

# US 287 INTERSTATE FEASIBILITY STUDY



# INTRODUCTION

The US 287 Corridor in Texas extends 671 miles from Port Arthur in Southeast Texas to Amarillo in Northwest Texas. It is a national and state-significant transportation corridor that connects and integrates Texas' key economic engines, including energy production, maritime, agriculture, cattle, and timber industries. It plays a vital role in supporting and growing demographic and economic centers along the corridor. US 287 is a diagonal route that connects northwest Texas to the major urban areas of Dallas-Fort Worth to the Ports of Beaumont and Port Arthur. Currently, no interstate highways connect these areas within Texas, presenting a unique opportunity to enhance US 287 to interstate standards. Consequently, TxDOT's Transportation Planning and Programming (TPP) division initiated a study to evaluate the feasibility of upgrading US 287 to interstate standards.

US 287 is a freight corridor and plays a critical role in freight movement. In 2022, over 923 million tons of freight moved along US 287 within the study area, highlighting the corridor's significance to the economic infrastructure of the region. Notably, 8.8 million Texans reside within this study area, a figure projected to rise to 12 million, representing 28% of the state's population, by 2050. The study area also supports 4.3 million jobs, which is anticipated to increase to 5.9 million by 2050.

# US 287 INTERSTATE FEASIBILITY ANALYSIS AND FINDINGS

# Feasibility analysis considered two options:

The baseline analysis assumes only currently planned and programmed projects are implemented along the Corridor by 2050.



The interstate upgrade analysis assumes improvements to provide a continuous-flow, fully access-controlled facility with a minimum of two lanes in each direction separated by a median within a typical 300-foot to 500-foot right-of-way.

#### **SAFETY**

In 2050, reduce crash rates over the baseline by an estimated \$\square\$28\%

In 2050, economic benefit from reduced crashes of **\$517 Million** 

Result in fewer crashes than a US highway by \$\ddot 24\%-29\%\$

These findings indicate the interstate upgrade would lower crashes over the baseline. Crash rates = the number of crashes per 100 million vehicle miles.



## FREIGHT MOVEMENT IMPROVEMENTS



Truck Hauling Hay Bales

The interstate upgrade would attract truck traffic from nearby parallel routes, such as:

45





I-45

I-10

**I-20** 

The upgrade would also improve freight access across multiple corners of the state.

Reduce corridor travel time



Increase average daily truck traffic by



# INCREASED ACCESS TO MARKETS FOR ENERGY, MARITIME, TIMBER, AGRICULTURE PRODUCTS



Transporting products improved by reduction in travel time and increased market access radius and route reliability



Fully access-controlled facility benefits travel times and reliability



A safer and more reliable route for trucks traveling through cities and small towns

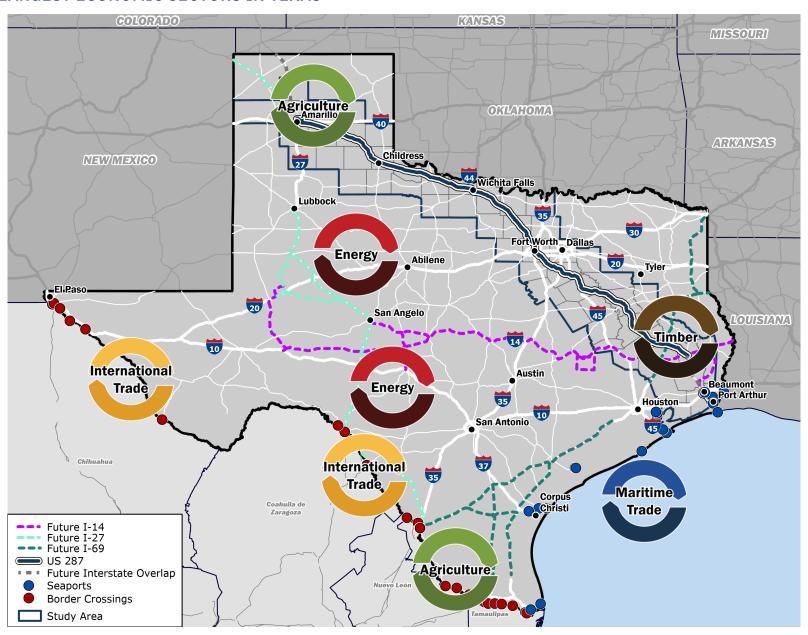


Lumber Truck in Beaumont District



Northbound Tank Truck along US 287

# LINKING LARGEST ECONOMIC SECTORS IN TEXAS





# Oil and Natural Gas Sector

#### Texas:

• \$719 Billion of total private sector Texas GSP in 2023

#### US 287:

- 15.7 Million BBL (Barrels of crude oil) produced in study area in 2023.
- 1.1 Billion MCF (thousand cubic feet of natural gas) produced in study area in 2023.



# **Timber Sector**

#### Texas:

• \$41.6 Billion of total industry output in 2021

### US 287:

 5.4 Million tons of timber produced in study area in 2022



# **Agriculture Sector**

#### Texas:

• \$32.2 Billion of sales in 2022

#### US 287:

• \$12 Billion agriculture produced in study area (more than 1/3 of state)



# **International Maritime Trade**

#### Texas:

- 19% of US Maritime Trade in 2023
- \$261 Billion in exports and \$149 Billion in imports
- Port of Beaumont & Port Arthur combined saw \$40+ Billion in trade

#### • US 287:

- Deploy military equipment and personnel
- Port of Beaumont (#1 Strategic Military Port in the US) 1st & 2nd largest oil refineries in the US nearby
- Port of Port Arthur (Imports biopulp, aluminum, lumber, exports petroleum)



# **National Defense and Security**

#### **Texas**

\$89 Billion in GDP in 2023

#### US 287:

- Power Projections Platform (PPP)
  - Support the movement of DOD equipment
  - US 287 from I-35/US 287 to US 87/US 287/SH 152 is α PPP route
- STRAtegic Highway NETwork (STRAHNET)
  - Support defense deployment needs
  - US 287 is on STRAHNET along I-45 from Corsicana to Ennis and from I-35 in Fort Worth to I-40 in Amarillo
- Strategic Military Ports
  - Deploy military equipment and personnel
  - Port of Beaumont & Port of Port Arthur are both ports of embarkation and debarkation
- Military Installations
  - Wichita Falls Sheppard Air Force Base
  - Amarillo Panhandle Training Area National Guard
  - Mineral Wells Fort Wolters Training Site
  - Fort Worth Naval Air Station Joint Reserve Base

# **MOBILITY**

Converting US 287 to an interstate would add more capacity to handle additional traffic. It would increase average daily traffic on US 287 by 43%. Traffic would divert from parallel and intersecting roadways to take advantage of the improved travel time on the US 287 Corridor.

45

3.3K

daily vehicles would be diverted from I-45

10

3.1K

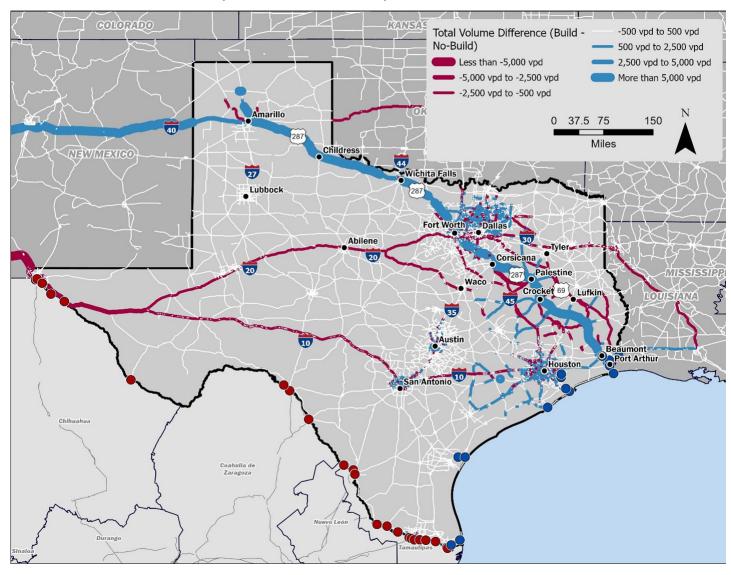
daily vehicles would be diverted away from I-10

20

2.8K

daily vehicles would be diverted away from I-20

# TOTAL VOLUME DIFFERENCE (BUILD AND NO-BUILD)



## TRAVEL TIME

Travel time benefit refers to the amount of time saved due to upgrading the US 287 Corridor to an interstate. The interstate upgrade would provide a travel time benefit over the existing facility due to higher travel speeds provided by full access control. The exhibit below presents travel time benefits of the interstate upgrade for unconstrained (free flow) conditions, average conditions, and peak traffic conditions along US 287. The interstate upgrade would provide a travel time benefit over the baseline due to higher travel speeds provided by full access control.

## **Baseline Travel Time**

575 minutes

597 minutes

641 minutes

Free Flow Reduced

Average Time Reduced

Peak Time Reduced







# **Interstate Upgrade Travel Time**

539 minutes

553 minutes

584 minutes

# METHODS FOR INTERSTATE DESIGNATION

Federal law prescribes a multi-step process for interstate highway designation involving many transportation partners, including the U.S. Congress, the United States Department of Transportation, and state DOTs. The US 287 Corridor is not currently designated as a High Priority Corridor by a congressional act, and the route is not currently designated as interstate under a congressional act.

The Study analyzed the ways to obtain interstate designation. In its analysis, it was concluded that although portions of the 671-mile US 287 Corridor are already designated interstate (39 total miles made up of I-10, I-45, I-20, I-820, I-35W, I-44, and I-40), the remaining 632 miles of the Corridor are on U.S. highways. These highways consist of generally two to four lanes, and have lower design speeds with smaller right-of-way widths that neither currently meet interstate standards nor are suitable for interstate designation.

# Three Federal Designation Methods for Interstate Highways



#### BY CONGRESSIONAL ACT

[Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and amendments]

2

FHWA has approval authority

# IF THE CORRIDOR CURRENTLY MEETS INTERSTATE STANDARDS

The US Secretary of Transportation may designate as an interstate [23 USC 103c(4)(A)]



# REQUESTING DESIGNATION AS A FUTURE INTERSTATE

If corridor does not currently meet interstate standards, TxDOT may submit a proposal requesting designation as a future interstate [23 USC 103(c)(4)(B)]



# **INTERSTATE UPGRADE COST ESTIMATES**

Of the 671 miles of the US 287 corridor, there is a 39-mile overlap with other interstates. The remaining 632 miles are currently non-interstate. They will need to be upgraded to interstate standards if and/or when US 287 is designated to be an interstate by the U.S. Congress in the future.

# COSTS TO UPGRADE THE CORRIDOR TO INTERSTATE STANDARDS

A planning level cost estimate for the US 287 Texas Corridor was developed using a methodology typically used to develop costs during the corridor feasibility stage. This cost estimate is preliminary for planning purposes only and may be updated based on more detailed right-of-way and design information during future stages of each project development along the Corridor.

The cost estimate was adjusted to account for planned and programmed projects and used current year dollars. Costs are preliminary for planning purposes only, subject to change.

CATEGORY	CORRIDOR INTERSTATE COST ESTIMATE	
Construction	\$18.39 Billion	
Project Development	\$6.13 Billion	
Total Project Cost	\$24.52 Billion	

#### **ECONOMIC IMPACT AND RETURN ON INVESTMENT**

Upgrading the US 287 Corridor to an interstate facility is anticipated to result in economic prosperity and future growth of the cities, counties and all communities along the Corridor, and the state. The economic benefits described below would result from the interstate upgrade of the entire US 287 Corridor in Texas.



**US 287 Corridor Statewide Benefits in 2050** 

\$5.4 Billion

2050 Travel Cost Savings **46,885 Jobs**Total Increase in Employment

**\$11.6 Billion**Total Annual

Increase in GDP

Return on Investment - \$11.6 Billion in GDP GAINS in 2050

**\$39.6 Billion** net return on investment, representing a return on investment of **161%** 

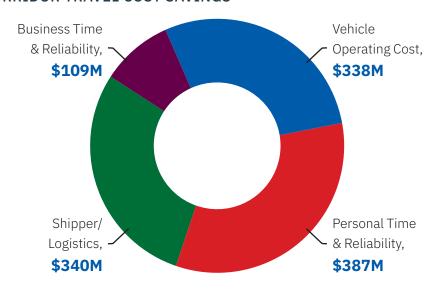
Benefit-Cost Ratio - 3.25

#### **JOBS AND ECONOMIC OPPORTUNITIES**

The interstate upgrade would encourage economic opportunities, resulting in an increase in local and state tax revenues. The higher impact industries are Manufacturing, Professional and Business, Wholesale Trade, and Financial Activities. These four industries add up to two-thirds of the increase in GDP and almost half of the jobs created.

2050 JOBS CREATED	INDUSTRY	2050 GDP INCREASE
+2,327 jobs	Manufacturing	+\$3.03 billion
+12,302 jobs	Professional and Business	+\$2.05 billion
+2,400 jobs	Wholesale Trade	+\$1.43 billion
+5,258 jobs	Financial Activities	+\$1.33 billion
+24,598 jobs	Other industries	+\$3.76 billion
+46,885 jobs total		+\$11.6 billion total

## CORRIDOR TRAVEL COST SAVINGS





# In summary, US 287 is feasible to be an interstate, based on:

- **✓** Promoting safety
- ✓ Facilitating freight movement for key economic sectors, including maritime trade
- **✓** Supporting national defense
- Enhancing mobility and providing traffic congestion relief
- Economic benefits and return on investment

The building of an interstate system is a decades-long strategic initiative. There is no specific federal or state funding program set aside to build future interstate highways. If and/or when US 287 is congressionally designated as a future interstate, funding will need to be determined. It will compete with all other Texas highway improvement projects for funding. There is a continual balance between competing interests throughout the state, in terms of new construction and maintenance and preservation of existing facilities.

US 287 remains an essential corridor for economic opportunities, national defense, freight movement, and regional mobility. Careful consideration of funding and strategic priorities will be crucial in ensuring that US 287 continues to serve as a vital corridor in the transportation network of Texas, linking Southeast to Northwest Texas and beyond.





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