September 18,2024

Welcome

FM 2288 Project Public Meeting
From US 87 to US 67
CSJ: 2141-02-016

Welcome to the FM 2288 Virtual Public Meeting with an In-Person Option. This public meeting is divided into a virtual project presentation, which you are currently watching, and an in-person public meeting to be held at the Concho Valley Multi-Modal Terminal, Annex Building from 6 to 8 pm on Wednesday, September 18, 2024.

The Texas Department of Transportation San Angelo District thanks you for your attendance. We appreciate your interest and involvement in this project. Your input is critical to the project development process, and we look forward to receiving feedback and comments from you.

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This presentation will provide an overview of the proposed project, what TxDOT is considering, current conditions on FM 2288, the proposed improvements for the roadway, as well as goals for public involvement, including the comment deadline and ways to stay connected with the FM 2288 Project.

We encourage you to engage with the materials posted on the FM 2288 webpage at TxDOT.gov (that's *T-x-D-O-T-dot- G-O-V).* We would also like to stress the importance of providing feedback and comments for our consideration. A comment form is available online as a PDF or comments may be submitted through an online survey. Please submit all comments by Thursday, October 3, 2024.

November 7, 2000 was the last deathless day on roadways in Texas. That means for nearly 24 years, at least one person has died every single day. We all have a part to play to change that. This message is that reminder – to End the Streak of deaths on Texas highways. We need drivers and passengers to act more responsibly and help us reach our goal of zero deaths by 2050. Texans can play a major role in ending fatal crashes with a few simple driving habits: wear seatbelts, drive the speed limit, put away the phone and other distractions, and never drive when sleepy or under the influence of alcohol or drugs. So please do your part and share this message with your friends and family

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Project Overview

- The Texas Department of Transportation (TxDOT) is considering improvements to FM 2288 from US 87 to US 67 to improve safety and mobility for all modes of traffic – vehicular, pedestrian and bicycle – along the 11.4-mile corridor.

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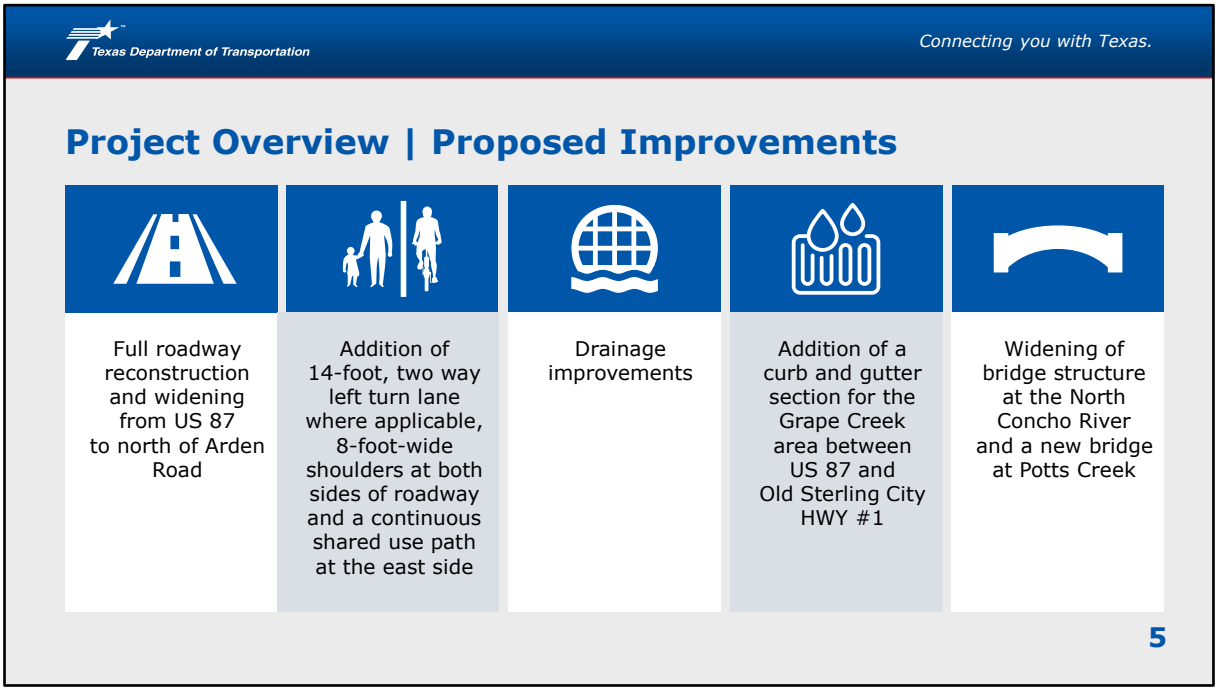
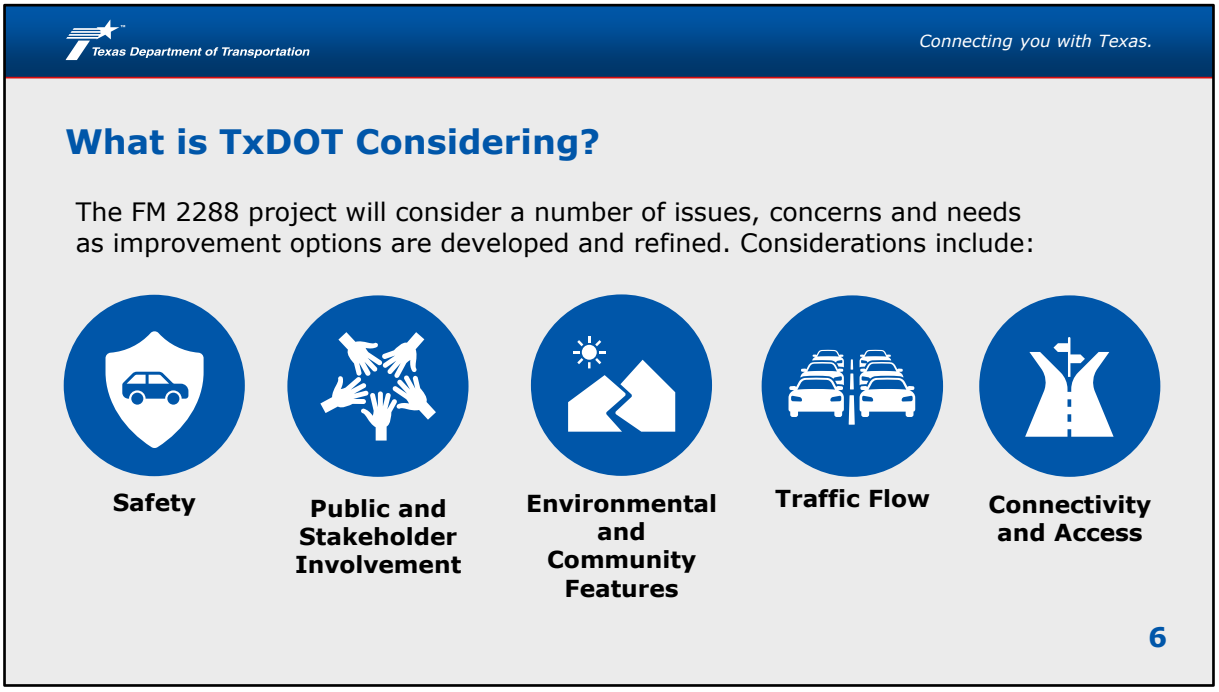
The FM 2288 project is 11.4 miles in length and stretches from US 87 to US 67 in San Angelo, TX. It serves as a busy connection to local arterials regional corridors and the San Angelo State Park.

TxDOT recognizes that due to the aging condition of the current roadway and increased traffic volumes, improvements to safety and mobility for vehicular, pedestrian and bicycle traffic should be studied. As part of TxDOT's Connecting Texas 2050 plan roadways like FM 2288 need to accommodate bicycles and pedestrians alike. TxDOT has a Bicycle Plan pilot program that will ultimately be applied throughout all 25 TxDOT Districts. Initial studies for FM 2288 would analyze proposed improvements based on public input while avoiding or minimizing impacts to landowners, the community, and the environment.



Proposed improvements to FM 2288 include full roadway reconstruction and widening from US 87 to north of Arden Road, the addition of a 14-foot, two way left turn lane where it is applicable, the addition of 8-foot-wide shoulders at both sides of the roadway and a continuous shared use path at the east side. Drainage improvements will be added throughout the corridor, including the addition of a curb and gutter section for the Grape Creek area between US 87 and Old Sterling City Hwy 1. Lastly, a widening of the bridge structure at the North Concho River and a new bridge at Potts Creek are being considered.



TxDOT will consider numerous issues, concerns and needs as the improvement options for FM 2288 are developed and refined. These include:

- Safety
- Public and Stakeholder Involvement
- Environmental and Community Features
- Traffic Flow, and
- Connectivity and Access

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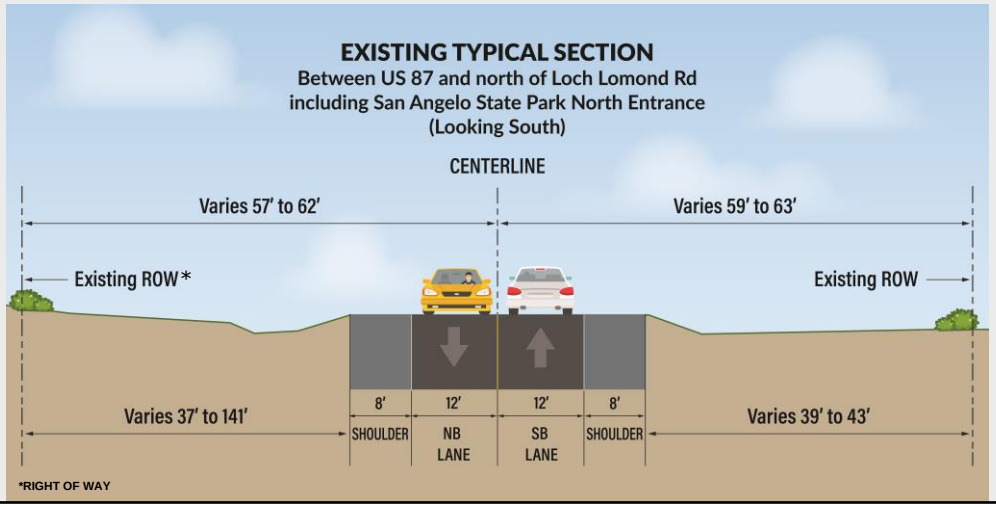
Existing Typical Sections



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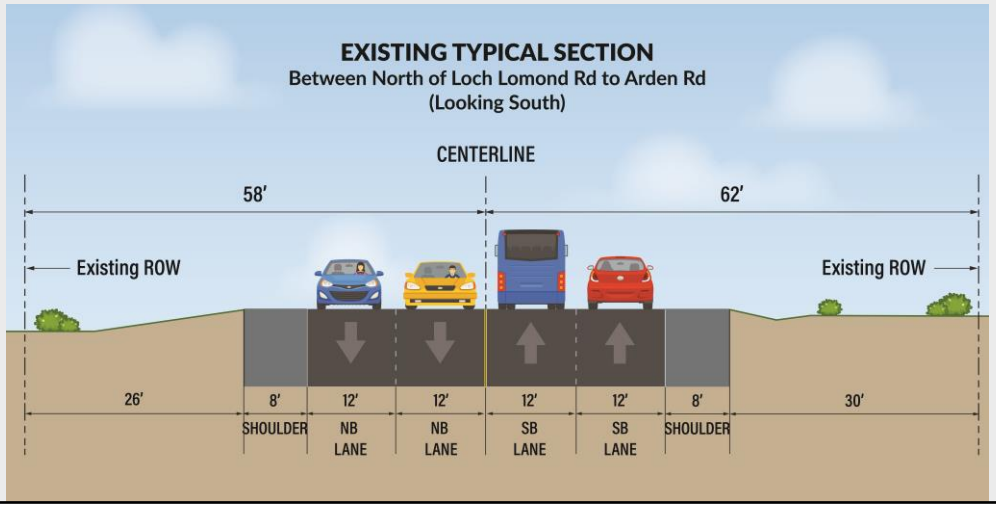
A "typical section" is a cross-section view of the roadway configuration and dimensions, and how it fits into the "right of way", which is the land area dedicated to the roadway.

Here we are showing the current roadway typical section between US 87 and north of Loch Lomond Road including San Angelo State Park North Entrance.

These sections consist of one 12-foot lane in each direction and two 8-foot shoulders on either side, without separation between the lanes, as depicted in the graphic on the screen. The vertical dotted lines on the far left and right of the graphic indicate the existing Right of Way or R-O-W.

Existing Typical Sections



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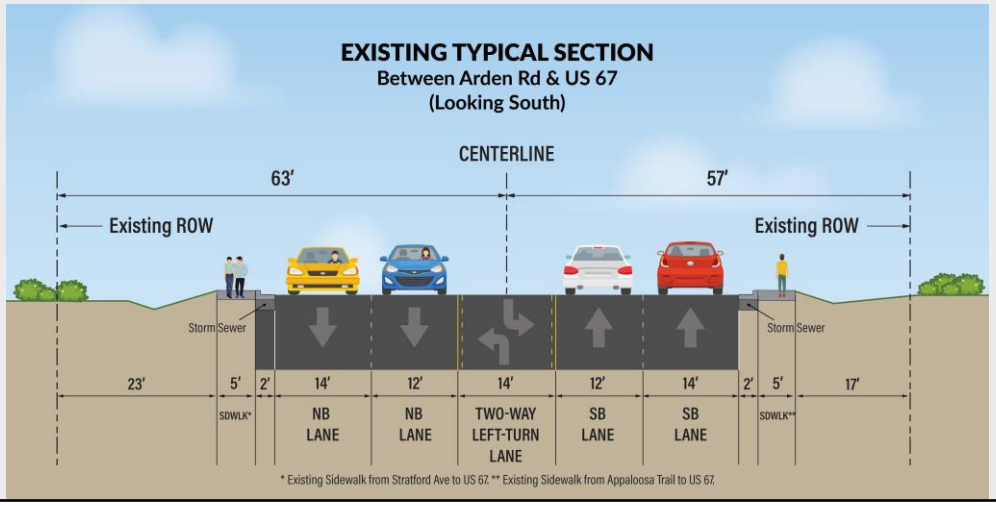
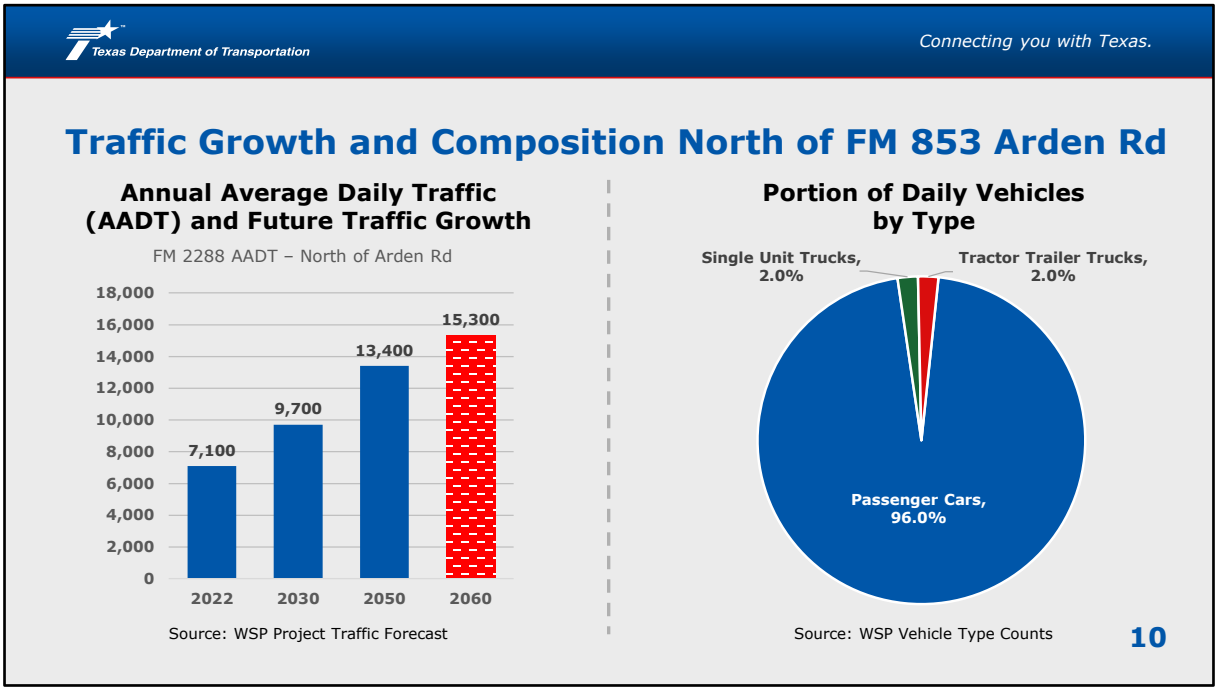
The typical section between North of Loch Lomond Road to Arden Road consists of two 12-foot lanes in each direction and two 8-foot shoulders on either side, without separation between the lanes, as depicted in the graphic.

Existing Typical Sections



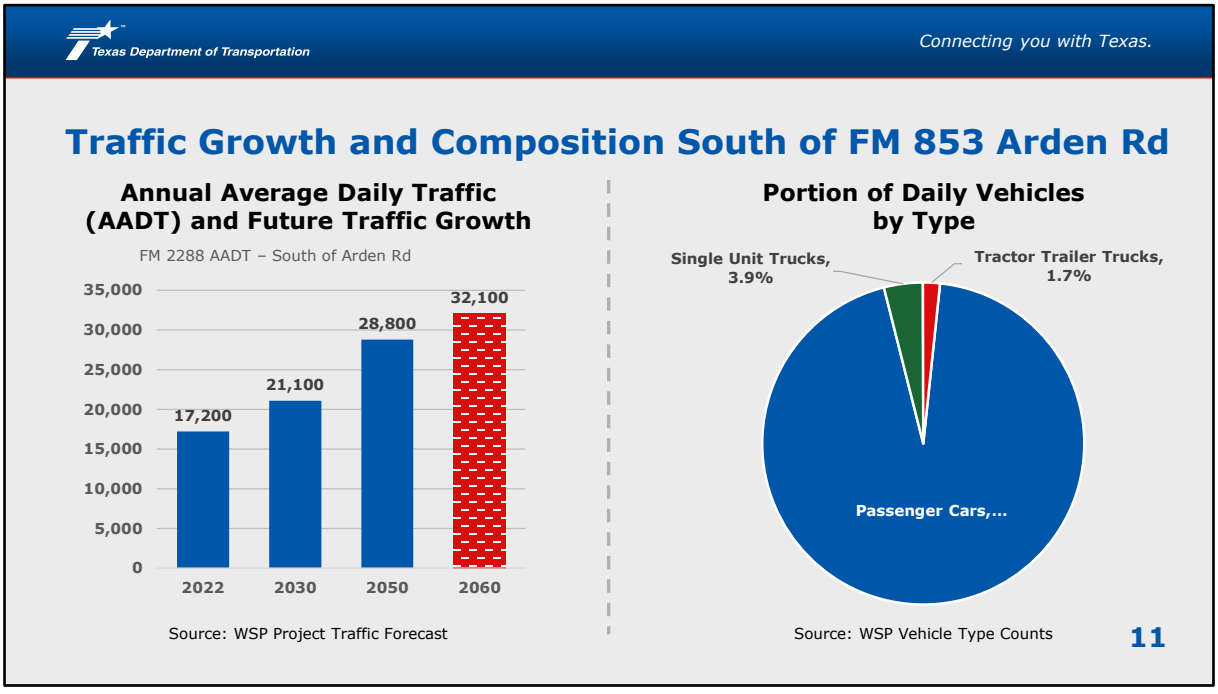
The typical section between Arden Road and US 67 consists of one 12-foot lane and one 14-foot lane in each direction, separated by a 14-foot, two-way, left-turn lane in the middle with two, 5-foot sidewalks and storm drains on either side of the roadway as depicted in the graphic.



We will now review the current traffic and safety conditions for FM 2288.

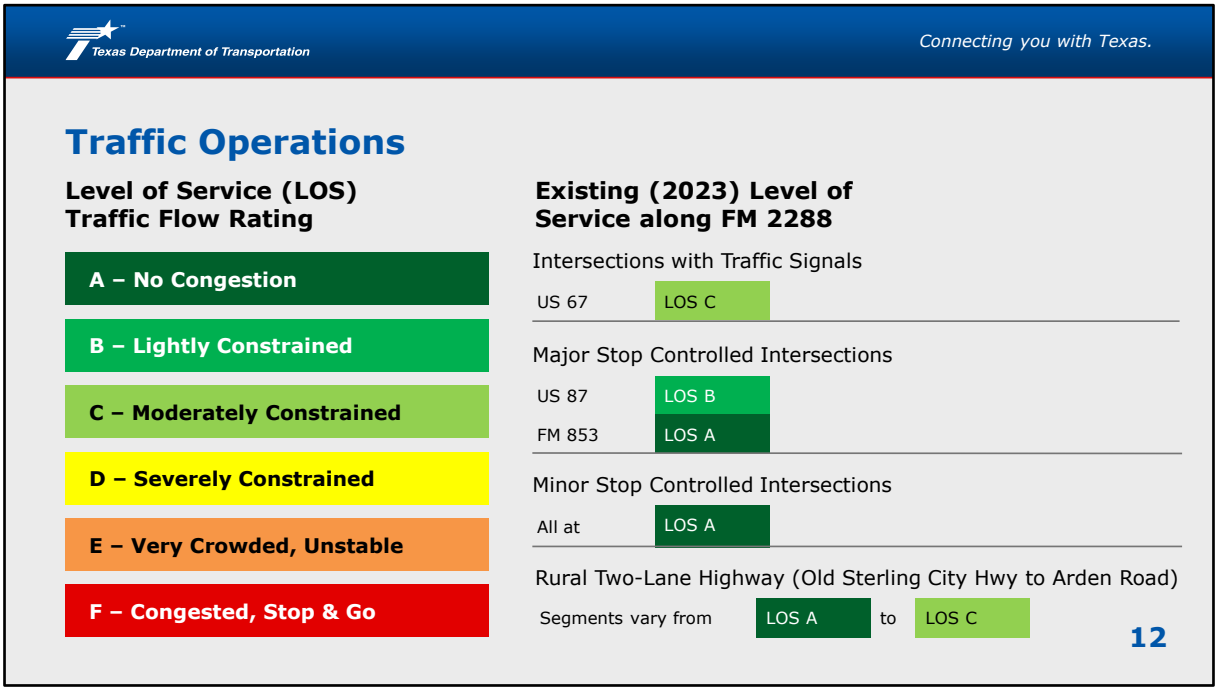
In 2022, annual average daily traffic on FM 2288 north of FM 853 Arden Road was 7,100 vehicles per day. This section's annual average daily traffic is projected to increase to an estimated 15,300 vehicles per day by the year 2060.

The chart to right shows that passenger cars make up 96% of the types of vehicles travelling on this section of FM 2288, with just 4% being trucks.



In 2022, annual average daily traffic on FM 2288 south of FM 853 Arden Road was 17,200 vehicles per day. This section's annual average daily traffic is projected to increase to an estimated 32,100 vehicles per day by the year 2060.

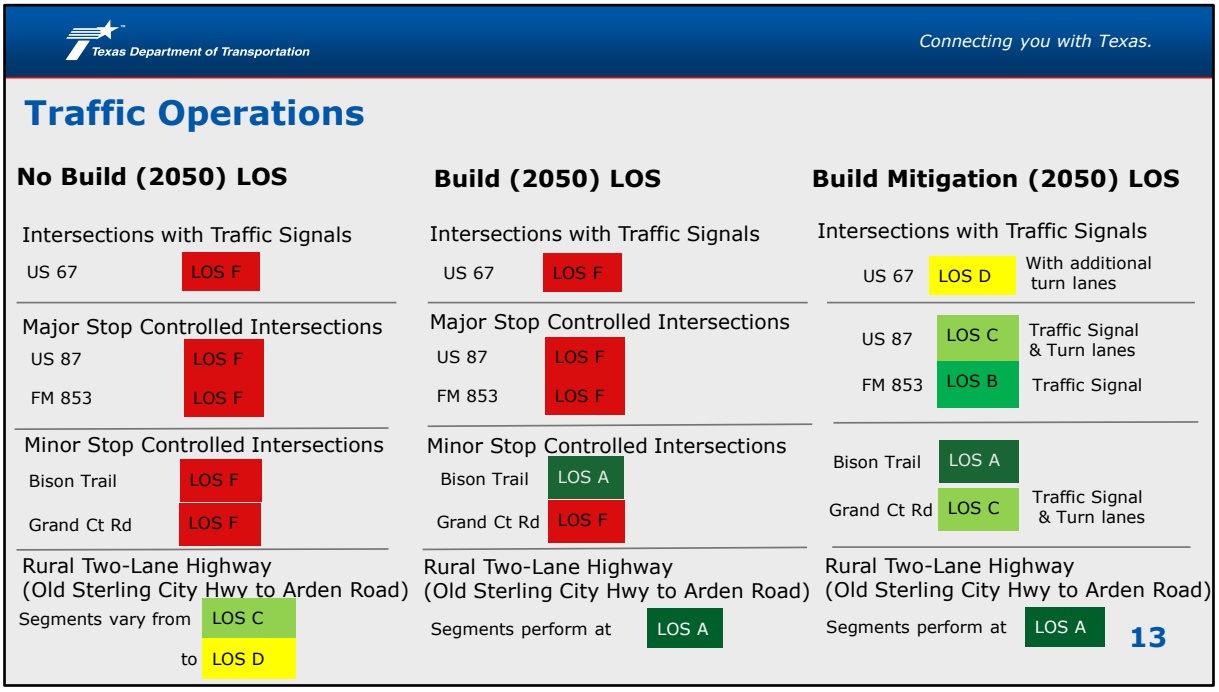
The chart to right shows that passenger cars make up nearly 95% of the types of vehicles travelling on FM 2288, with just over 5% being trucks.



The quality of traffic flow of a roadway configuration is rated using a measure called the “level of service”, or “LOS”.
LOS is a rating system ranging from A to F where levels A through C represent good operations, and levels D through F represent worsening traffic conditions.
Severe congestion thus occurs at LOS F. The color table at left summarizes the “freedom of movement” associated with all six levels.
The levels of traffic used to evaluate LOS represent a particularly busy time of day during a busy day of the year.

Year 2023 traffic conditions were evaluate on the existing FM 2288 intersections and for the rural highway segment between Grape Creek and San Angelo.
The busy signalized intersection at US 67 operates at LOS C.
The stop controlled interchange with US 87 frontage roads operates at LOS B.
The two-way stop intersection at FM 853 Arden Road operates at LOS A overall.
Other one-way stop intersections along the corridor generally operate at LOS A.

The rural two-lane highway between Grape Creek and San Angelo operates in the range of LOS A near Grape Creek, to LOS C north of FM 853 Arden Road.
This variation is due to increasing levels of traffic from Grape Creek to San Angelo, and the presence of many side road intersections on the southern half of the corridor.



Future year 2050 traffic conditions were evaluate on the existing FM 2288 intersections and for the two-lane rural highway segment between Grape Creek and San Angelo to illustrate how traffic growth will impact traffic operations.
The results of this evaluation are shown on the left as the “No Build” alternative, which shows what happens if no improvements are made to the existing corridor.
The busy signalized intersection at US 67 become saturated and operates at LOS F.
The stop controlled interchange with US 87 frontage roads operates at LOS F.
The two-way stop intersection at FM 853 Arden Road operates at LOS F, as well as the local one-way stop intersections with many minor streets and driveways up and down the corridor.

The rural two-lane highway between Grape Creek and San Angelo operates in the range of LOS C near Grape Creek, to LOS D north of FM 853 Arden Road.
However, the level of traffic growth makes it difficult to make turns on and off of the highway due to crowding, and FM 2288 through lanes would often be blocked when vehicles stop to make left turns into local streets and driveways.

The middle section of the figure shows the results of an evaluation of the “Build” alternative in which FM 2288 is expanded to a four lane road over the entire length, and median left turn lanes are added for local streets and driveways.
In this scenario, intersection improvements or traffic signals are not added to corridor intersections, so this scenario only measures the benefit of expanding FM 2288 to four lanes with left turn lanes.

Most of the major and many minor intersections still operate at LOS F because of crowded conditions on FM 2288. However, many of the local intersections with less traffic operate at a better LOS because of the added

lanes on FM 2288.
In this scenario, these added lanes dramatically improve the LOS of FM 2288, and the expanded four-lane rural highway operates at LOS A.

The right section of the figure re-evaluates critical intersections along the corridor by making minor road improvements like adding turn lanes, or by installing a traffic signal rather than having stop signs.
With added turn lanes, the busy signalized intersection at US 67 operates at LOS D under much higher future traffic. The intersection with the US 87 frontage roads operates at LOS C if traffic signals are installed without adding pavement width or more turn lanes.

The FM 853 Arden Road intersection operates at LOS B if a traffic signal is installed. In fact, a traffic signal is currently being designed by TxDOT for this location independently of this proposed project.
Other intersection treatments were evaluated for minor streets and driveways intersecting FM 2288. The driveway intersection to HEB at Grand Court Road improves to LOS C after adding a traffic signal. Though not a part of this project, TxDOT will continue to monitor traffic operations along FM 2288 in the future, and may add traffic signals or other intersection improvements to restore good traffic operations as issues arise. In fact, traffic signals have already been evaluated at several locations along the study corridor.

As was the case in the Build scenario without intersection improvements, the rural four-lane highway segment with these improvements will continue to operate at an excellent LOS A, ensuring good corridor traffic performance in 2050.

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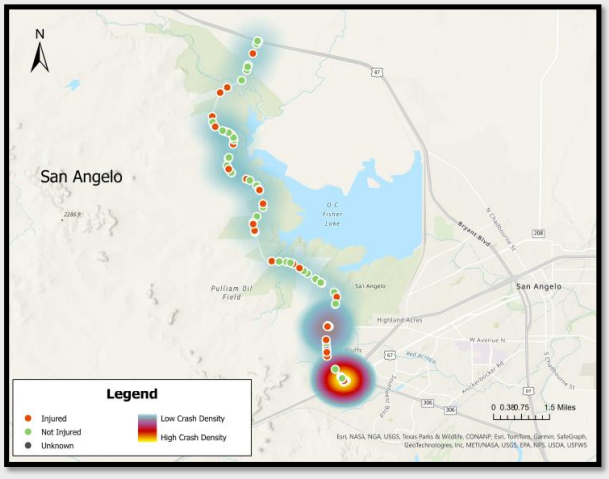
Corridor Crash Locations

5-year (2019-2023) Crash Locations and Density

- Highest concentrations at San Angelo major intersections
  - FM 853 Arden Road
  - US 67 Sherwood Way
- Moderate concentrations occur:
  - Inside Grape Creek
  - Along highway curves
  - At rural intersections
- Injury crashes are minor, possible or severe injuries, no fatal crashes occurred.



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The map to the right shows where crashes that occurred between 2019 and 2023 were concentrated. The largest concentrations of crashes are shown in red and orange on the map, while lesser concentrations are shown in yellow and low concentrations in blue.

The largest concentration of crashes on FM 2288 has occurred at the intersections of FM 853 and US 67 Sherwood Way. The second highest concentration happens at rural intersections and along highway curves.

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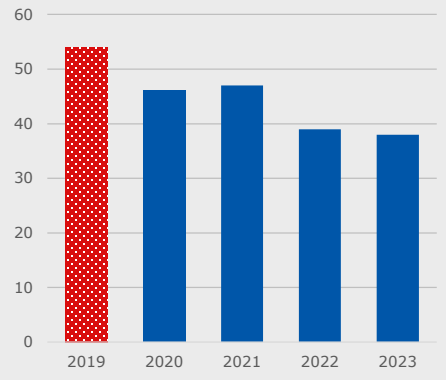
Crash Characteristics (2019-2023)

Annual Number of Crashes



Portion of Crashes by Collision Type

	Number of Crashes	Percentage of Crashes
Left Turn	42	19%
Angle	59	26%
Head On	6	3%
Rear End	58	26%
Sideswipe	9	4%
Single Vehicle	50	22%

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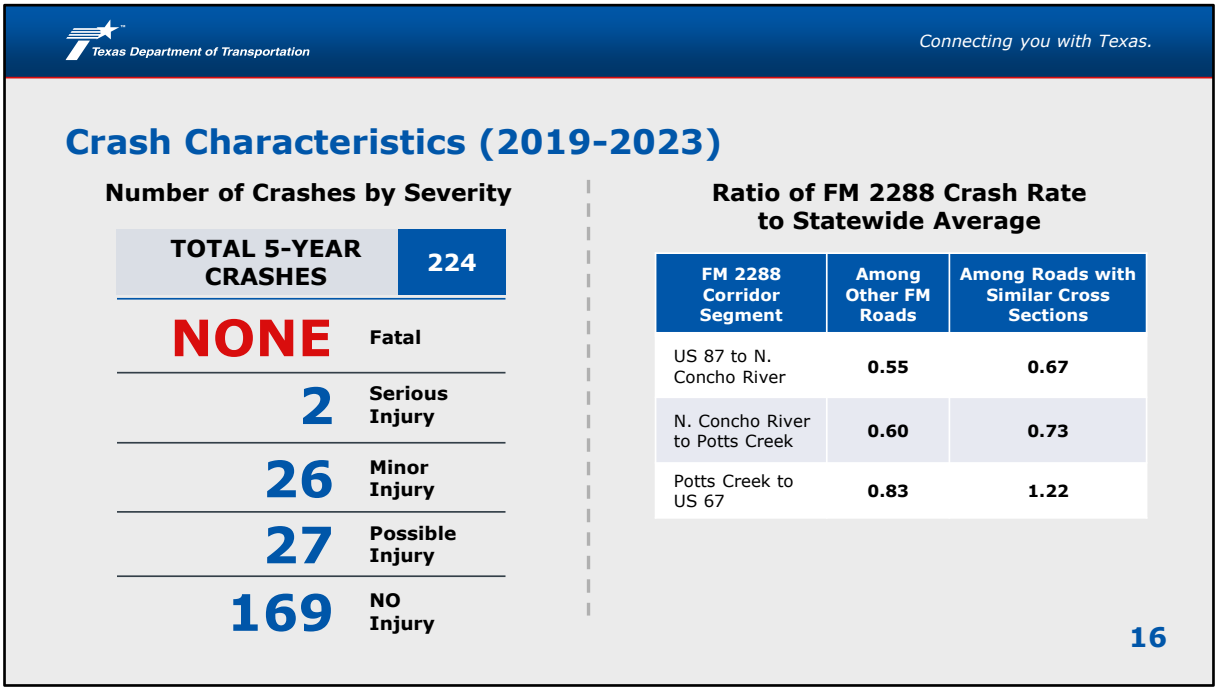
This slide shows the annual number of crashes for the years 2019-2023.

In 2019, there were 54 crashes along the corridor. That number has declined in recent years with 46 in 2020, 47 in 2021, 39 in 2022 and 38 in 2023. Rear end collisions and angle crashes make up the highest percentage of crashes along the corridor at 26% each, followed by single vehicle crashes and left turn crashes.



A total of 224 crashes were reported between 2019 and 2023. 2 of those were reported as serious injury, 26 reported as minor injury, 27 reported as possible injury, and 169 reported as no injury. No fatal or severe-injury crashes have occurred during these five years.

Roadway crash experience is evaluated by comparing the rate of crashes to other similar types of roadways. The table on the right shows the ratio between the FM 2288 crash rate and the statewide average crash rate for other Farm to Market Roads, and for other two or four lane highways throughout the state. Because the ratio is slightly greater than one north of North Concho River and substantially greater than one south of Potts Creek, there is a need to evaluate and implement safety improvements along these sections of FM 2288.

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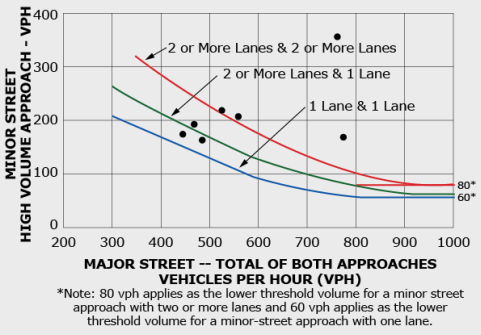
Arden Rd – Traffic Signal Warrant Analysis

Warrant	Description	FM 2288 at FM 853 Arden Road
Warrant 1A	Eight Hour Vehicular Volume-Minimum Vehicle Volume	**Satisfied**
Warrant 1B	Eight Hour Vehicular Volume - Interruption of Continuous Traffic	Not Satisfied
Warrant 2	Four Hour Volumes	**Satisfied**
Warrant 3	Peak Hour	Not Satisfied
Warrant 4	Four Hour Pedestrian Volume	Not Satisfied
Warrant 4	Peak Hour Pedestrian Volumes	Not Satisfied
Warrant 5	School Crossing	NA
Warrant 6	Coordinated Signal System	NA
Warrant 7	Crash Experience	**Satisfied**
Warrant 8	Roadway Network	NA
Warrant 9	Near a Grade Crossing	NA



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The study team noted traffic delay issues and higher crash experience at the intersection of FM 2288 and FM 853 Arden Road.

The intersection is currently controlled by stop signs on the Arden Road approaches to the intersection, and the signs are supplemented by flashing warning beacons.

TxDOT initiated an evaluation to determine whether a new traffic signal could improve intersection performance.

Traffic signals can only be installed pending an evaluation of traffic signal warrants.

Warrants involve a quantitative evaluation of eleven conditions in nine categories that could justify installation of a traffic signal. These conditions include traffic volume, delay, pedestrians, school crossings, railroad crossings, crash experience and other considerations to cover all the bases.

As shown in the table on the left, the intersection was found to meet three warrants that include:

Warrant 1A; exceeding a certain traffic magnitude in the eight busiest hours of the day,

Warrant 2; exceeding a higher traffic magnitude during the four busiest hours of the day, and

Warrant 7: by the total number of crashes in the three previous years of collision types that could be reduced in the future if a traffic signal were installed.

As on example, the graph on the right shows the minimum traffic threshold lines for Warrant 2 - the four-hour traffic volume warrant – and black dots identifying how many hours exceed the minimum threshold. The graph shows that the four-hour warrant was actually satisfied for seven hours.

Based on the warrants that were met, TxDOT has initiated a separate project to design and install a traffic signal at this location, independent of the FM 2288 corridor project.

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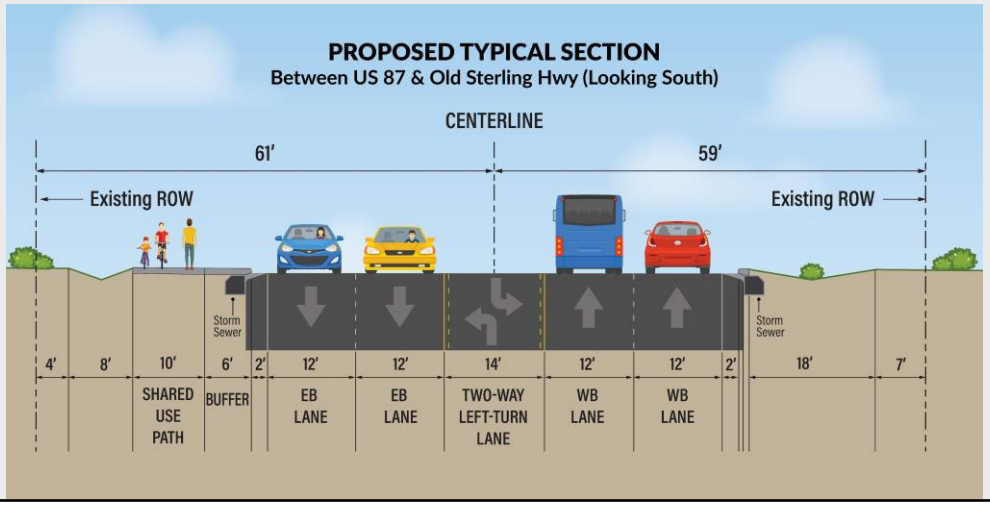
Proposed Typical Sections



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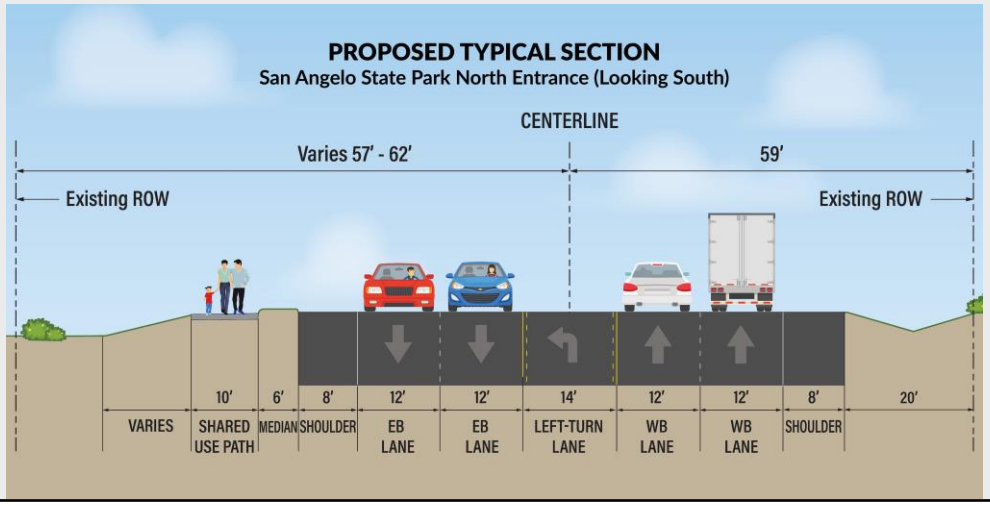
We will now go over the proposed improvements throughout the FM 2288 corridor.

On this slide we show the proposed roadway typical section between US 87 & Old Sterling Hwy.

Proposed Typical Sections



On this slide we show the proposed roadway at the San Angelo State Park North Entrance.

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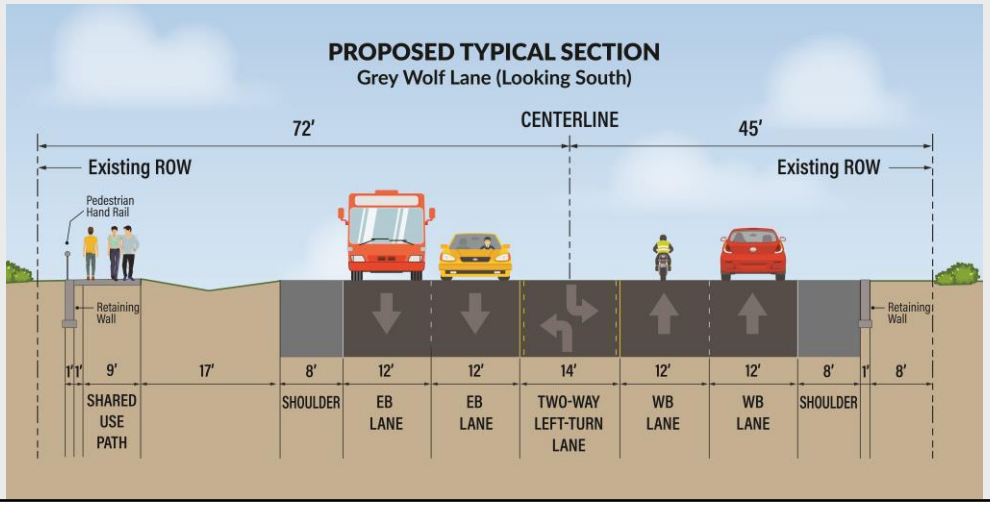
Proposed Typical Sections



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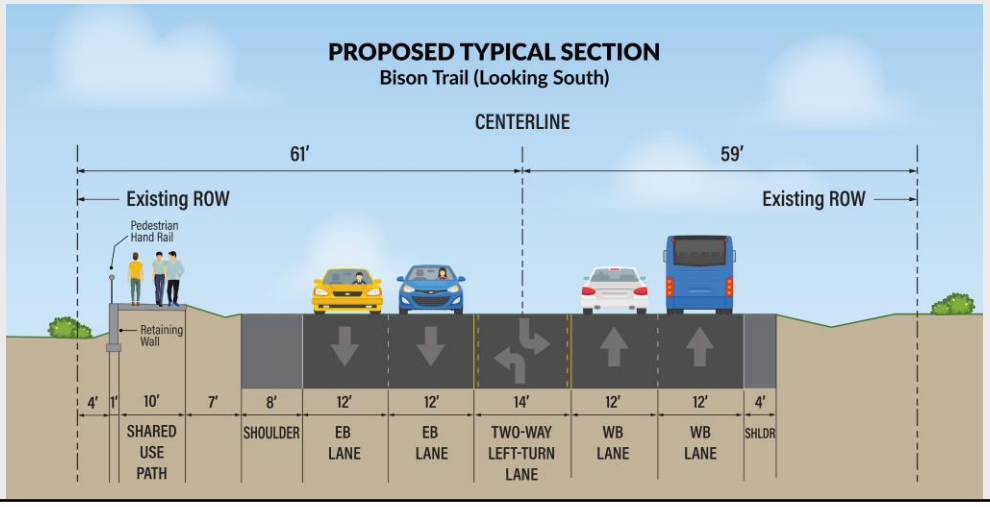
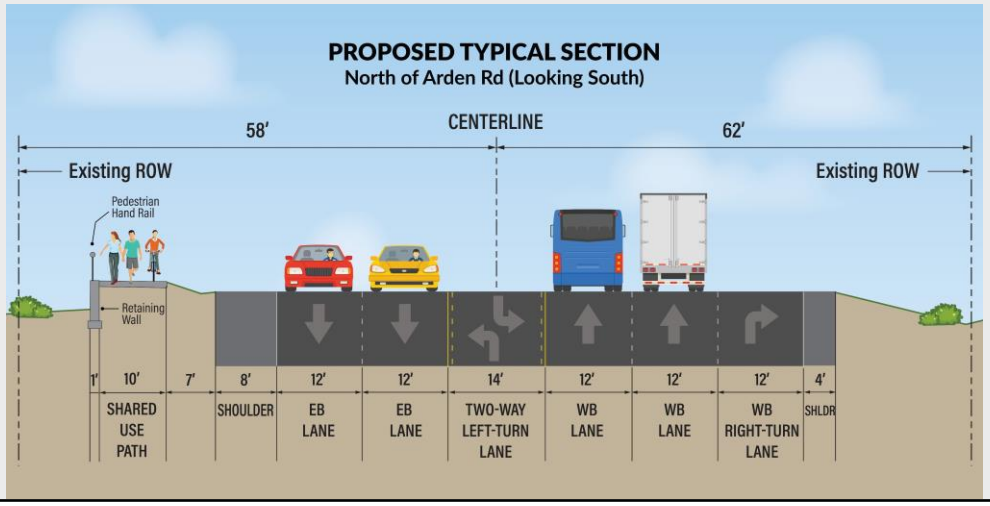
On this slide we show the proposed roadway at Grey Wolf Lane.

Proposed Typical Sections



On this slide we show the proposed roadway at Bison Trail.

Proposed Typical Sections



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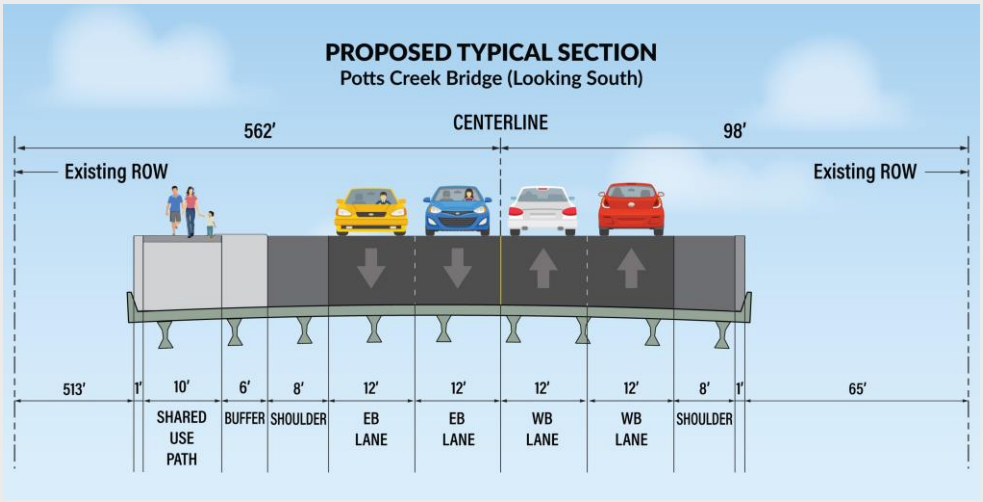
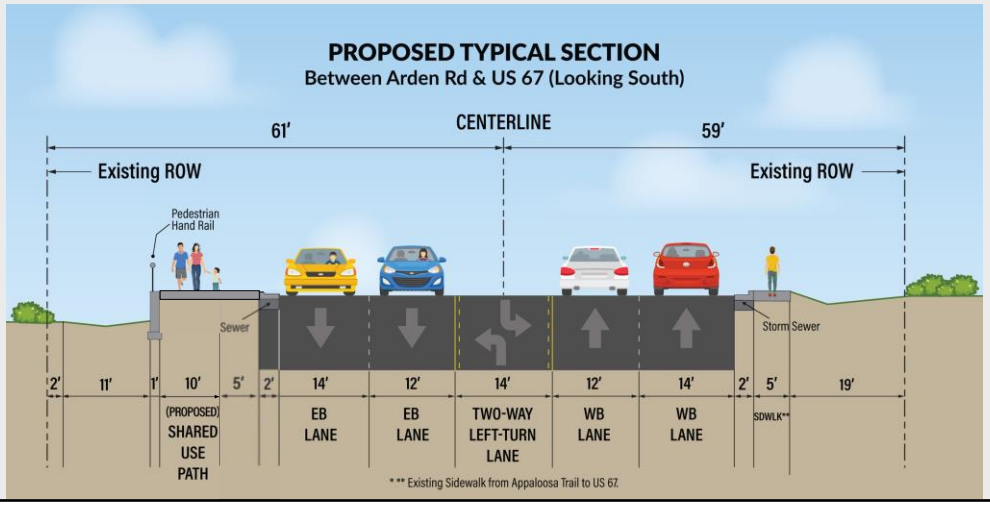
On this slide we show the proposed roadway North of Arden Road.

Proposed Typical Sections

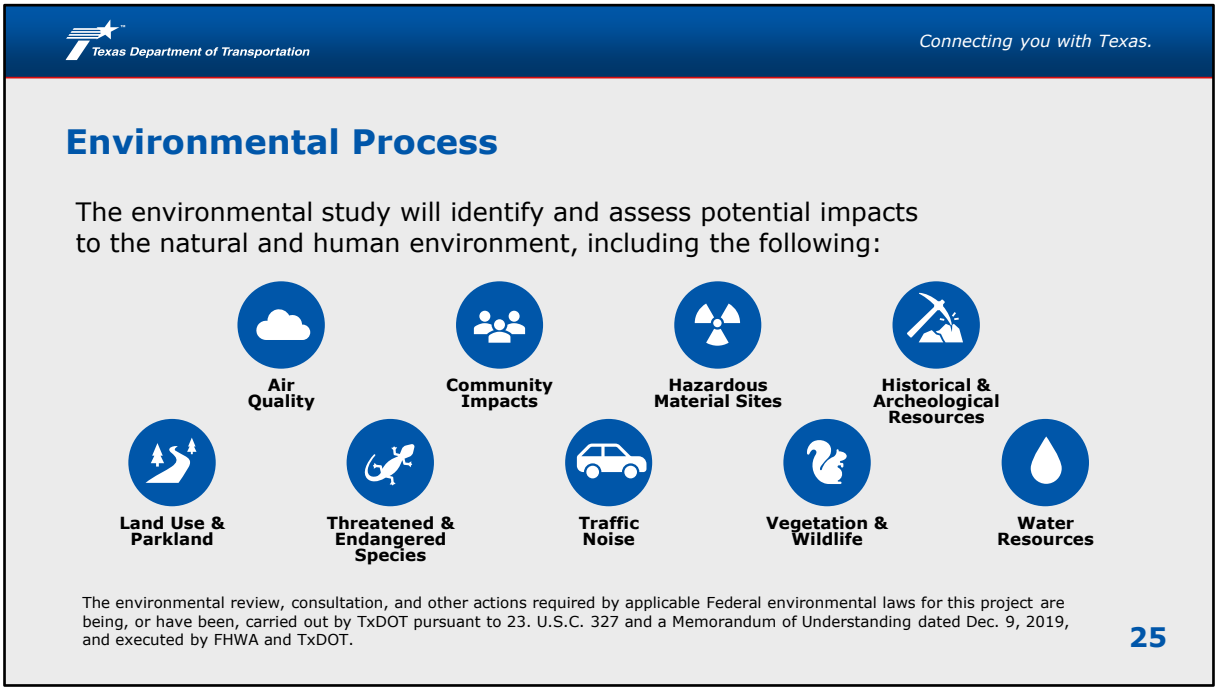


On this slide we show the proposed roadway at the new Potts Creek Bridge.

Proposed Typical Sections



On this slide we show the proposed roadway between Arden Road and US 67. Please note, that the only difference here from the existing roadway is the added Shared Use Path, all other elements are an existing condition.



As part of this project, environmental studies will be conducted as part of the National Environmental Policy Act, also known as "NEPA" *(pronounced Nee-pah)* process. During the environmental study process, the project team will identify the need and purpose for improvements, examine project alternatives and potential environmental impacts.

The environmental study will identify and assess potential impacts to the natural and human environment, including:

- Air quality
- Community impacts
- Hazardous material sites
- Historical and archeological resources
- Land use and parkland
- Threatened and endangered species
- Traffic noise
- Vegetation and wildlife and
- Water resources

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Right of Way (ROW)

Potential ROW acquisitions to accommodate right turning lanes at residential communities are being considered for the proposed project.*

All ROW acquisition would be completed in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

For more information, please see the Landowner's Rights Publications at www.txdot.gov, keyword search "landowner rights."

*Currently under evaluation upon further schematic and drainage studies and public input.

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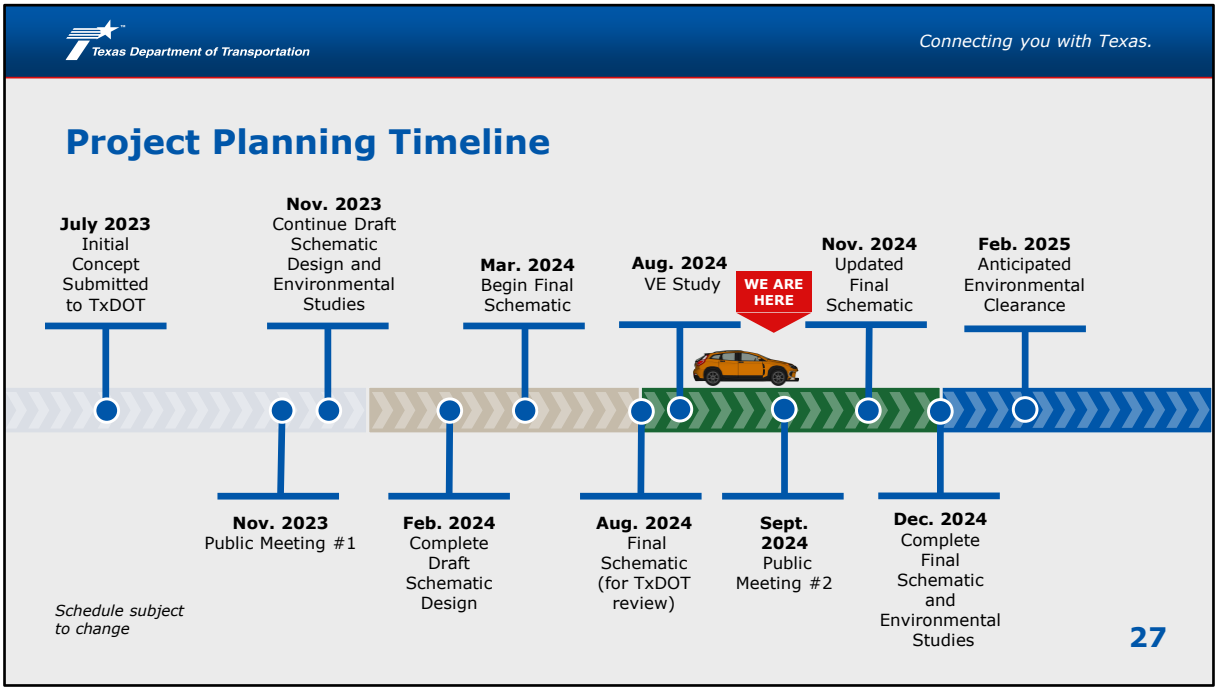
Potential right-of-way acquisitions are being considered for this project, but are currently under evaluation based on drainage studies, further schematic design and public input.



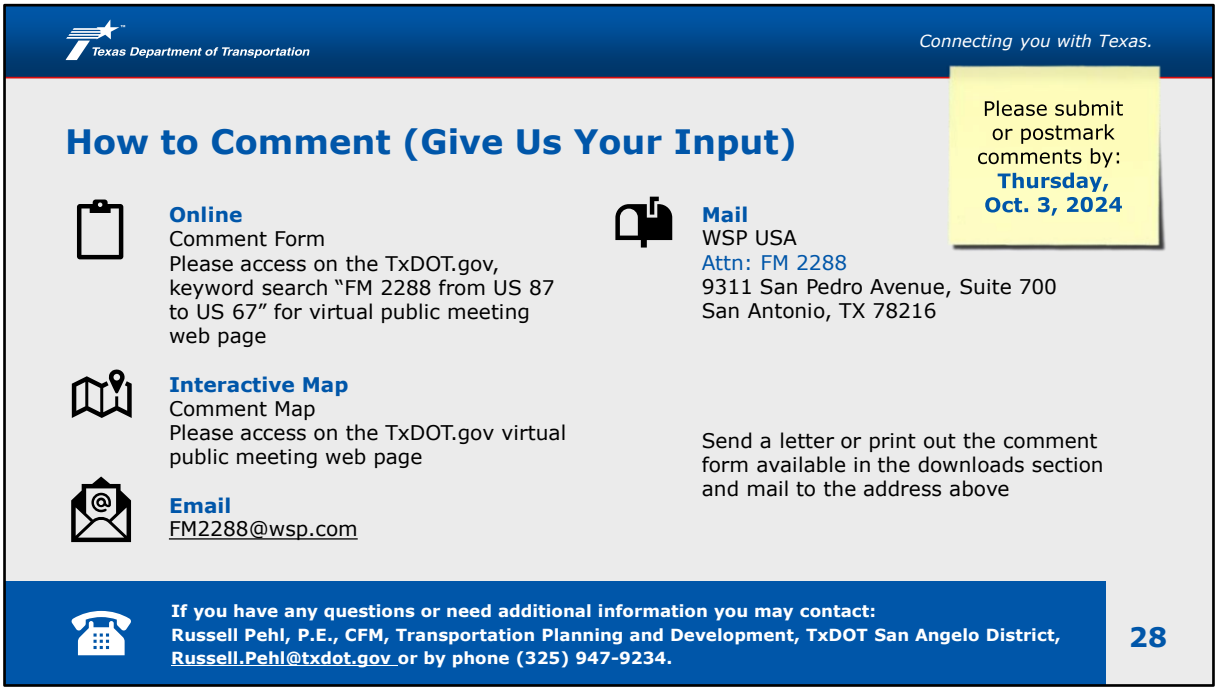
This figure represents the FM 2288 project's anticipated timeline.

This timeline shows that we are in the process of updating the final schematic.

TxDOT is hosting this public meeting to receive feedback and input from the community on the proposed improvements along the corridor. In 2023, we made a commitment to return to the community during the study process to present updates on the project. Currently, TxDOT anticipates schematic design to be complete by the end of 2024.

All construction funds have not been identified and are contingent upon approval by the Texas Transportation Commission in the future.

Please note this schedule is subject to change.



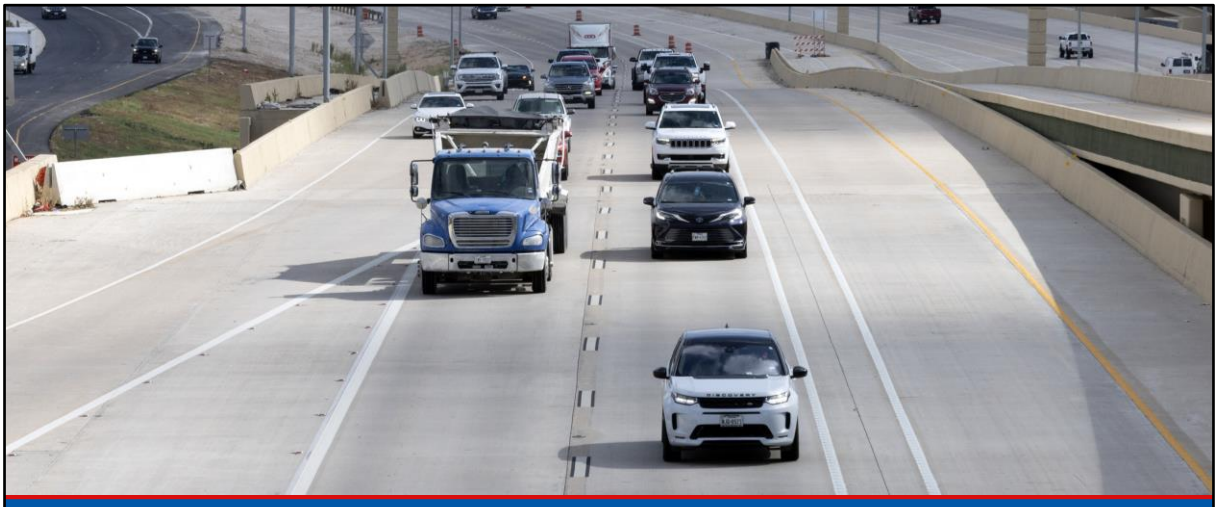
The primary objective for this public meeting is to engage the community at the start of the project, providing you with an opportunity to ask questions and give the project team valuable feedback and comments on the FM 2288 as a potential improvement project. To ensure we collect your input we have several options for how you can provide feedback:

- All methods for providing comments are available on the project website.
  - Go to www.txdot.gov; and either keyword search FM 2288 from US 87 to US 67 or click - Explore Projects-Hearings, Meetings and Notices Schedule
  - Look for this meeting in the Schedule
  - Click on the Description link ("FM 2288 from US 87 to US 67 ") and
  - Find Meeting Materials section
- In the meeting materials section, you will see links to comment via an online comment form, download a comment form to print and mail or access our interactive comment map.
- If you would like to mail in your comments, please send those to the WSP USA Office located at 9311 San Pedro Avenue, Suite 700, San Antonio, Texas 78216.
- Or you may choose to email your comments to **FM2288@wsp.com (*that's* F-M-2-2-8-8@W-S-P - dot - C-O-M)**
- This presentation, along with all of the other project information such as displays and comment forms are available at this public meeting can be found at **www.TxDOT.gov** with a keyword search for "FM 2288"

For your comments to be included in the official record, your feedback must be received by one of the

methods on or before **Thursday, October 3, 2024.**

Moving forward if you have any questions or wish to obtain updates on the project, we encourage you to visit the **TxDOT.gov** (*that's* T-X-D-O-T-dot-G-O-V) website to learn more. If you have any questions or need additional information please contact, Russell Pehl with the TxDOT San Angelo District Office for Transportation Planning and Development. He can be reached via email at Russell.Pehl@txdot.gov (that's R-U-S-S-E-L-L-dot-P-E-H-L at T-X-D-O-T-dot-G-O-V) or by phone at (325) 944-1501.



FM 2288 Project Public Meeting

From US 87 to US 67, CSJ: 2141-02-016

Texas Department of Transportation

September 18, 2024

Thank you for joining us for the FM2288 from US 87 to US 67 virtual public meeting!