



STATION 1: WELCOME & SIGN-IN

Welcome to the Virtual Public Meeting for BUS 77 from Farm-to-Market (FM) 507 to FM 510 in Cameron County, Texas. My name is Chris Mundie, and I am the Project Consultant Engineer for the project, and I will guide you through this interactive public meeting.

If you have questions about using this format, please contact Gilysa Garcia at (737) 272-6777 for assistance.

This virtual public meeting has been designed to mirror a traditional public meeting, while giving you a chance to experience this meeting from the comfort and safety of your own home. You will have the opportunity to learn about the proposed project by reviewing several exhibit boards. Opportunities to provide comments will be available throughout this virtual meeting room.

Let's begin with an orientation of this virtual room format. At the top left of the screen is an orange box with a dropdown menu that provides an outline of the stations in the room. At the top right there is a map of the room. If you do not see a rectangular layout, click the map icon. The numbered stations on this map align with the numbers on the dropdown menu. The blue station numbers highlighted on the map indicate which station you are currently viewing. At any time, you can use this map to move from station to station or orient yourself in the room.

At the bottom of the screen, you will see several icons. The first icon to the left, labeled as the letter "i" will give more information about how to navigate around the room and what the different buttons do. The next icon to the right, shown as a "www" will take you to the TxDOT project website which includes all the materials you will see here today in the meeting. The middle icon shows you a map of the project area and where it is in the region. Next you see plus and minus icons that can be used to zoom in and out, respectively, at any time. We have included a HELP button you may click any time. There is a comment icon in the right bottom corner of the screen. You can leave a comment in any station by clicking this button. Also, there is a pause and play button near the bottom of the screen which allows you to play and pause the narration. Finally, to move forward one station, click the arrow on the right-hand side of the screen. To move backward, click the arrow on the left-hand side of the screen. You can view all stations as many times as you'd like as well as replay any narration as many times as you'd like.

Now let's look at Station 1, beginning with the boards. First, we have the welcome board; to zoom in on each board simply click the icon that looks like an eye. Once you are finished viewing an item, just press the "X" in the top right-hand corner to exit. You can also click the icon on the right to download the board and view it as a PDF and then print or save it to your device. You will see the same icons for all exhibits and handouts in the room. The second board in this section talks about ending deaths on Texas highways.

November 7, 2000 was the last deathless day on roadways in Texas. That means for nearly 22 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 under the influence of alcohol or drugs. So please do your part and share this message with your friends and family.

Now, moving down to the table – the first piece of paper on the table is where you sign in for the meeting. Please provide your contact information, so that we can keep you informed as the project progresses. We encourage all visitors to sign in. To do so, just click the pen icon under the box labeled "Sign-In." The second paper to the right is the project fact sheet, which provides the most up to date project information. Click on the down arrow icon to download the project fact sheet.



When you are finished viewing the materials at this station either click the arrows on the right-hand side of the screen or select Station 2 from the map at the top right corner of the screen, in order to advance.

STATION 2: PROJECT BACKGROUND

As we start this next station remember to click on the eye icon beneath each board as I talk about it to see the additional information presented on each topic.

Station 2 provides a project overview board and a board with the goals and objectives of the proposed project.

Board 1

The BUS 77 project area is within the cities of Harlingen and San Benito in Cameron County, Texas. The proposed project limits extend from FM 507 in Harlingen to FM 510 in San Benito. The project length is approximately 7.05 miles.

Board 2

The goals and objectives of this project are to: improve roadway safety, enhance mobility, reduce traffic congestion, add lane capacity, and improve accommodations for bicycles and pedestrians.

When you are finished viewing the boards, please advance to Station 3.

STATION 3: TRAFFIC AND SAFETY

As we start this next station remember to click on the eye icon beneath each board as I talk about it to see the additional information presented on each topic.

Station 3 provides information and data from the safety evaluation performed by the Texas A&M Transportation Institute (TTI) for the BUS 77 corridor.

Board 1

The third station provides information and data from the safety evaluation performed by the Texas A&M Transportation Institute (TTI) for the BUS 77 corridor from FM 507 to FM 510. The purpose of this evaluation was to assess safety conditions in the existing corridor and identify potential safety issues which could be improved should raised medians be installed in the BUS 77 corridor.

The TTI report was prepared in March of 2020, and analysts used historical crash records from 2010 to 2019 in the TxDOT/Department of Public Safety Crash Records Information System to examine roadway safety for BUS 77. The crash heat map shown in the upper left corner of the slide shows high crash areas are primarily found in the most urbanized parts of the corridor within both Harlingen and San Benito.

The crash rate comparison in the upper right of the slide compares crash rates for BUS 77 with statewide average crash rates for state highways and high-volume undivided roadways. Crash rates in the figure present the crash rate (in industry-standard format) as the number of annual crashes occurring per 100 million vehicle miles of travel on a given section of roadway. The annual crash rate is above the statewide average for urban state highways and similar to the statewide average for high-volume undivided roadways. The 2019 crash rate was calculated using the 2018 average annual daily traffic volume on BUS



77 of 30,789 vehicles per day. Current traffic analysis for BUS 77 from E Washington Ave to Line M Road (FM 510) forecasts average daily traffic of 34,450 vehicles per day in 2028, increasing to 46,825 vehicles per day in 2048.

The severity of crashes from 2010 to 2019 is shown in the lower left figure. Sixty-five (65) percent of crashes had no injuries, 25 percent had possible injuries, and 8 percent involved non-incapacitating injuries. Unfortunately, 29 suspected serious injury and 3 fatality crashes occurred.

Another interpretation of roadway crash data involves categorizing the crash data based on where the crashes occur in relation to intersection locations. The figure in the bottom right shows how many crashes occurred at intersections, near intersections, at driveways between intersections, or along BUS 77 at mid-block locations (not at an intersection or driveway). As shown in the pie chart, 553 crashes at intersections, 652 crashes near intersections, and 345 crashes at driveways account for approximately 70 percent of the crash events.

Board 2

The top large figure on the left shows centerline crashes, which are crashes involving a vehicle crossing over the centerline of the roadway. These crashes are a focused interest in this case since centerline crashes not occurring at signalized intersections are those that can be directly addressed and mitigated by the raised median treatment proposed for BUS 77. Examples include left-turning vehicles into driveways or minor streets, left turns out of driveways or minor streets, and vehicles from driveways or minor streets crossing BUS 77. Of the total 2,198 crashes occurring along BUS 77 between FM 507 and FM 510 from 2010 to 2019, 456 or 20.7 percent were centerline crashes. Should raised medians be installed, all such crashes could be removed since their associated crash types, which tend to be more severe head-on, right angle and turning angle crashes, would be prevented by the raised median between signalized intersections. On average, 46 crashes per year could be prevented with raised median implementation.

The top right figure shows centerline crash by location. BUS 77 centerline crashes occur quite differently compared to other types of crashes when looking at their occurrence relative to signalized intersections in the corridor. Analyses of centerline crashes categorically exclude the crashes that occur at signalized intersections since left turn and crossing maneuvers at signals are managed and controlled by the signal itself. As a result, centerline crashes occur at unsignalized intersections and driveway access points. Of the 456 centerline crashes from 2010 to 2019, approximately 93 percent occurred at driveway access points and unsignalized intersection and intersection related locations.

The bottom right figure shows the severity of centerline crashes along BUS 77 from 2010 to 2019. Of the 453 crashes, 1 percent of crashes involved suspected serious injuries, 9 percent involved non-incapacitating injuries, 23 percent involved possible injuries, and 66 percent of crashes had no injuries.

Board 3

The Federal Highway Administration generally defines a traffic conflict as an event involving two or more road users, in which the action of one user causes the other user to make an evasive maneuver to avoid a collision. Conflicts are vehicle interactions which can lead to accidents. This slide is a schematic diagram of conflict points between a center two-way left turn lane (TWLTL) and raised median. The total conflict points for a four-lane road with two lanes in each direction and two-way left turn lane in the center are 11 versus only 2 for the same roadway with a center raised median installed. The 2020 TTI safety evaluation for BUS 77 found the installation of a raised median on BUS 77 would reduce the total number of conflict points along the BUS 77 study corridor from 4,753 to 1,150 – a reduction of approximately 76 percent – without elimination or consolidation of a single driveway.

Click on the link next to this board to watch a video of examples of centerline crossover near miss crashes.



When you are finished viewing the boards and video, please advance to Station 4.

STATION 4: EXISTING CONDITIONS

As we start this next station remember to click on the eye icon beneath each board as I talk about it to see the additional information presented on each topic.

There are two boards at Station 4 that show the existing typical sections for the project.

Board 1

The existing BUS 77 consists of both six-lane and four-lane sections within the project limits and serves as a principal arterial roadway providing mobility and access to residences, businesses and schools, and linking the roadway network to other urban areas.

The six-lane roadway section extends from approximately E Jefferson Avenue to State Loop (SL) 499 and consists of three 12-foot-wide travel lanes in each direction, separated by a continuous 16-foot-wide center two-way left turn lane. The existing right-of-way width varies from 100 feet to 120 feet.

Board 2

The existing four-lane section extends from SL 499 south to the ending project limit at FM 510. The existing four-lane roadway consists of two 12-foot-wide travel lanes in each direction with 10-foot-wide paved outside shoulders, and 16-foot-wide center two-way left turn lane to separate directions of travel. The existing right-of-way width is 120 feet.

When you are finished viewing the boards, please advance to Station 5.

STATION 5: PROPOSED IMPROVEMENTS

As we start this next station remember to click on the eye icon beneath each board as I talk about it to see the additional information presented on each topic.

Station 5 provides information on the proposed improvements to BUS 77.

Board 1

The proposed roadway from approximately E Jefferson Ave to SL 499 would consist of two 12-foot-wide and one 11-foot-wide travel lane in each direction, separated by a 14-foot-wide raised median. Five-foot-wide sidewalks would be constructed on each side of the roadway, offset one foot from the curb. A total of 0.03 acres of additional right-of-way is anticipated for the proposed improvements.

Board 2

The proposed roadway section from SL 499 to FM 510 would provide three 12-foot-wide travel lanes in each direction, separated by a 14-foot-wide raised median. A six-foot-wide sidewalk would be offset 1.5 feet from the southbound outside travel lane, and 10-foot-wide shared use path constructed 5.5 feet from the outside northbound travel lane. A total of 3.20 acres of additional right-of-way is needed to accommodate these proposed improvements.

When you are finished viewing the boards, please advance to Station 6.



STATION 6: SCHEMATICS

Station 6 includes a table showing the proposed schematic of the proposed improvements. Click on the eye button on top of the table to view the schematics in more detail. You can zoom in and out by using the “+” and “-” signs at the bottom of the screen for a closer view of the area. You can move to different areas of the schematics by clicking and dragging your mouse left or right. Click the down arrow to download the schematics and view it as a PDF and then print or save it to your device. This item may take a while to download due to its size.

When you are done reviewing the maps, please proceed to Station 7.

STATION 7: ENVIRONMENTAL PROCESS

As we start this next station remember to click on the eye icon beneath each board as I talk about it to see the additional information presented on each topic.

Station 7 includes a board summarizing the environmental process and maps showing environmental constraints along the project corridor.

Board 1

In compliance with the National Environmental Policy Act (NEPA) and other federal and state environmental regulations, the environmental process would include an evaluation of potential environmental impacts to the natural and human environment, including, but not limited to: air quality, traffic noise, social and community impacts, hazardous materials, biological resources, water resources, historic and archaeological resources.

Board 2

This board shows the environmental constraints within the BUS 77 study area. The study area is outlined by a green dashed line where the proposed improvements are being considered. Environmental constraints were identified within 300 feet on each side of BUS 77 and mapped on current aerial photography. Constraints include waterbodies, floodplain, and various land uses such as churches, commercial, residential, and schools. These constraints were taken into consideration when developing the project design. Please proceed to the next slide to view the rest of the environmental constraints.

When you are finished viewing the boards, please advance to Station 8.

STATION 8: ANTICIPATED PROJECT TIMELINE

As we start this next station remember to click on the eye icon beneath each board as I talk about it to see the additional information presented on each topic.

Station 8 provides information about the anticipated project timeline for the BUS 77 project and information on the Right of Way Acquisition process. Please note the timeline schedule is subject to change.

Board 1

This board shows the anticipated project timeline. The proposed project is currently at the Virtual Public Meeting with In-Person option part of the timeline. Final schematic development and environmental documentation are anticipated for mid-2024. Following the final schematic development and environmental documentation a public hearing is anticipated to gather input from the public in mid to late 2024. The final project schematic development and environmental clearance are anticipated to be finalized by late 2024. Right of way acquisition is anticipated in early 2025.

Board 2



The Right-of-Way Acquisition Process will follow federal and state laws and policies. The Uniform Relocation Assistance and Real Property Acquisitions Policy Act of 1970, known as the Uniform Act, is the federal law that is followed for appraisals, negotiations, and relocation of families and/or businesses. Hard copies of the Right of Way Brochures and Property Owner's Bill of Rights will be available at the Right of Way table at the In-Person public meeting and are also available at www.txdot.gov.

Texas Department of Transportation (TxDOT) is the agency responsible for acquiring the additional right of way from the individual property owners for the project. TxDOT will acquire all real property in accordance with the provisions of Title III of the Uniform Act and its associated federal regulations (49 CFR Part 24). All negotiations for right of way conducted are subject to this law and these regulations. Relocation booklets, which provide a general overview of the Relocation Assistance Program and outlines the services offered and any payments for which displaced individuals, families, business, and non-profit organizations may be eligible to receive are available for download on the TxDOT website address listed.

Information about the benefits, services and Right of Way Acquisition schedule can be obtained by calling the TxDOT District Office at (956) 702-6287.

When you are finished viewing the boards, please advance to Station 9.

STATION 9: PUBLIC COMMENT PROCESS

This is the final station of the virtual public meeting. The board provides directions for submitting comments.

If you didn't already do so, please add your contact information to the sign-in sheet at Station 1 to receive updates as they are made available. To view any of the meeting materials you saw here today, simply go to www.txdot.gov and search "BUS 77 FM 507 to 510" at the top right of the webpage. Your input is important to us. As shown on the board, comments can be submitted online by using the comment button at the bottom right of this virtual public meeting room. In addition, comments can be emailed to Cynthia Gonzales at Cynthia.Gonzales@txdot.gov, or comment forms can be downloaded and mailed to: TxDOT Pharr District Office, Attn: Cynthia Gonzales, 600 W. Interstate 2, Pharr, TX 78577.

Looking at the table at this station in the virtual room there are three items. The first item on the left is a comment card. Click on the pen button to leave an electronic comment or click on the down arrow to download the comment card. You can send this card in via mail to the address shown on the board next to the table or send via email. The next item to the right is a file for download that contains all the materials presented at the virtual meeting. This item may take a while to download due to its size. The last item is a link to the TxDOT Right of Way brochures.

All comments must be received or postmarked by Thursday, November 9, 2023 to be included in the official meeting documentation. Please contact Isaac Garza, P.E., TxDOT Project Manager at 956-702-6248 or email Isaac.Garza@txdot.gov for any project related questions. Comments can be made regarding the project at any time during the project development process but will not be included in the official Public Meeting record if not received within the comment period.

We thank you for taking the time to participate in this virtual public meeting. This concludes the virtual public meeting.