




# Brookshire-Pattison Mobility Study In-Person Open House with Virtual Public Meeting Option



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# WELCOME

## BROOKSHIRE-PATTISON MOBILITY STUDY

Virtual Public Meeting: March 3, 2025 – March 19, 2025  
In-Person Public Meeting: March 4, 2025

### Why Am I Here?

- Learn about the study
- Ask questions about existing conditions
- Share your feedback

Royal High School

34499 Royal Rd, Brookshire, TX 77423

Memorandum of Understanding: The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated Dec. 9, 2019, and executed by the Federal Highway Administration and TxDOT.

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The Texas Department of Transportation Houston District would like to welcome you to this in-person open house with an on-line public meeting option for the Brookshire-Pattison mobility study. The study includes the cities of Brookshire and Pattison, and the surrounding areas, addressing transportation needs in this rapidly growing region.

TxDOT is hosting the in-person open house on Tuesday, March 4, 2025, from 5:30 to 7:30 pm at Royal High School. The public may come and go at their convenience and TxDOT staff will be there to answer questions. The purpose of the public meeting is to solicit input on the mobility study and offer an opportunity for the study team to address any questions or concerns from the public.

Please note the Memorandum of Understanding. The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated Dec. 9, 2019, and executed by the Federal Highway Administration and TxDOT.

# STUDY NEEDS AND GOALS



## What are the Needs in the Study Area?

- Accommodating significant population growth
- Reducing higher than average statewide crash rates
- Adapting to increasing truck traffic
- Improving limited connectivity



## What Are We Trying to Do?

- Explore opportunities for future transportation and community investments
- Identify short-, medium-, and long-term transportation solutions
- Improve safety, mobility, and sustainability while accommodating the region's residential and economic growth

The Waller County population is expected to almost triple in the next 20 years. This mobility study aims to identify short-, medium-, and long-term solutions to improve safety, mobility, and sustainability while, accommodating the region's residential and commercial growth, reducing higher than average statewide crash rates, adapting to increasing truck traffic, and improving limited connectivity.

The study's key considerations include population, land use, traffic, safety and freight.

### Study Overview

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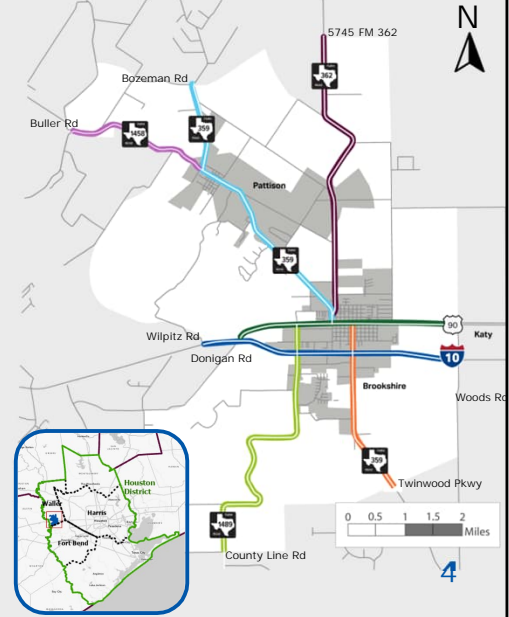
Study Corridors

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Miles of Roadway

Corridor	Limits (length)	Lanes	2023 AADT	Speed Limit
 10	Wilpitz Rd – Woods Rd (4.5 miles)	6	57,000 – 64,000	65 mph
 90	Donigan Rd – Woods Rd (4.5 miles)	2-4	2,000 – 15,500	55 mph
 N  S	Bozeman Rd – US 90 – Twinwood Pkwy (8.3 miles)	2	5,400 – 13,000	55 mph
 362	5745 FM 362 – US 90 (3.9 miles)	2	5,400 – 6,900	55 – 60 mph
 458	Buller Rd – FM 359 (2.5 miles)	2	2,000 – 3,100	55 mph
 489	US 90 – County Line Rd (5.4 miles)	2	4,200 – 7,500	55 mph

FM 359 north of US 90 and south of US 90 are considered as two corridors for the purpose of the study.  
 AADT: Average Annual Daily Traffic.  
 There are very limited sidewalks and shoulders in the Study Area.



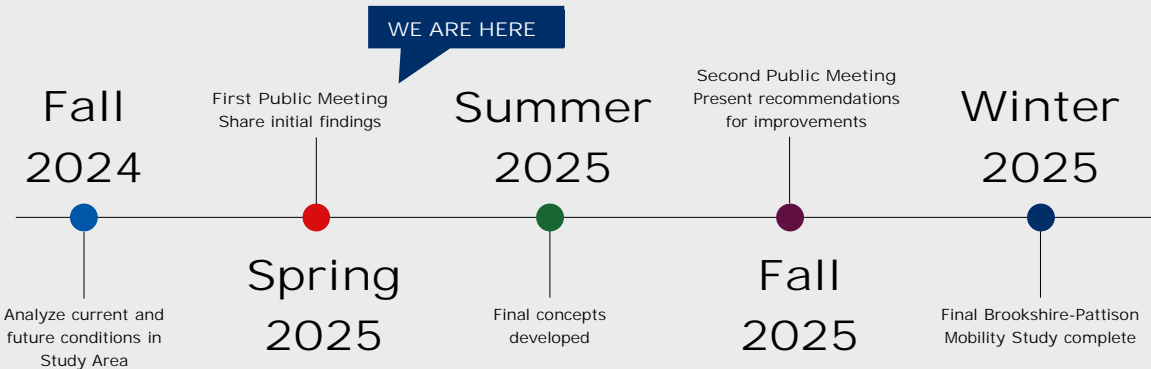
This study evaluates 29 miles of key roadways. These encompass six key corridors which include IH-10, US 90, and FM corridors (FM 359, North and South, FM 362, FM 1458, and FM 1489). For the purpose of this study, FM 359 will be considered as two corridors, north and south of US 90.

The table on this slide summarizes the limits, length, number of lanes, Average Annual Daily Traffic (AADT) and speed limit for all six corridors. IH 10 is the only divided roadway, with three lanes in each direction. A short section of US 90 has four undivided lanes. The rest of US 90 and all FM roads are two-way with two undivided lanes. The AADT ranges from 57,000 to 64,000 on IH-10. The AADT for US 90 and the FM roads is a lot lower, ranging from 2,000-15,500. With the expected growth in the Study Area more traffic is expected on these FM roads which will in turn increase safety concerns for these smaller corridors in the future.

There are currently very limited sidewalks and shoulders in the Study Area.

## Study Timeline

- Conceptual Planning is the first step in developing, designing, funding, and constructing future transportation projects.
- The process includes numerous opportunities to get involved.



The “we are here” box shows the current stage of the Brookshire-Pattison Mobility Study; the first public meeting. The project started in the fall of 2024. The project team is currently examining existing and future conditions within the Study Area. Short-, medium-, and long-term solutions will be proposed based on analysis of existing and future conditions and input from the public. The recommended improvements will be presented in the second public meeting in fall 2025. The final study report will be completed by winter 2025 or early 2026.



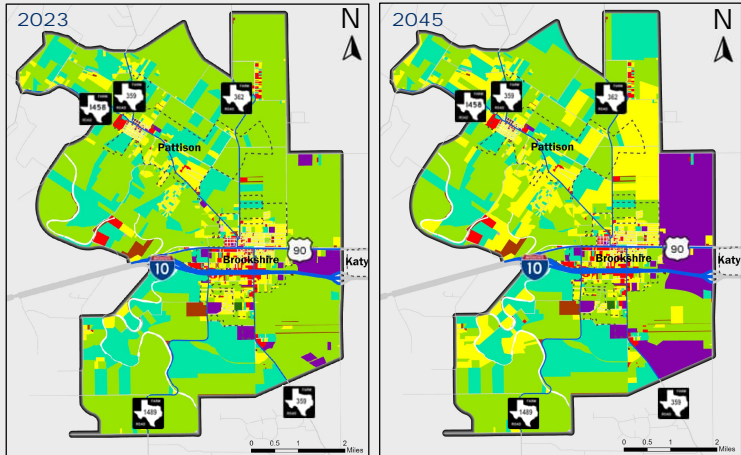
## Land Use

2023 → 2045

Industrial 3%	Industrial 11%
Residential 7%	Residential 13%
Mixed Use 19%	Mixed Use 22%

Source: H-GAC Land Use Projections, 2023; Waller County, 2023

5,350 acres (17%) of vacant land are expected to be developed by 2045



Legend	
	Mixed Use
	Residential
	Vacant Developable/Farming
	Gov/Med/Edu
	Other
	Undevelopable
	Industrial
	Parks/Open Spaces
	Unknown
	Commercial
	Study corridors
	Study Area boundary
	City limits

Within the Study Area industrial land use is currently 3% and is predicted to increase to 11% by 2045. Industrial land use is used for manufacturing, production, warehousing, and other industrial activities. Residential land use is currently 7%, and this is expected to increase to 13% by 2045. 19% of land is mixed use and is expected to increase to 22% by 2045. Mixed use refers to land designated for multiple purposes, such as residential, commercial, and industrial development. In total, 5,350 acres of land will be developed by 2045, which corresponds to 17% of the Study Area.

The maps on the right-hand side show how land use will change from 2023 to 2045 based on current H-GAC and Waller County land use projections.



## Population

36,450  
(2045)

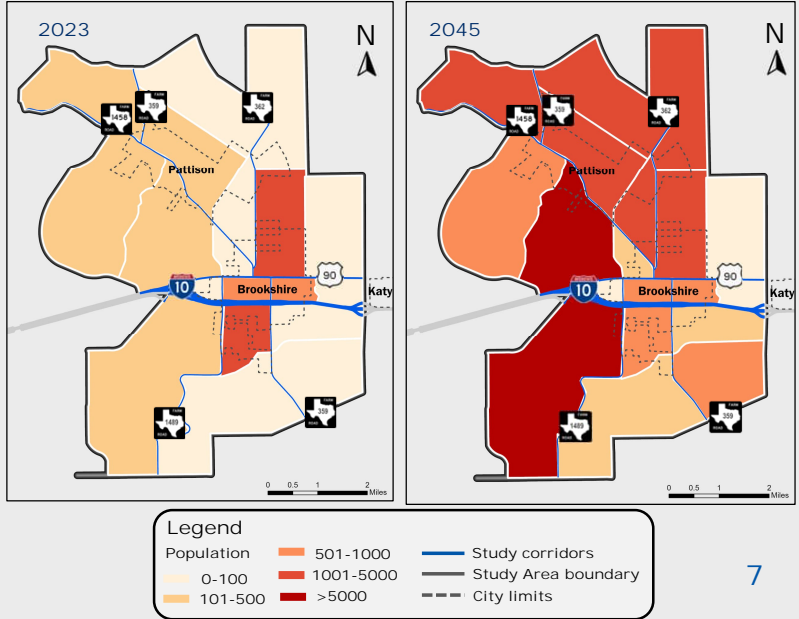
5,800  
(2023)

Study Area Population is expected to **increase by 6x**

Study Area employment is expected to **increase by 1.5x**

8,050  
(2045)

5,450  
(2023)



Source: H-GAC Regional Model 2045

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The population in the Study Area is expected to increase from 5,800 in 2023 to 36,450 in 2045, which averages to about 9% growth per year. The employment in the Study Area is also expected to increase from 5,450 in 2023 to 8,050 in 2045, which averages to about 2% growth per year.

The map on the left shows the population of the Study Area in 2023 and the map on the right shows the predicted population for the Study Area by 2045. Each area represents a Transportation Analysis Zone, which is based on census data analyzed by H-GAC. The darker the shade of red, the higher the population in that area of the map. In the pale areas where there is no population growth, these are projected areas for industrial growth.



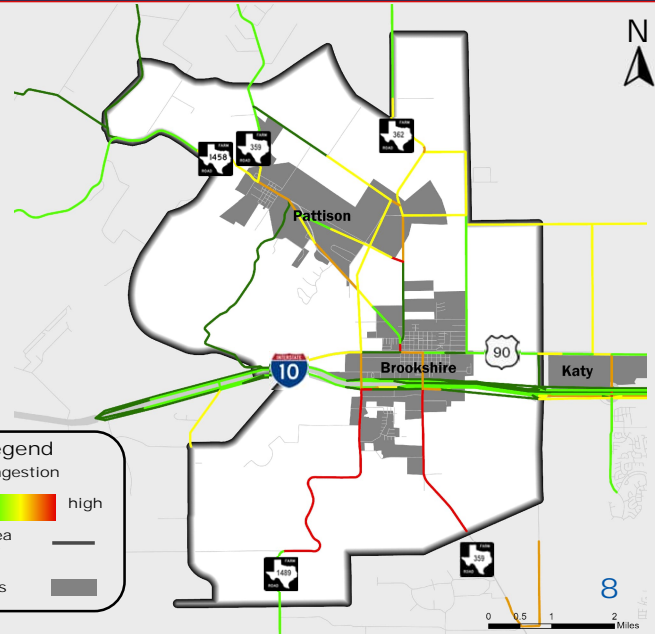
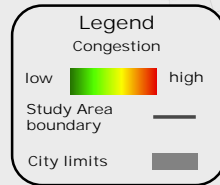
## Congestion

### Increasing Congestion By 2045

Traffic is predicted to double on most study corridors

High congestion is predicted in downtown Brookshire

FM 1489 and FM 359S will reach capacity

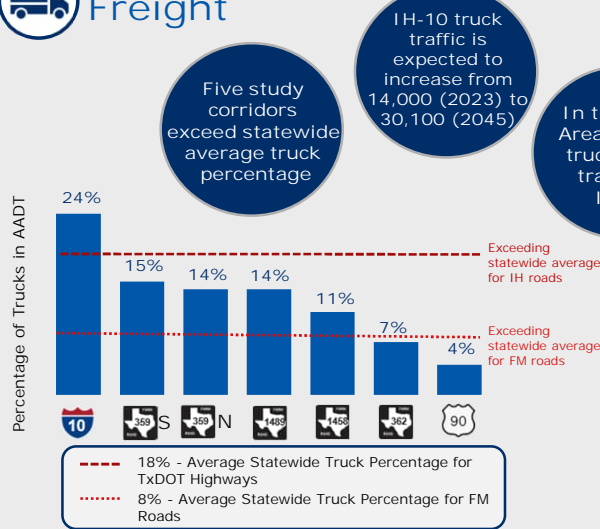


Source: H-GAC Regional Model, 2045

By 2045, traffic volumes in the Study Area are predicted to double on most key corridors. As a result, very high congestion is predicted in Brookshire Downtown, as it is a meeting point for FM 359, FM 362 and US 90. FM 1489 and FM 359 South are both predicted to reach capacity.

The map on the right-hand side of the screen shows predicted congestion in 2045. The congestion level is measured by speed ratio, this is the average travel speed at peak times divided by the speed limit. A higher ratio represents a lower level of congestion. Red indicates high levels of congestion; orange indicates medium levels, and dark green is the lowest. As you can see there are high levels of congestion predicted south of IH-10 and moderate congestion in both Pattison and Brookshire.

# Freight

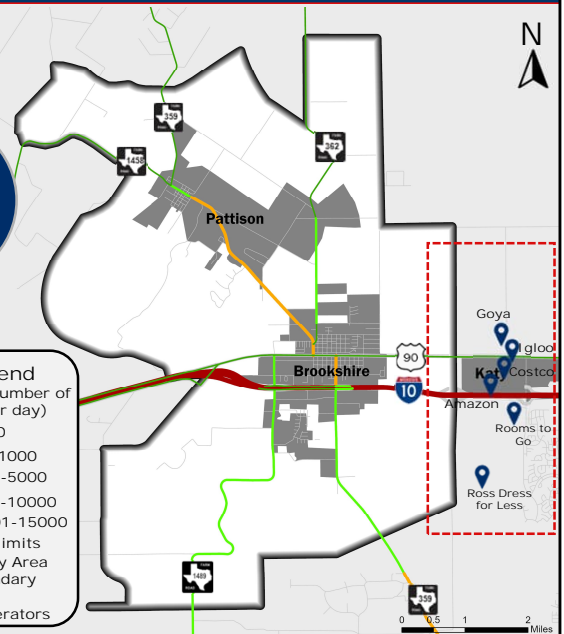
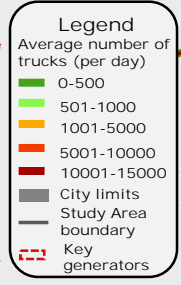


Source: Rhino (2023), USDOT, FHWA, Office of Freight Management and Operations, Freight Analysis Framework (FAF) v 5.2, 2024 TxDOT Roadway Inventory

IH-10 truck traffic is expected to increase from 14,000 (2023) to 30,100 (2045)

In the Study Area, 90% of truck traffic traverses IH-10

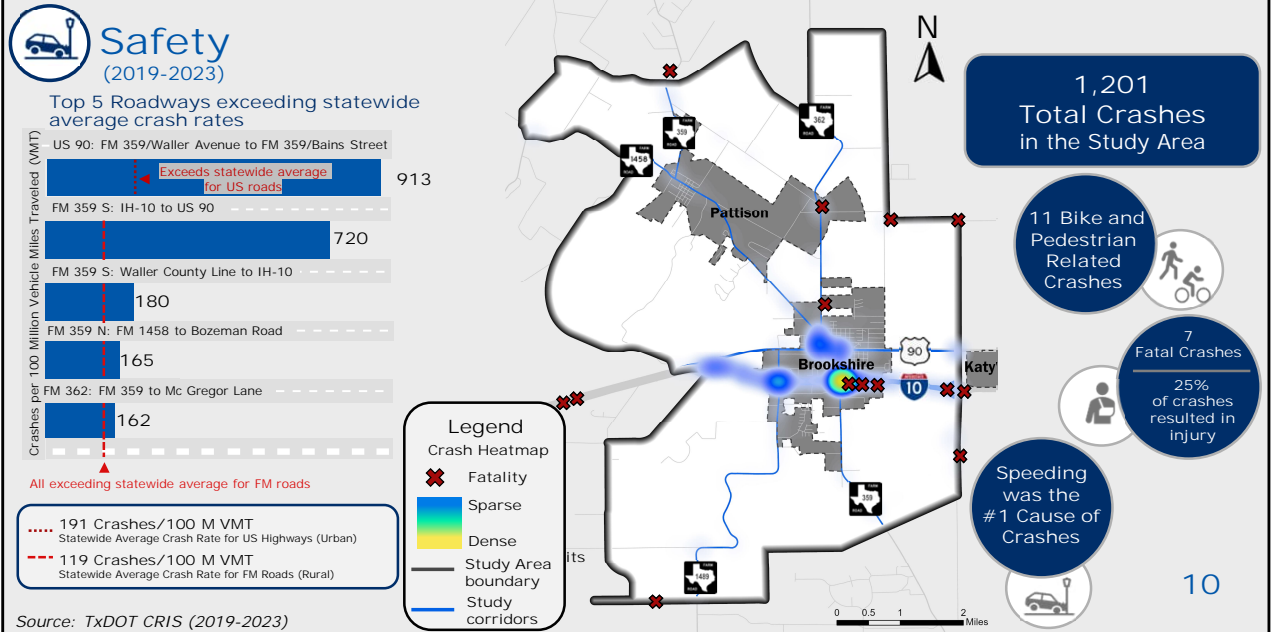
Five study corridors exceed statewide average truck percentage



The Study Area is a key location for movement of goods, with five of the study corridors exceeding the statewide average for truck percentage. 90% of truck traffic in the Study Area traverses IH-10 and this traffic is expected to increase from 14,000 in 2023 to 30,100 in 2045. The graph on the left shows the percentage of trucks on each Study Area corridor as a part of the Annual Average Daily Traffic. On IH-10, 24% of total traffic corresponds to trucks, which is above the TxDOT interstate highway average of 18%. For FM roads, the percentages are as follows:

- FM 359 South: 15%
- FM 359 North: 14%
- FM 1489: 14%
- FM 1458: 11%

These percentages are all above the TxDOT average for truck traffic on FM roads, which is 8%. On FM 362, 7% of all traffic is trucks, this is just below the TxDOT FM average of 8%. US 90 has the lowest percentage of truck traffic of all the study corridors at 4%. The map on the right-hand side of the screen shows the average number of trucks per day on each key corridor. Red indicates a high number of trucks and dark green is the lowest number. Also highlighted to the east of the Study Area, in the red box, is where key generators for the movement of goods in the area are located.



The top five roadway segments with the highest crash rates within the Study Area are shown in the chart on the left-hand side. All crash rates were recorded between 2019 and 2023 and are measured per 100 Million Vehicle Miles Traveled. On US 90, the segment between FM 359 and Waller Avenue to FM 359 and Bains Street had a crash rate of 913. This is much higher than the TxDOT US Highway Urban Average, marked by the dark red dotted line. The next three roadway segments with the highest crash rates within the Study Area are all along FM 359 S: From IH-10 to US 90 with a crash rate of 720, FM 359 S: From Waller County Line to IH-10 had a crash rate of 180 and FM 359 N: From FM 1458 to Bozeman Road had a crash rate of 165. These are all above the TxDOT FM Rural Average marked by the light red dash line. FM 362: From FM 359 to Mc Gregor Lane had a crash rate of 162, this is also above average.

The map in the center shows a crash heat map. Where the yellow color is denser this indicates a higher crash rate, the blue color indicates a lower crash rate. The X's indicate fatal crashes.

Between 2019 and 2023 there were a total of 1,201 crashes in the Study Area, which averages to just over four crashes per week. Of these, 11 were bike and pedestrian related crashes. Seven were fatal, and 25% resulted in injuries. For all recorded crashes, speeding was the number one cause.

## Regional Projects and Studies

### Planned Projects

	Control Section Job (CSJ)	Estimated Year
1 IH-10 Managed Lanes Extension	0271-04-070	2026
2 IH-10 Frontage Roads Extension: Cane Island Pkwy to Waller Ave	0271-04-093	2026
3 Widen FM 529: FM 362 to SH 99	1006-02-011	2027
4 Widen FM 359: IH-10 to US 90	0453-01-054	2029
5 Widen US 90: IH-10 to Bartlett Rd	0271-09-025	2029
6 Widen FM 2855: IH-10 to FM 529	2898-01-013	2031
7 Widen FM 359: FM 1458 to FM 362	0543-01-068	2035
8 FM 1489 Widening and Extension: FM 359 to Fort Bend County Line	0141-80-1013	2035
9 Widen FM 362: FM 359 to FM 529	0523-02-053	2036
10 FM 529 Alignment Study	1006-02-011	10+ years
11 Widen FM 359: IH-10 to Fort Bend County Line	N/A	10+ years

### Planning Concepts

- REAL Lane on IH-10 W
- Regional Express Services
- Brookshire Secondary Mobility Hub
- Pattison Local Mobility Hub

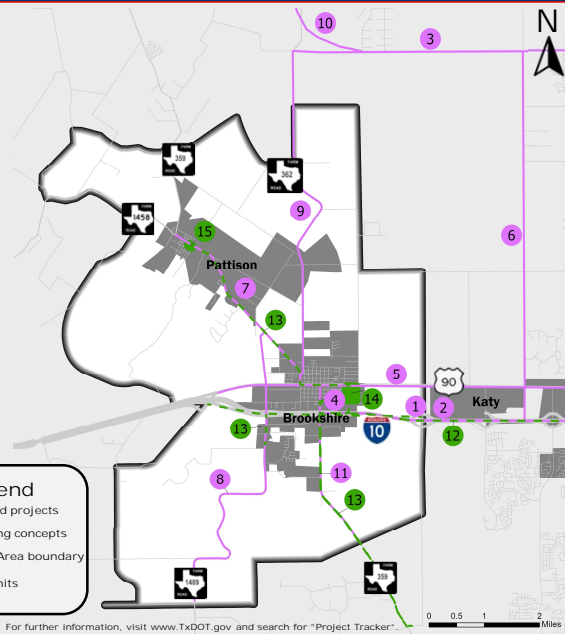
### Adjacent Projects

IH-10 New Frontage Rd: Waller County Line to Cane Island Parkway	0271-05-052	2026
METRO New IH-10 HOV Lanes: Westgreen to FM 359	N/A	2033
I-10 Widening: Waller County Line to West of Snake Creek	0271-05-049	2026
I-10 Widening: West of Snake Creek to Harris County Line	0271-05-025	2025
I-10 Widening: Fort Bend County Line to Mason Rd	0271-06-117	2025
US 90 Widening: FM 2855 to Fort Bend County Line	0271-09-026	2028
US 90 Reconstruction: Waller County Line to FM 1463	0271-10-011	2028

Notes:  
 - The 36A Project Study Area overlaps with the Study Area of this project. However, the location for this project is still to be determined.  
 - Projects on FM 1489, FM 359, FM 362, and FM 529 are subject to change

**Legend**

- Planned projects
- Planning concepts
- Study Area boundary
- City limits



For further information, visit [www.TxDOT.gov](http://www.TxDOT.gov) and search for "Project Tracker".

In and around the Study Area there are a number of planned projects as well as planning concepts. These are shown on the map to the right. The pink on the map indicates planned projects, these are projects that are currently being studied in detail and are part of the Regional Plans. The green on the map indicates planning concepts, these are still in the early stages and their development will depend on further evaluation and incorporation into Regional Plans. The Planned Projects have CSJ numbers that should be used in the subject line if you were to reach out to TxDOT about the project. Most of them also have an estimated year that they are expected to be delivered. The planned projects in and around the Study Area are as follows:

- IH-10 Managed Lanes Extension
- IH-10 Frontage Roads Extension: From Cane Island Pkwy to Waller Ave
- Widen FM 529: From FM 362 to SH 99
- Widen FM 359: From IH-10 to US 90
- Widen US 90: From IH-10 to Bartlett Rd
- Widen FM 2855: From IH-10 to FM 529
- Widen FM 359: From FM 1458 to FM 362
- FM 1489 Widening and Extension: From FM 359 to Fort Bend County Line
- Widen FM 362: From FM 359 to FM 529
- FM 529 Alignment Study
- Widen FM 359: From IH-10 to Fort Bend County Line

The planning concepts in and around the Study Area are as follows:

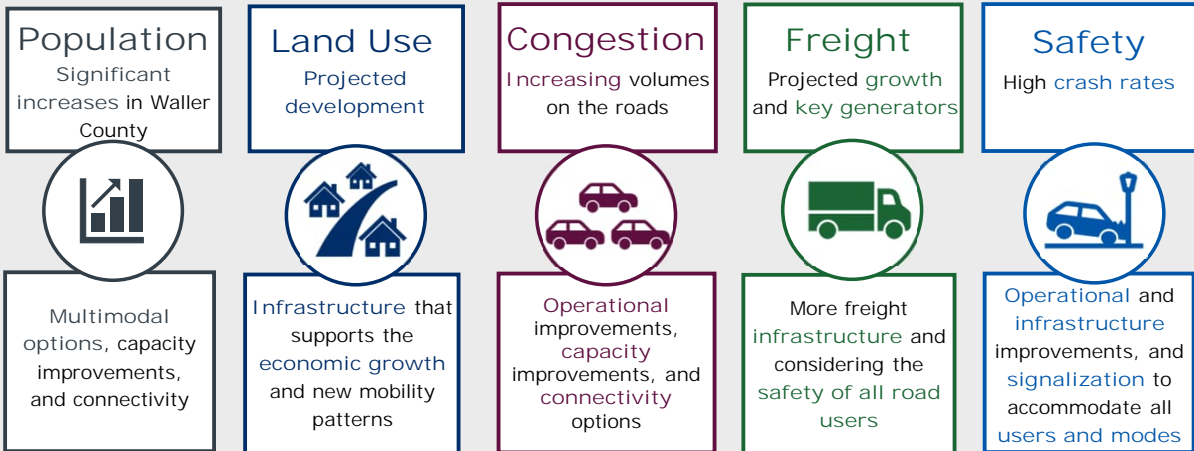
- REAL Lane on IH-10 W
- Regional Express Services
- Brookshire Secondary Mobility Hub
- Pattison Local Mobility Hub

Additional projects that are outside of the Study Area but within the wider region are also listed for your reference.

The 36A Project Study Area overlaps with the Brookshire-Pattison Mobility Study Area however the location of this project is still to be determined. Projects on FM 1489, FM 359, FM 362, and FM 529 are subject to change.

For further information, visit [www.TxDOT.gov](http://www.TxDOT.gov) and search for "Project Tracker".

## Key Findings and Needs Identified



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Based on the information shared in this presentation, the following key findings and needs were identified for each of the themes.

Waller County's population growth necessitates multimodal options, capacity improvements, and better connectivity. Projected development requires infrastructure to support economic growth and new mobility patterns. Increasing traffic volumes call for operational and capacity improvements. Freight movement growth demands more infrastructure and safety considerations. High crash rates highlight the need for operational and infrastructure improvements, including signalization.

## Key Findings at Critical Locations

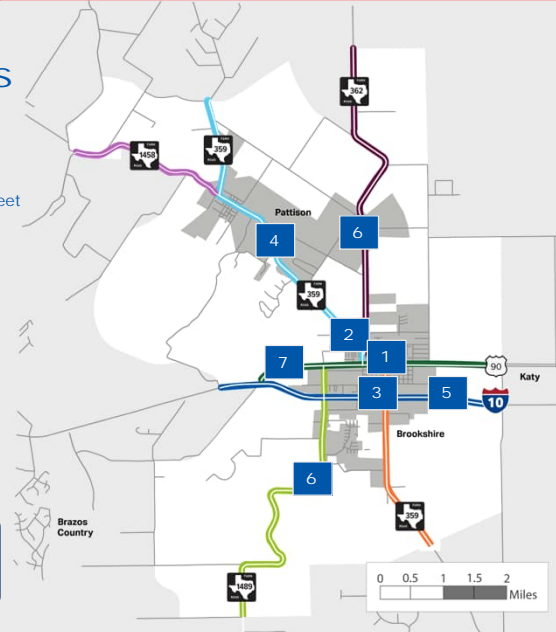
US 90 at Waller Avenue and Bains Street



FM 359 at FM 362



IH-10 at FM 359



FM 359 Corridor



IH-10 Corridor



FM 362 and FM 1489 Corridors



US 90 Corridor



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This map highlights our critical locations that have been identified as part of the study so far.

Location 1 is US 90 at Waller Avenue and Bains Street. Location 2 is FM 359 and FM 362. Location 3 is IH-10 at FM 359. FM 359 corridor is location 4 and the IH-10 corridor is location 5. Location 6 marks the FM 362 and FM 1489 corridors. Location 7 marks the US 90 corridor. Except FM 362, FM 1489 and US 90 corridor which are only critical for high-growth traffic, the rest of the corridors have multiple critical situations:

- Locations 1 and 2 are experiencing high traffic volumes, high growth and safety issues.
- Location 3 is experiencing high traffic volumes, freight growth and safety issues.
- Locations 4 and 5 are experiencing high traffic volumes and freight growth.
- Locations 6 and 7 are experiencing high growth.

## Next Steps



### Your Input will Help Develop Improvements

- Review public and stakeholder feedback
- Develop implementation plan and provide future public involvement opportunities.
- Study will be completed in Winter 2025



### Please send any questions or comments to:

#### Address:

TxDOT Houston District  
Attn: District Transportation Planning  
7600 Washington Avenue  
Houston, Texas 77007  
Phone: 713-802-5812

#### Email:

[HOUPLAN@txdot.gov](mailto:HOUPLAN@txdot.gov)  
Use subject title 0912-00-673

#### Website:

Go to: [www.txdot.gov](http://www.txdot.gov)  
Search: "Brookshire-Pattison Mobility Study"

### We Need Your Help!

Take the online survey here and then share with others



Deadline for comments March 19

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Thank you for participating in this virtual public meeting. The next step is to share your feedback.

TxDOT encourages you to review the materials posted on the public meeting webpage and to provide comments, which can be your safety, mobility, and resilience concerns in this Study Area, or any input to this study. You may do this online via our engagement site or using a digital comment form found on the project webpage. You can also scan the QR code on the screen to be redirected here. The comment card can be emailed to [HOUPLAN@txdot.gov](mailto:HOUPLAN@txdot.gov), using the subject title 0912-00-673 or mailed to TxDOT Houston District, Attn: District Transportation Planning, 7600 Washington Avenue, Houston, Texas 77007. Comments must be submitted by email or mailed and postmarked by March 19<sup>th</sup>, 2025, to be included in the official public meeting documentation.

Responses to comments received during the comment period will be included in the public meeting documentation that will be posted on the project webpage when complete.

We encourage your participation throughout the study. Your input and feedback will directly contribute to making significant positive changes in this area. Thank you for your time. This concludes the presentation.