advisory Committee Meeting #2

Preliminary Corridor Feasibility Analysis

Caroline Mays, TxDOT

Consultant Team



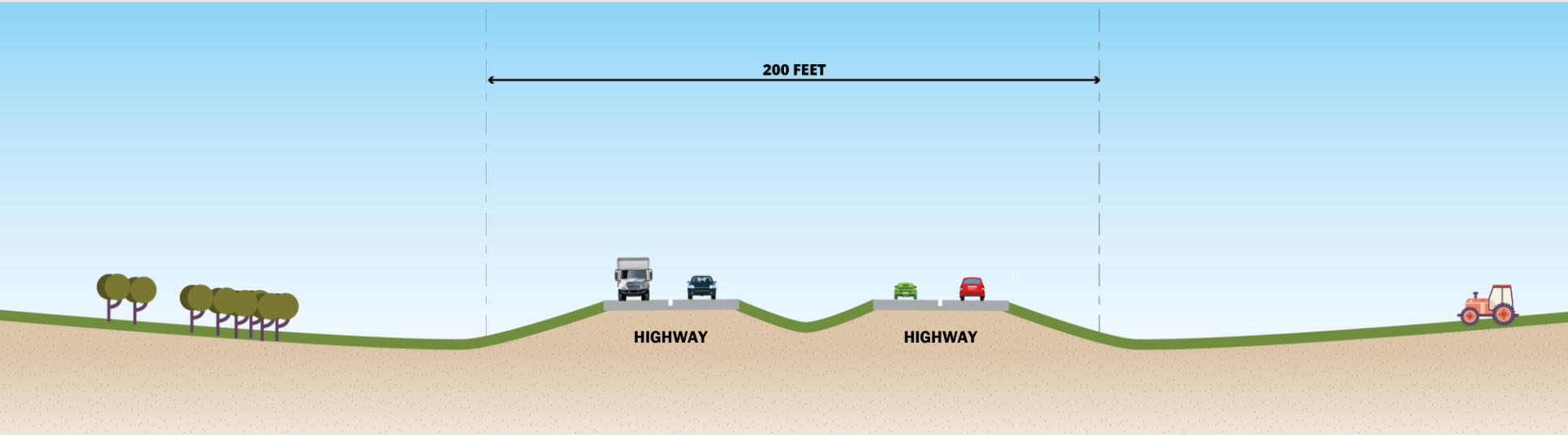
What is a Feasibility Analysis?

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 of the data analysis** to determine whether No Action, 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**

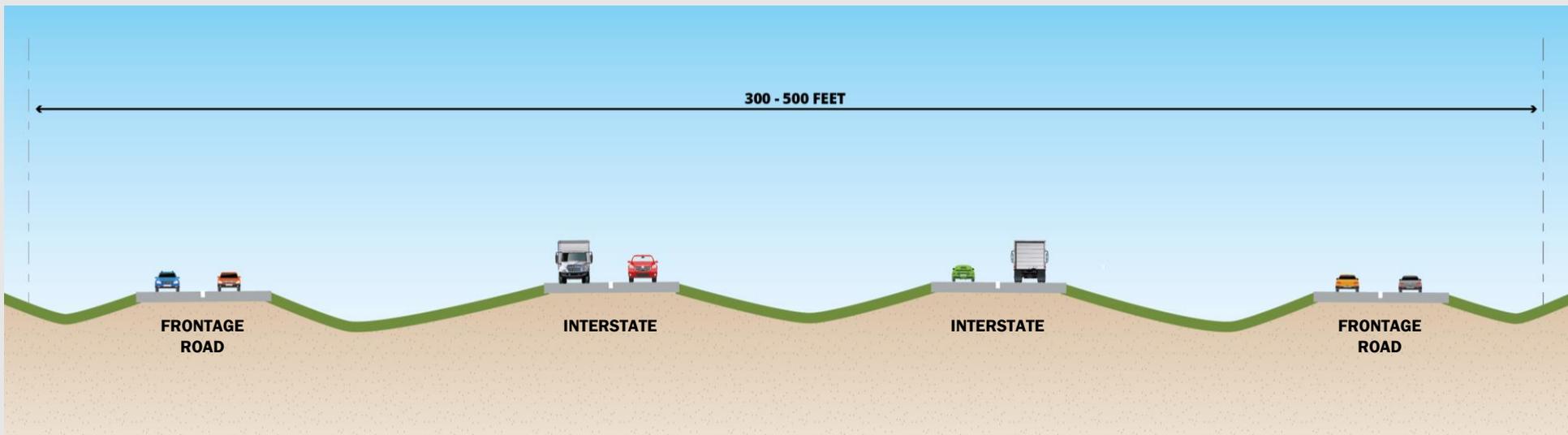


Smaller right-of-way **widths**



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

Four-Lane Divided Hybrid

- Attracts less traffic compared to interstate
- Mobility/reliability an issue – areas without access control are subject to slower travel speeds and stops

Interstate

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

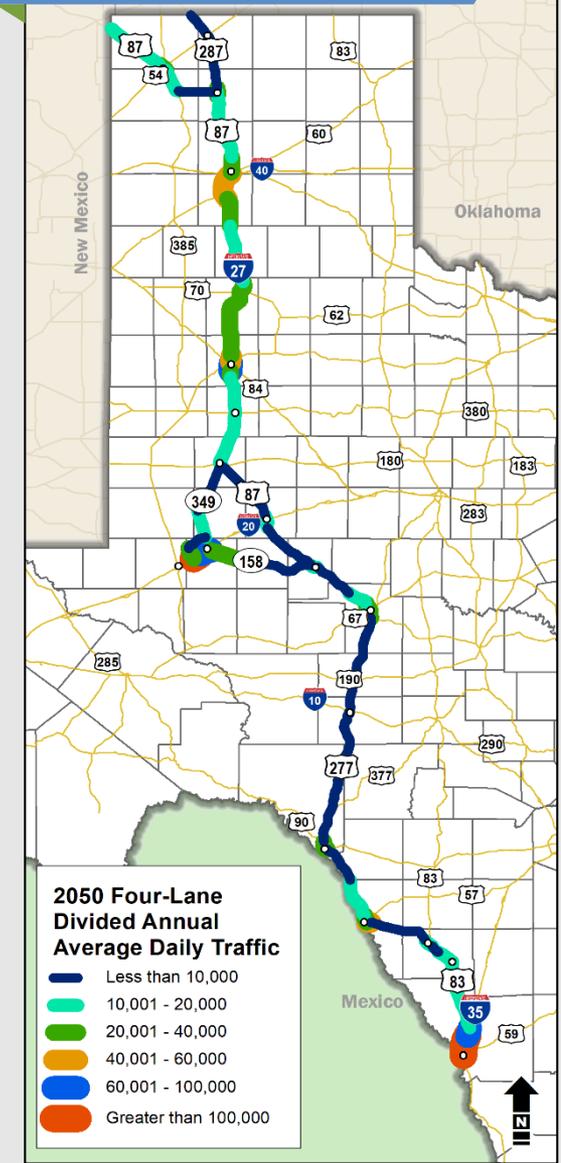
Forecasted Traffic Conditions



2050 Traffic - No Build



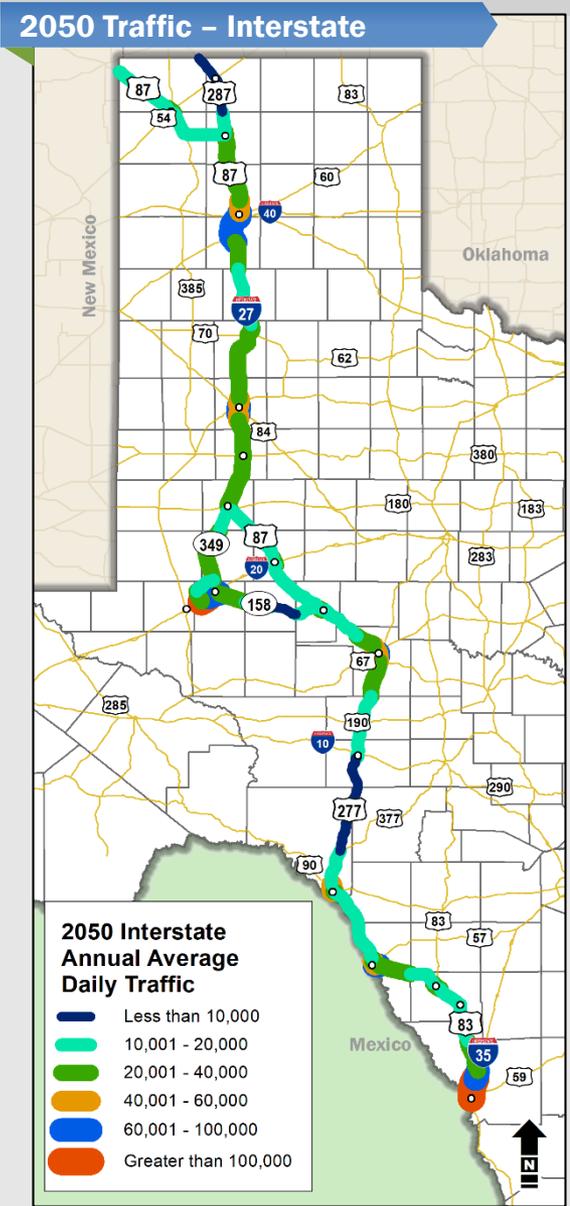
2050 Traffic - 4 Lane Divided



- **No Build Growth**
 - Traffic growth due to local population and employment growth only
 - 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
- **4-lane Divided Hybrid**
 - Would attract moderate additional growth over No Build or 4-Lane Divided Options

Source: TxDOT SAM and TxDOT 2018 RID

Forecasted Traffic Conditions



Overview of Findings

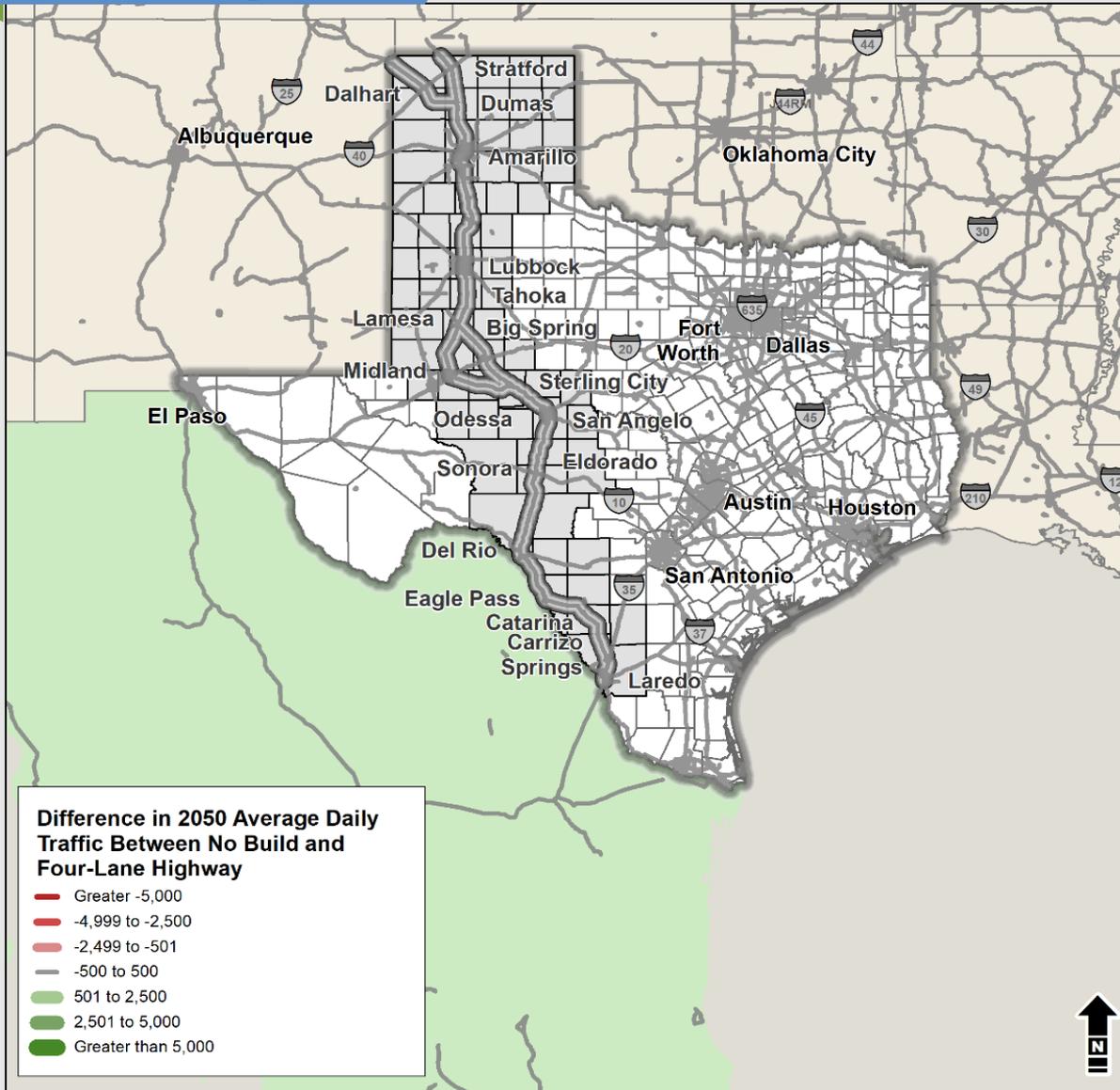
- **Interstate Highway Growth**
 - 100-200% growth over 2018 volumes found in all three segments on arterial sections
 - US-87 provides path to I-25
 - US-287 route mostly two-lanes in Oklahoma and Colorado
- **Interstate Highway Diversions**
 - Fills in National Grid
 - Most diversions from within 100 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

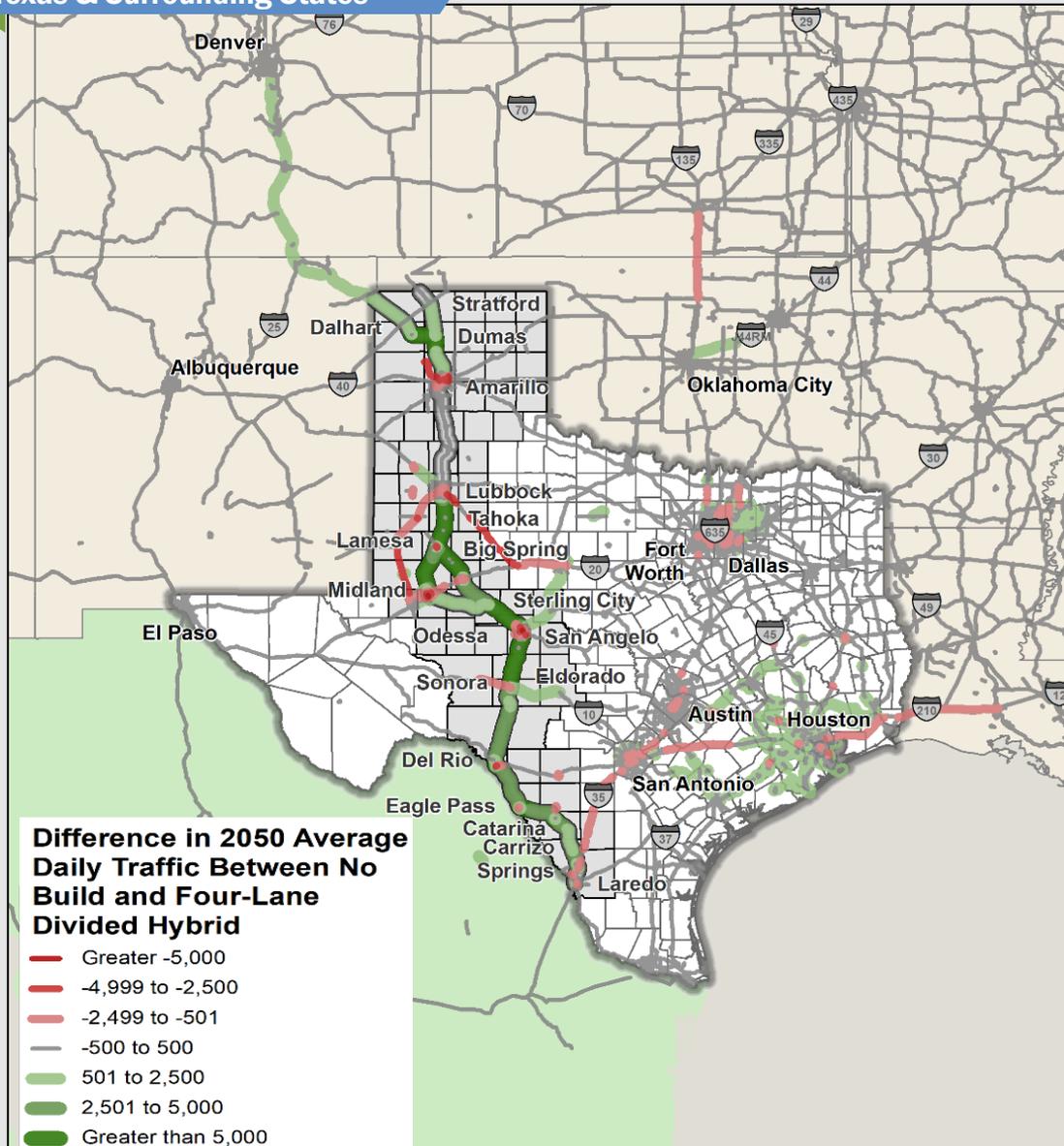
- 4-Lane Divided
 - Minimal Diversion from other routes

Source: TxDOT SAM and TxDOT 2018 RID

4-Lane Hybrid Option – Anticipated Total Traffic Diversions



Texas & Surrounding States



Diversions - Statewide

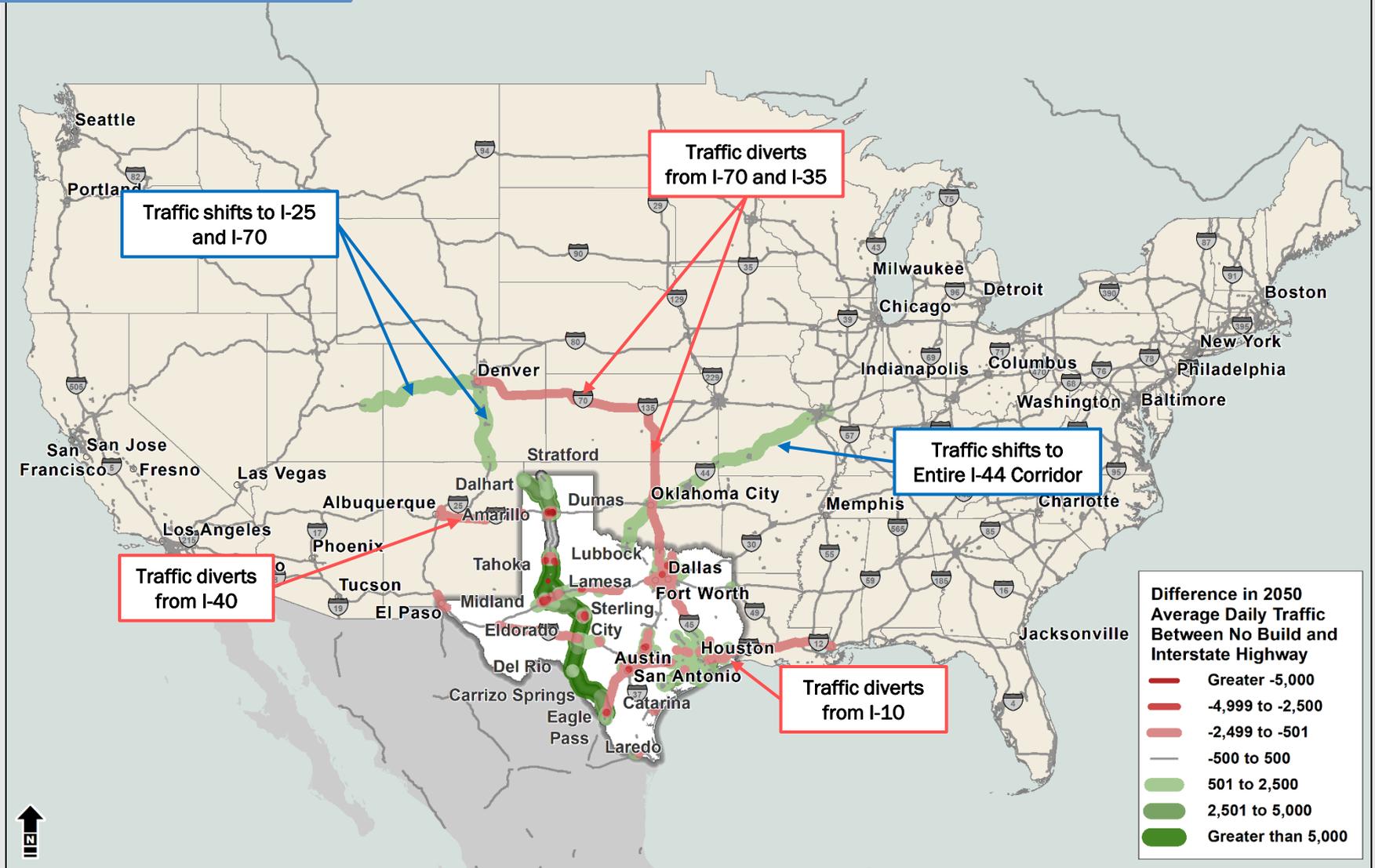
- 4-Lane Divided Hybrid
 - Moderate Diversion from other routes
 - Trip attraction from parallel routes leading to Lubbock
 - Moderate diversion of trips on I-35 between Laredo and San Antonio

Source: TxDOT SAM and TxDOT 2018 RID

Interstate Option – Anticipated Total Traffic Diversions



North America

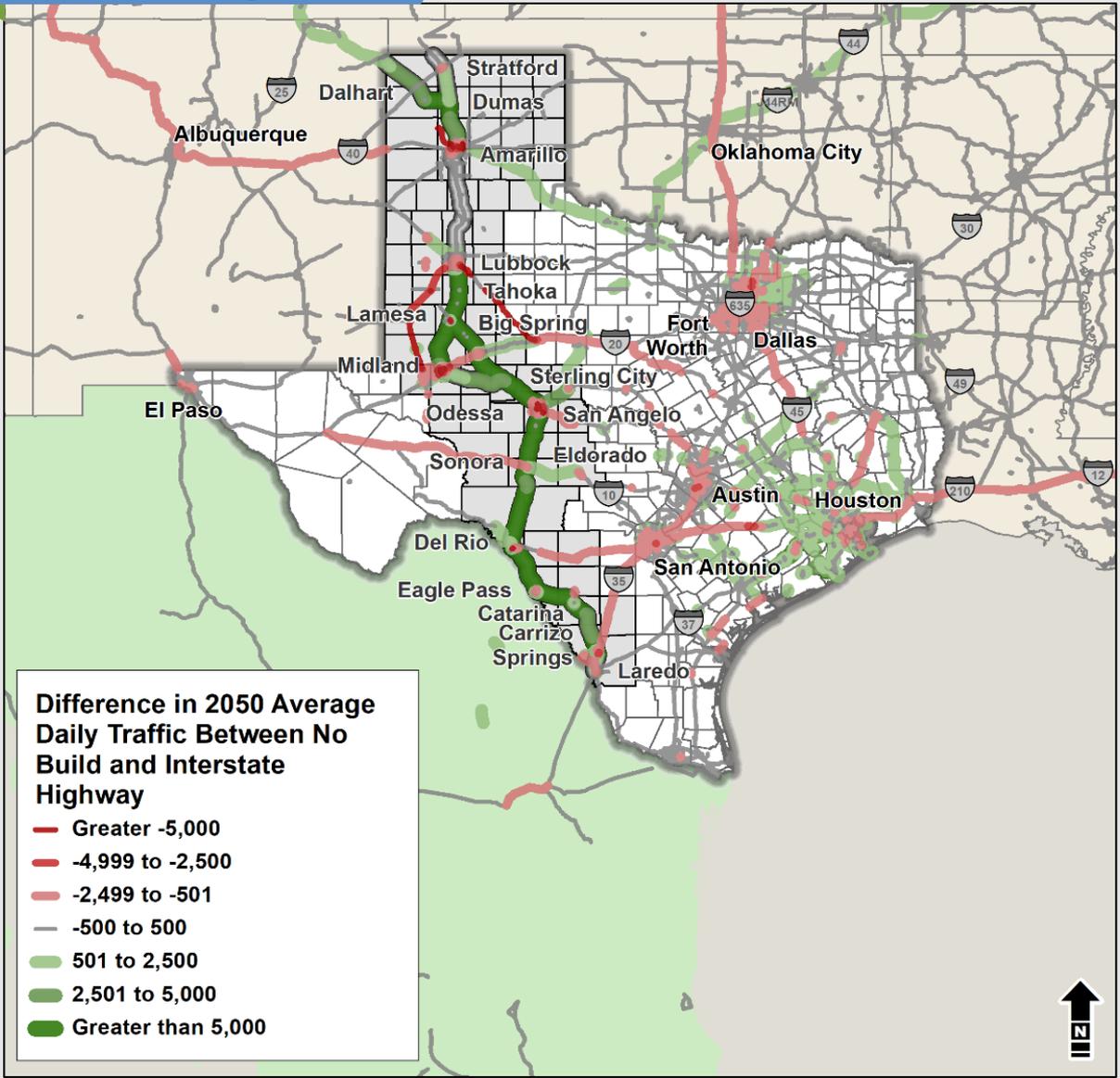


Source: TxDOT SAM and TxDOT 2018 RID

Interstate Option – Anticipated Total Traffic Diversions



Texas & Surrounding States



Diversions - Statewide

- 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
- Moderate diversion from I-35 from Laredo to San Antonio to Austin
- Moderate Diversion from I-10 and portions of I-20
- Low to Moderate Diversion from I-35 between Austin and DFW

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
- Mobility/reliability an issue in areas without access control are subject to slower travel speeds and stops

Four-Lane Divided Hybrid

- Lower crash rates in urban areas
- Mobility issues partially mitigated in urban areas
- Mobility/reliability an issue in areas without access control are subject to slower travel speeds and stops

Interstate

- Lowest crash rates of all route types
- Full access control offers the best mobility
- Expected travel time savings with 75 mph speed
- and route attractiveness



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

– 4-Lane Divided Hybrid

- Would reduce crashes in urban areas over 4-Lane Divided

– Interstate

- 15% to 25% fewer crashes than typical US Highway
- 35% fewer crashes than typical State Highway

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

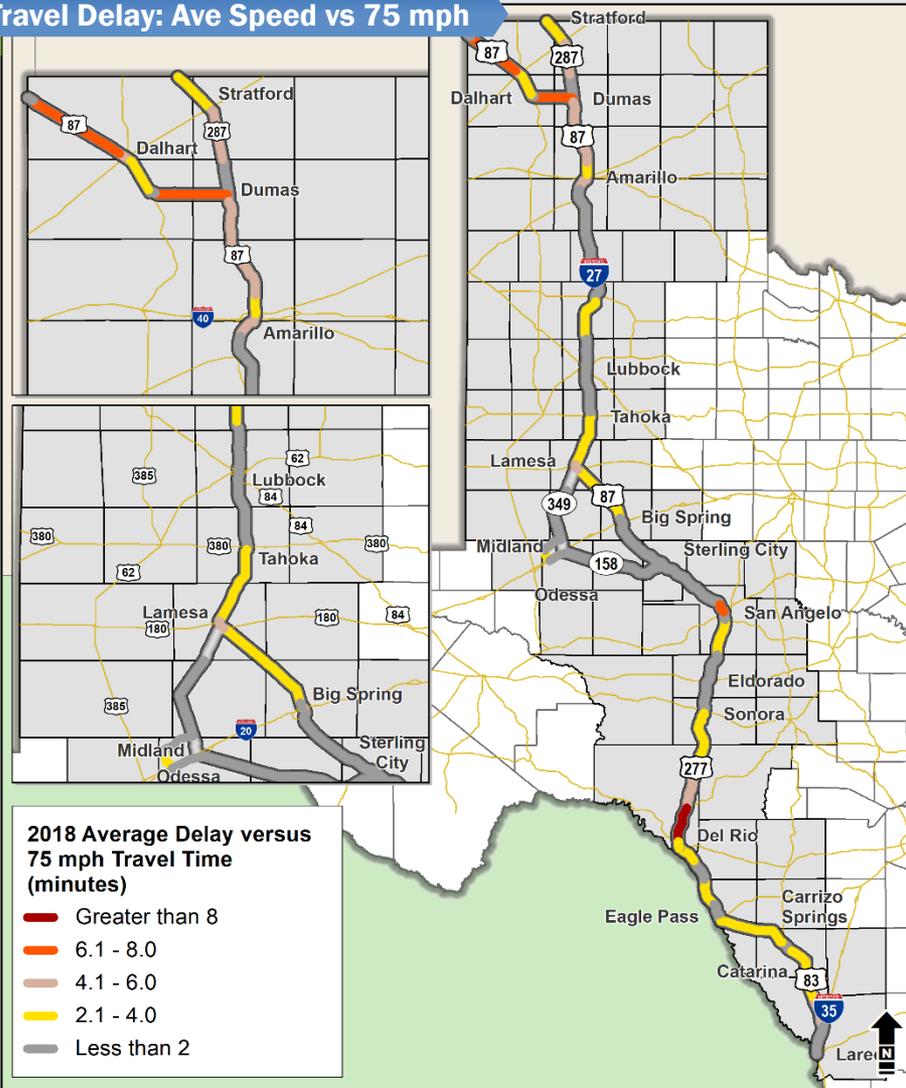
Source: TXDOT Crash Statistics, 2018



Evaluation

- Average Travel Time Versus 75 mph Travel Time
 - Segment #1 Savings: 64 minutes
 - Segment #2 Savings: 80 minutes
 - Segment #3 Savings: 68 minutes
 - Entire Corridor Savings : 212 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

Four-Lane Divided Hybrid

- Partial control of access improves performance for freight transportation
- Moderate trips attraction from parallel routes
- Moderate improvements to safety and reliability

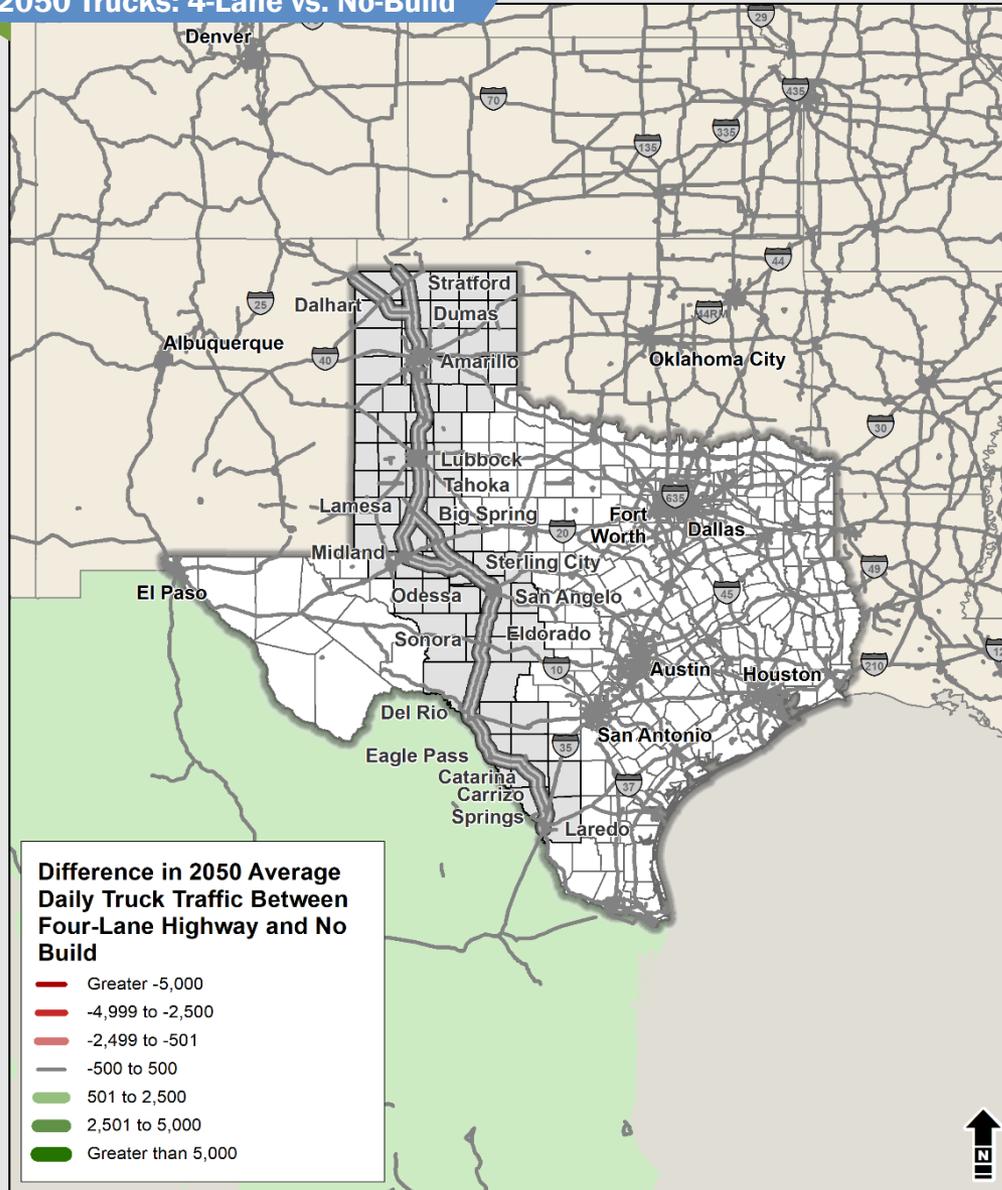
Interstate

- 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 - 4-Lane Corridor



2050 Trucks: 4-Lane vs. No-Build



■ 4-Lane Divided

- 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 to attract new trips
- Traffic is not diverted from other routes

■ 4-Lane Divided Hybrid

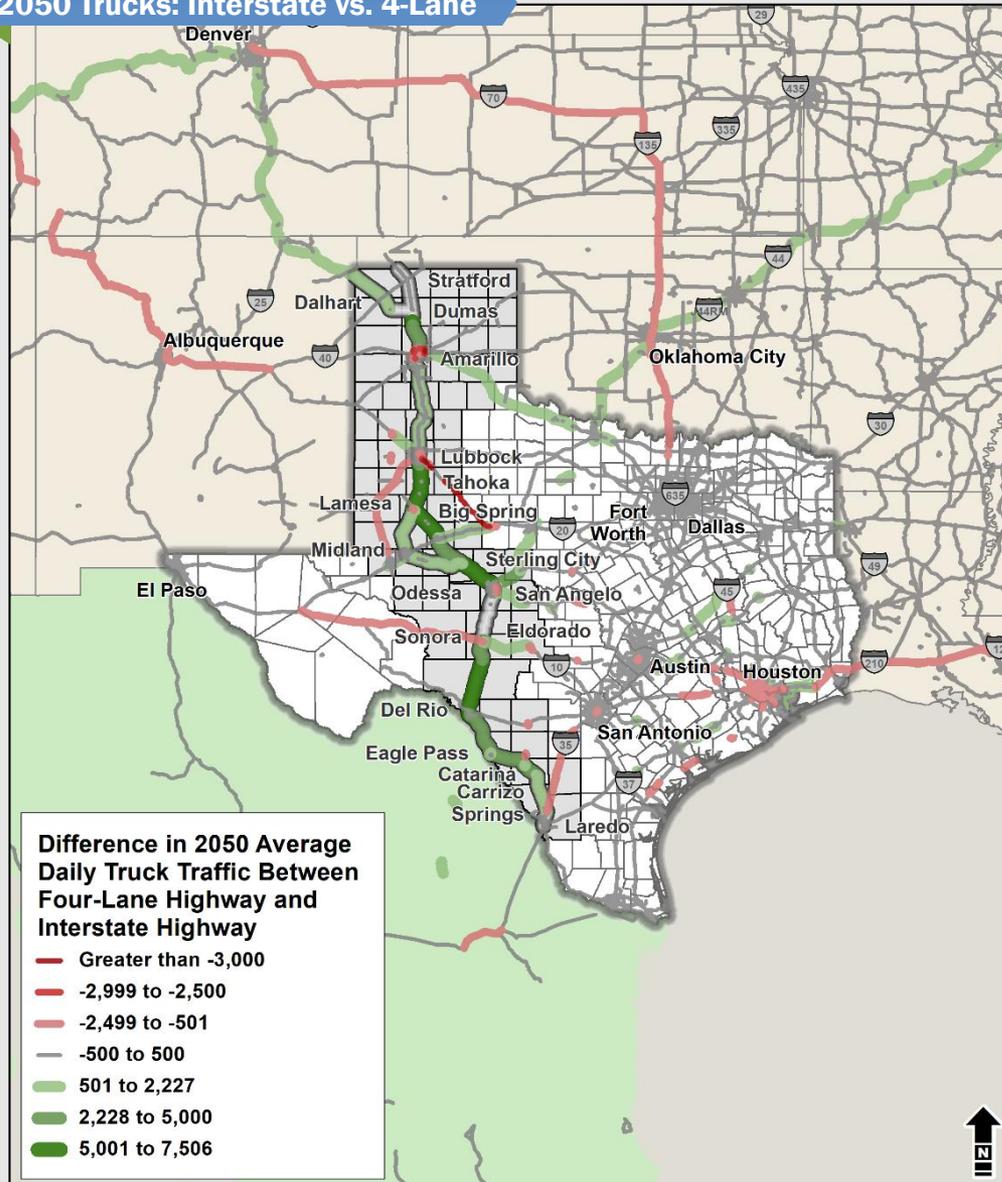
- Moderate increase in forecast tonnage
- Performance gains are moderate vs. 4-lane divided to attract new trips
- Moderate traffic is diverted from some routes

Source: TxDOT SAM

2050 Truck Traffic Diverted to Full Interstate Corridor



2050 Trucks: Interstate vs. 4-Lane



- Upgrade to Interstate adds another **125%** in diverted truck tons above the 2050 forecast, compared to 4-Lane Highway
 - Total volume **377 million tons**
- Corridor draws from:
 - Parallel routes
 - I-10 to west and east
 - I-35 from Laredo - San Antonio
 - I-35/I-70 from Dallas - Denver

Source: TxDOT SAM



Results of the analysis of the following evaluation criteria will be presented to the Segment Committees in April:



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 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



Committee Discussion



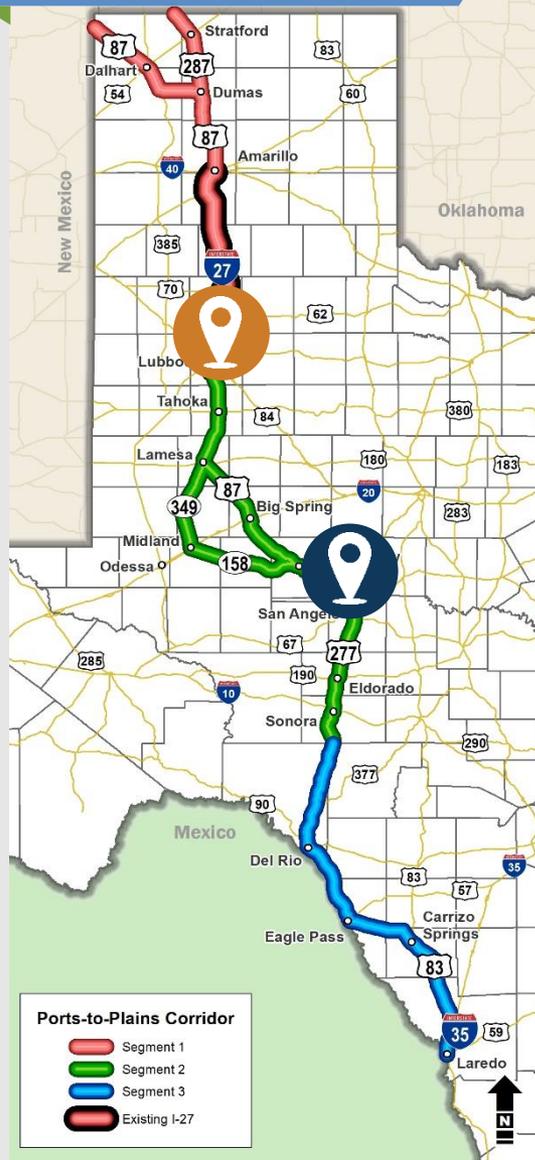
Advisory Committee Meeting #2

Overview of Advisory Committee Meeting #3

Honorable Dan Pope, Advisory Committee Chair



Ports-to-Plains Corridor



Lubbock

- Meeting #3
July 2020
 - Segment Chair Recommendations
 - Draft Chapters (all but Recommendation and Implementation Plan)



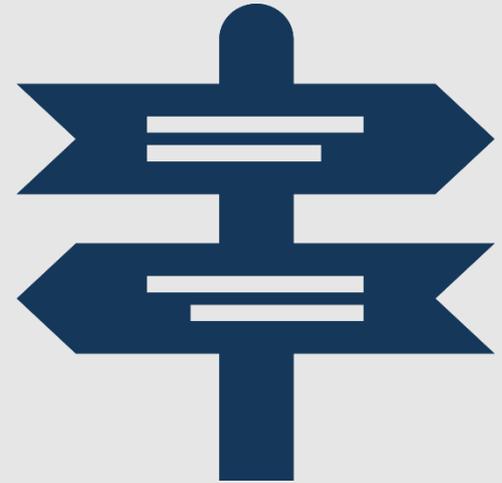
San Angelo

- Meeting #4
August 2020
 - Draft Report



Lubbock

- Meeting #5
September 2020
 - Final Report



July 2020 Meeting #3

Segment Committees
and Public Meetings
Rounds 3 and 4
Summaries

Segment Committee
Reports/
Recommendations

Report Chapters

August 2020 Meeting #4

Implementation Plan

Finalize/Prioritize
Recommendations

Draft Advisory
Committee Report and
Executive Summary

September 2020 Meeting #5

Public Meetings Round
4 Summary

Final Advisory
Committee Report and
Executive Summary



For more information visit
www.txdot.gov keyword search
"Ports to Plains"

