



#### US 380 Denton County Feasibility Study

From I-35 to Collin County Line CSJs: 0135-10-061, 0135-10-062, 2250-02-022 Denton County, Texas

> Public Meeting #3 Nov. 30, 2021 – Dec.17, 2021

| Prosper ISD Children's Health Stadium - |
|---|
| Community Room                          |
| 2000 Stadium Dr.                        |
| Prosper, TX 75078                       |
| Tuesday, Nov. 30, 2021                  |
| 6-8 p.m. Open House                     |

Denton Civic Center 321 E McKinney St. Denton, TX 76201 Thursday, Dec. 2, 2021 6-8 p.m. Open House

#### **Frequently Asked Questions**

| Contents   |
|--|
| Question #1: Why is the project needed?  |
| Question #2: What is the purpose of the study?   |
| Question #3: What is a feasibility study?2   |
| Question #4: Why is the study being conducted?   |
| Question #5: What is the study area?   |
| Question #6: What will be evaluated in this feasibility study?   |
| Question #7: What type of improvements will this study evaluate?   |
| Question #8: What is the feasibility study timeline?   |
| Question #9: What is the difference between the in-person and virtual public meeting?4                     |
| Question #10: When will construction begin?  |
| Question #11: TxDOT already has an in-progress project on US 380. Why does something else need to be done? |
| Question #12: What is the in-progress project?5  |
| Question #13: Why is TxDOT building a project if it cannot handle the future traffic needs?5               |
| Question #14: Why did TxDOT pick the Blue alternative as their recommendation?6                            |
| Question #15: How will the recommended Blue alternative help make the road safer?                          |





| Question #16: Why are two alternatives (Blue and Teal) proposed?7                                  |
|--|
| Question #17: Why is TxDOT recommending the teal alternative for future study?7                    |
| Question #18: What does level of service mean?7  |
| Question #19: Why does the recommended Blue alternative propose widening on one side vs the other? |
| Question #20: When will there be evaluations for air and noise?                                    |
| Question #21: How has the public been involved throughout this feasibility study?                  |
| Question #22: How has public input altered project planning?                                       |
| Question #23: How can I provide comments regarding the Study's recommendations?9                   |

#### Question #1: Why is the project needed?

The US 380 Denton County Feasibility Study is being conducted to identify long-term solutions for alleviating traffic congestion along US 380 in preparation for a continuously growing population and increased development within Denton County.

### Question #2: What is the purpose of the study?

The purpose of this study is to analyze potential alternative alignments for a limited access facility, including the existing alignment and new alignments, for US 380 & Loop 288 from I-35 to the Collin County line within Denton County. This limited access facility would be a new freeway with six to eight mainlanes and four to six frontage road lanes.

The study is anticipated to recommend a solution that has both regional and local benefits. One or more recommended alignments would enhance regional connectivity by providing an east-west connection serving Collin and Denton Counties. Locally, a recommended alignment would help provide reliable travel time and minimize congestion, enhance driver expectations, minimize human and environmental impacts, and provide roadway network reliability.

This study assumes that the grade-separated improvements to <u>US 380 from Loop 288 to west of</u> <u>CR 26 project</u> to be considered as the No-Build (do nothing) scenario. We refer to the grade separation project as the "in-progress project." See Question #11 for more information about the in-progress project.

### Question #3: What is a feasibility study?

A feasibility study is one planning tool that TxDOT uses when a project is in the very early stages of development. It helps determine if the project should move on to more advanced phases of project development such as more in-depth environmental analysis, public involvement, schematic design, and right-of-way mapping.





The reason this type of study is done is to identify high level or critical elements of engineering, impacts to stakeholders and the public, and the economic feasibility of potential new roadways or improvements to existing roadways.

Feasibility studies are not intended to result in detailed design, environmental analysis, or cost estimates.

#### Question #4: Why is the study being conducted?

#### The County is growing...

The population of Denton County is projected to grow from approximately 906,000 people (2020 census) to over 1.3 million people in 2045 according to the North Central Texas Council of Governments (NCTCOG).

#### More and more land in Denton County is being preserved for developments.

The study team is working with Denton County and cities in the study area to identify land that has been purchased and right of way that is preserved for existing or future planned residential or commercial development. As the county's population grows, the options to build a new roadway or expand US 380 become more limited and potential impacts to residential and commercial developments increase. Between 2015 and 2021, over 20,000 acres of farmland, ranch land, timberland, and vacant land has been converted to single family or commercial use in the study area. The feasibility study will identify a roadway alignment or alignments to serve as a blueprint to begin preserving land now.

#### Question #5: What is the study area?

The US 380 Denton County Feasibility Study limits include US 380 from I-35 to the Collin County line. The study area includes the area north and south of US 380 and includes the cities of Denton, Frisco, Aubrey, Krugerville, and Celina, and the towns of Little Elm, Prosper, Cross Roads and Providence Village.

#### Question #6: What will be evaluated in this feasibility study?

The study team will consider projected regional traffic, existing and planned developments, stakeholder input and the impact on the economy and environment.

#### Question #7: What type of improvements will this study evaluate?

This study will assess the feasibility of various transportation improvements including:

- Improving the existing facility
- Adding a new urban arterial roadway
- Upgrading to a controlled access facility
- Providing high speed connection to Loop 288

The improvements under consideration will address both existing and future (2045) transportation needs within the corridor.





### Question #8: What is the feasibility study timeline?

Spring-fall 2018: Data collection Fall-winter 2018: Initial alternative alignments January 2019: Public Meeting #1 Spring 2019-summer 2020: Conceptual alignments December 2020: Public Meeting #2 Winter 2020-fall 2021: Alignment refinement Nov. 30-Dec. 17, 2021: Public Meeting #3 Winter 2021-spring 2022: Final report \*Please note that the schedule is subject to change.

### Question #9: What is the difference between the in-person and virtual public meeting?

TxDOT is conducting both an in-person and online virtual public meeting. The same information will be available at both the in-person and virtual meetings. The in-person meeting will be held at 6 p.m. on Nov. 30, 2021 in Prosper and at 6 p.m. on Dec. 2, 2021 in Denton and will be an open house format where the public may come and go at their convenience. A pre-recorded video will be available for viewing. TxDOT staff will be available to answer questions and take comments.

The virtual meeting can be viewed beginning at 6 p.m. on Tuesday, Nov. 30, 2021 through 11:59 p.m. on Friday, Dec. 17, 2021. The virtual public meeting materials will be posted to the project website at <a href="http://www.keepitmovingdallas.com/US380DentonPM3">http://www.keepitmovingdallas.com/US380DentonPM3</a> and will consist of the same pre-recorded video presentation and exhibits that were presented at the in-person meetings. The virtual public meeting is not a live event. More information about the meetings including how to submit comments can be found <a href="http://www.keepitmovingdallas.com/US380DentonPM3">http://www.keepitmovingdallas.com/US380DentonPM3</a> and will consist of the same pre-recorded video presentation and exhibits that were presented at the in-person meetings. The virtual public meeting is not a live event. More information about the meetings including how to submit comments can be found <a href="http://www.keepitmovingdallas.com/usa800">http://www.keepitmovingdallas.com/usa800</a> and will consist of the same pre-recorded video presentation and exhibits that were presented at the in-person meetings. The virtual public meeting is not a live event. More information about the meetings including how to submit comments can be found <a href="http://www.keepitmovingdallas.com/usa800">http://www.keepitmovingdallas.com/usa800</a> and will consist of the same pre-recorded video presentation and exhibits that were presented at the in-person meetings. The virtual public meeting is not a live event.

### Question #10: When will construction begin?

Should the project proceed and funding is identified, it is anticipated that it may take 10 to 20 years before construction begins and will more than likely be broken into multiple projects due to funding constraints. Before any improvements are made, there are steps that must be taken, such as a more in-depth environmental study and design, right of way acquisition, cost estimating, and utilities coordination.





# Question #11: TxDOT already has an in-progress project on US 380. Why does something else need to be done?

Currently TxDOT is working on widening US 380 from four to six lanes with raised medians between the intersection of US 377/US 380 and CR 26 (Collin County Line) and adding grade separated overpasses constructed at the intersections of FM 720, Legacy Drive, Teel Parkway, Navo Road and FM 423. These improvements are TxDOT's only planned improvements between now and the year 2045. Although these improvements accommodate the traffic volumes that exist today; they will not accommodate projected traffic volumes in the NCTCOG 2045 horizon year forecast and result in congestion three times worse than the existing congestion. The in-progress project is intended to help alleviate traffic today but given the expected continued increase in traffic, a long-term solution needs to be identified.

#### Question #12: What is the in-progress project?

The in-progress construction project involves widening US 380 from 4 to 6 lanes between US 377 and CR 26 (Collin County Line) with grade separations at FM 423, FM 720, Navo Rd, Teel Pkwy, and Legacy Dr. as well as improved sidewalks and continuous lighting. US 380 between Loop 288 and US 377 will received raised medians with left and right turn lanes. This project will help increase capacity along US 380 and will create a pedestrian friendly corridor with safe access to businesses and schools. Construction on the in-progress project will begin in January 2022 and is expected to be complete by 2025.

For more information about the in-progress project, please visit http://www.keepitmovingdallas.com/projects/us-highways/us-380-from-loop-288-to-west-of-cr-26

## Question #13: Why is TxDOT building a project if it cannot handle the future traffic needs?

The in-progress project was designed for year 2040 traffic projections using historic growth rates prior to 2015. These projections did not anticipate the continuing rapid growth and land use changes along the corridor and within the study area that have taken place over the past few years. While the in-progress project may not be the long-term solution for the corridor, it is anticipated to enhance safety and alleviate traffic congestion in the near-term. The in-progress project on US 380 is expected to add capacity and provide safety enhancements; however, it is not anticipated to address long-term demand for the corridor. Construction for this project is planned to begin in early 2022 and is anticipated to be complete in early 2025, weather permitting.





# Question #14: Why did TxDOT pick the Blue alternative as their recommendation?

Many factors contributed to TxDOT's recommendation, but a significant element was the anticipated delay or forecasted congestion for the US 380 corridor as well as the need to minimize impacts to The United States Army Corps of Engineers (USACE) property. While all the alternatives considered reduced regional delay, the blue alternative did the best to alleviate the future congestion along the existing Loop 288 and US 380 corridors. The table shown illustrates what delay or congestion currently exists along the corridor and what is anticipated by 2045 for different alternatives. As you can see in the 2045 In-Progress row, if no additional improvements are made along the corridor beyond the in-progress project, congestion is anticipated to increase over 200%, making it three times what was experienced in the year 2020.

| ALTERNATIVES         | ANNUAL HOURS<br>OF DELAY | PERCENT INCREASE IN<br>CONGESTION |
|----------------------|--------------------------|-----------------------------------|
| 2020 (EXISTING)*     | 1,346,500                | -                                 |
| 2045 (IN-PROGRESS)   | 4,073,000                | 202%                              |
| 2045 (BLUE)          | 1,513,700                | 12%                               |
| 2045 (PURPLE/YELLOW) | 3,142,600                | 133%                              |
| 2045 (ORANGE)**      | 2,899,500                | 115%                              |
| 2045 (TEAL)          | 2,899,500                | 115%                              |

Overall, you'll notice that the Blue alternative significantly outperformed all other alternatives in the year 2045. The purple, yellow, orange, and teal alternatives were unable to effectively serve travel demand which is concentrated along the US 380 corridor due to the location of development and lack of nearby alternative routes.

### Question #15: How will the recommended Blue alternative help make the road safer?

The Recommended Blue alternative proposes to convert the existing facility to a limited access freeway. The freeway will provide frontage roads for local circulation and mainlanes for longer destination travel. Similar to the in-progress project, grade separations will be proposed at all major intersections. With these changes, it is anticipated to reduce the Loop 288 and US 380 crash rates by 28% and fatal/injury-related crash rates by 46%.

Another aspect of safety is the reliability for police, fire, and emergency medical services to respond to an incident. The recommended Blue alternative is anticipated to minimize future congestion along Loop 288 and US 380 roadways thereby avoiding significant increases to police, fire, and emergency medical service response times.





## Question #16: Why are two alternatives (Blue and Teal) proposed?

Both the Blue and Teal alternatives will be necessary for future growth in the region.

### Question #17: Why is TxDOT recommending the teal alternative for future study?

TxDOT is recommending that the Teal alternative be further evaluated for implementation as it will play an important role in serving future developments north of US 380 within Denton and Collin counties.

### Question #18: What does level of service mean?

Level of service (LOS) is a mechanism used to determine how well a roadway is operating from a traveler's perspective. Typically, six levels of service are defined, and each is assigned a letter designation from A to F, with LOS A representing the best operating conditions, and LOS F the worst.

| Level of<br>Service | Description  |
|---------------------|--|
| A                   | Highest driver comfort;<br>free flowing                      |
| В                   | High degree of driver<br>comfort; little delay               |
| С                   | Acceptable level of driver<br>comfort; some delay            |
| D                   | Some driver frustration;<br>moderate delay                   |
| E                   | High level of driver<br>frustration; high levels of<br>delay |
| F                   | Highest level of driver<br>frustration; excessive delays     |

# Question #19: Why does the recommended Blue alternative propose widening on one side vs the other?

The recommended Blue alternative attempted to avoid and/or minimize impacts to significant infrastructure and environmentally sensitive sites, such as but not limited to, water transmission lines, electrical substations, neighborhoods, parks, schools, as well as the USACE property. As the project advances to the next phase of environmental studies and schematic design, TxDOT will re-evaluate alternatives in greater detail which may lead to changes in the proposed alignment.





# Question #20: When will there be evaluations for air and noise?

As the project advances to the next phase of environmental studies and schematic design, TxDOT will study air quality and noise in detail.

# Question #21: How has the public been involved throughout this feasibility study?

Since October 2018, TxDOT has worked with the public to receive and consider comments regarding the US 380 Denton County Feasibility Study. Between spring and fall 2018, TxDOT collected data on the study area, leading to the development of many initial alternative alignments for US 380 in winter 2018. The first public meeting for the US 380 Denton County Feasibility Study occurred in January 2019. Between spring 2019 and summer 2020, TxDOT worked to narrow the initial alternatives to five conceptual alignments for the project, using public input and stakeholder feedback. In December 2020, a second public meeting was held virtually due to COVID-19. After the second public meeting, TxDOT refined the five conceptual alignments based on additional public input, resulting in a final recommended alignment. Now, we are holding a third public meeting, and the final study report will be completed in spring 2022.

This public meeting is the third public meeting held throughout the study. In-person and virtual options have been offered due to COVID-19 and comments given within 15 days of the meeting will be considered, responded to, and included in the public meeting summary. However, all public comments are welcome throughout the life of the project.

### Question #22: How has public input altered project planning?

Public meeting #1 was held in January 2019 and the public provided input on their concerns about the existing US 380 alignments as well as potential improvements. Over 1,000 comments were received including 901 survey responses. Based on survey feedback, individuals expressed that congestion and safety were of greatest concern. 51% of individuals felt that improving the existing US 380 was the best solution for the area. Lastly, when presented with proposed alignments, 30% favored the existing alignment, and 14% believed the solution was north of the existing alignment. 28% of respondents were not sure what the best solution for the study area is. Using this feedback, TxDOT expanded the study limits north to evaluate additional east to west corridors such as the Outer Loop corridor and develop the conceptual alignments for public meeting #2.

Public meeting #2 was held in December 2020 and the public provided input on the draft conceptual alignments that were presented in the virtual public meeting. Over 400 surveys and over 300 comments were received during the public comment period. Of the 400 survey responses, 72% preferred the blue alignment. Regarding the public's priorities for the project, minimizing human and environmental impacts, congestion, and safety were the three top priorities. And lastly, 68% of survey responses recognized the need for two freeways for the study area and 30% consider the Blue and Teal conceptual alignments the most necessary. Based on





this feedback, TxDOT selected the Blue alignment as the recommended alignment and is recommending the Teal alignment be considered for further evaluation.

### Question #23: How can I provide comments regarding the Study's recommendations?

Comments will be accepted in several ways. You may complete an online comment form, submit a written comment via email to <u>Stephen.Endres@txdot.gov</u>, submit a written comment via US mail to TxDOT Dallas District Office, Attention Stephen Endres, P.E., 4777 E. Highway 80, Mesquite, TX 75150, or leave a verbal comment via voicemail at (833) 933-0439.

Comments must be received or postmarked by Dec. 17, 2021 to be part of the official public meeting record, but comments can be made at any time during the project development process.

Questions on this project may be directed to the TxDOT Project Manager, Stephen Endres, P.E. at <u>Stephen.Endres@txdot.gov</u>.