



Virtual Public Meeting

US 380 Denton County Feasibility Study

US 380 from I-35 to the Collin County Line

December 2, 2020

Denton County, Texas

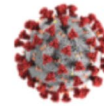




TxDOT changed the in-person public meeting to a virtual format only, in response to the COVID-19 outbreak.

The virtual public meeting and TxDOT website will provide the same information as an in-person meeting would have.

What you should know about COVID-19 to protect yourself and others



Know about COVID-19

- Coronavirus (COVID-19) is an illness caused by a virus that can spread from person to person.
- The virus that causes COVID-19 is a new coronavirus that has spread throughout the world.
- COVID-19 symptoms can range from mild (or no symptoms) to severe illness.



Know how COVID-19 is spread

- You can become infected by coming into close contact (about 6 feet or two arm lengths) with a person who has COVID-19. COVID-19 is primarily spread from person to person.
- You can become infected from respiratory droplets when an infected person coughs, sneezes, or talks.
- You may also be able to get it by touching a surface or object that has the virus on it, and then by touching your mouth, nose, or eyes.



Protect yourself and others from COVID-19

- There is currently no vaccine to protect against COVID-19. The best way to protect yourself is to avoid being exposed to the virus that causes COVID-19.
- Stay home as much as possible and avoid close contact with others.
- Wear a mask that covers your nose and mouth in public settings.
- Clean and disinfect frequently touched surfaces.
- Wash your hands often with soap and water for at least 20 seconds, or use an alcohol-based hand sanitizer that contains at least 60% alcohol.



Practice social distancing

- Buy groceries and medicine, go to the doctor, and complete banking activities online when possible.
- If you must go in person, stay at least 6 feet away from others and disinfect items you must touch.
- Get deliveries and takeout, and limit in-person contact as much as possible.



Prevent the spread of COVID-19 if you are sick

- Stay home if you are sick, except to get medical care.
- Avoid public transportation, ride-sharing, or taxis.
- Separate yourself from other people and pets in your home.
- There is no specific treatment for COVID-19, but you can seek medical care to help relieve your symptoms.
- If you need medical attention, call ahead.



Know your risk for severe illness

- Everyone is at risk of getting COVID-19.
- Older adults and people of any age who have serious underlying medical conditions may be at higher risk for more severe illness.



© 2020 CDC

cdc.gov/coronavirus



1. Inform the public of project status and present recommendations.
2. Describe the project so the public can determine how they may be affected.
3. Provide the public the opportunity to provide input.
4. Develop a record of public participation.



Please submit your comments regarding the design modifications presented in this Virtual Public Meeting by using any of the five methods below by our deadline, **December 17, 2020**.



Survey

Click the provided link on the website



Comment Online

Click the provided link on the website



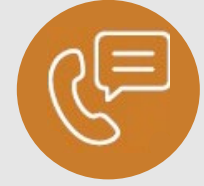
Email Us

Stephen.Endres@txdot.gov



Mail-in Comments

TxDOT Dallas District Office
Attn: Stephen Endres, P.E.
4777 E. Highway 80
Mesquite, TX 75150



Leave a Voicemail

(833) 933-0435

For general questions about the presentation or the project, please contact TxDOT Project Manager, Stephen Endres, P.E. at Stephen.Endres@txdot.gov.

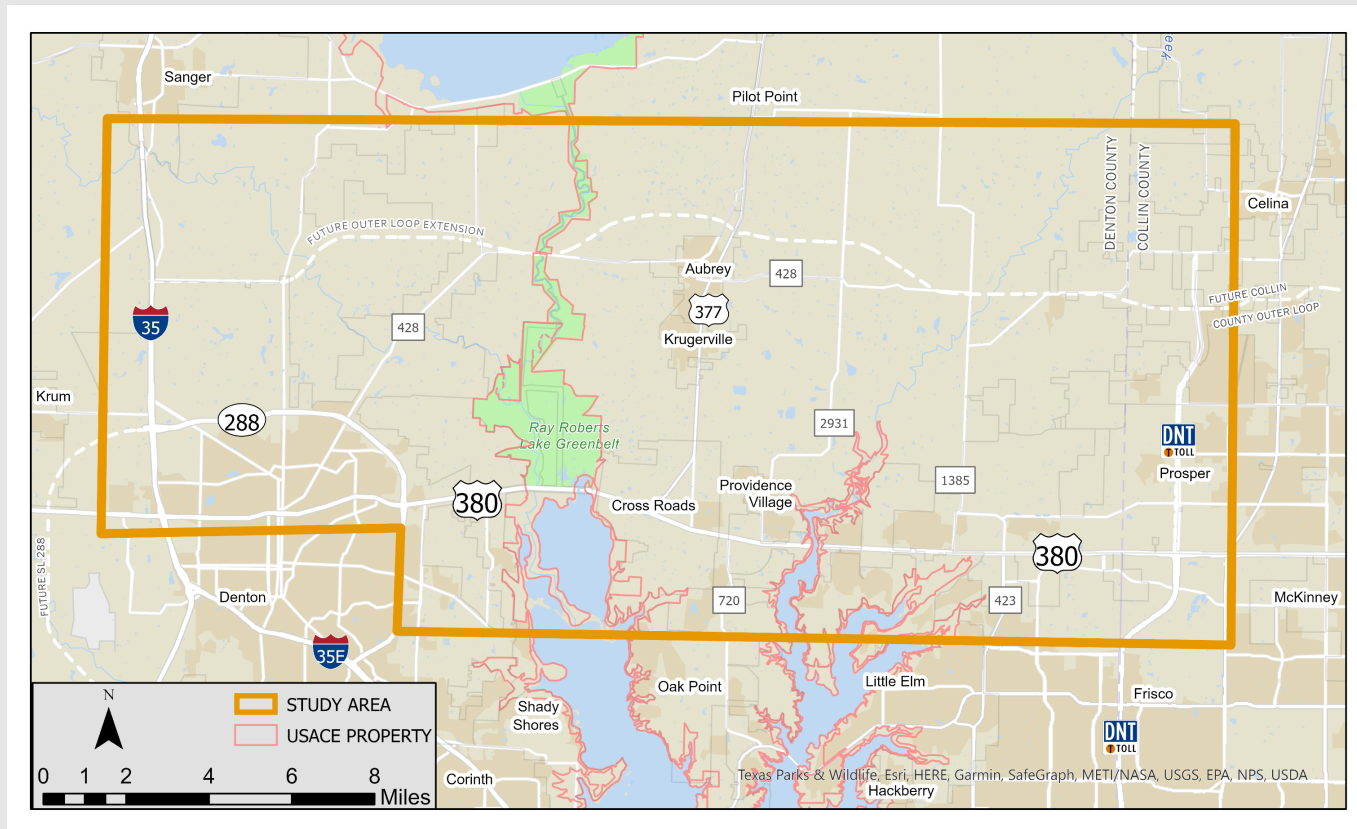


Websites

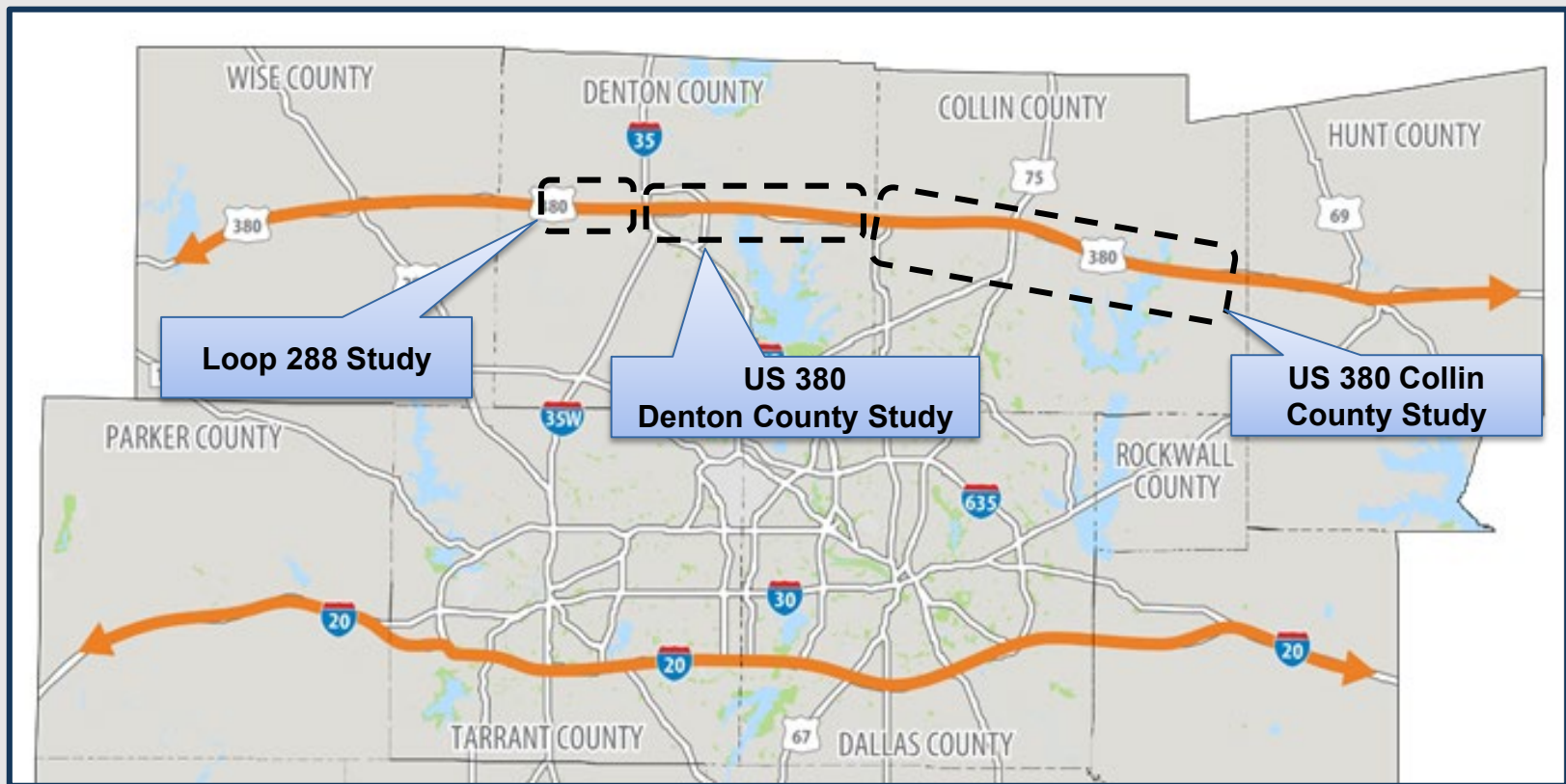
- www.keepitmovingdallas.com/
Under “Public Hearings/Meetings”
- www.Drive380.com
Feasibility Study Website
- <http://www.keepitmovingdallas.com/US380DentonPM2>
Direct site link to the posted materials

US 380 Denton County Feasibility Study

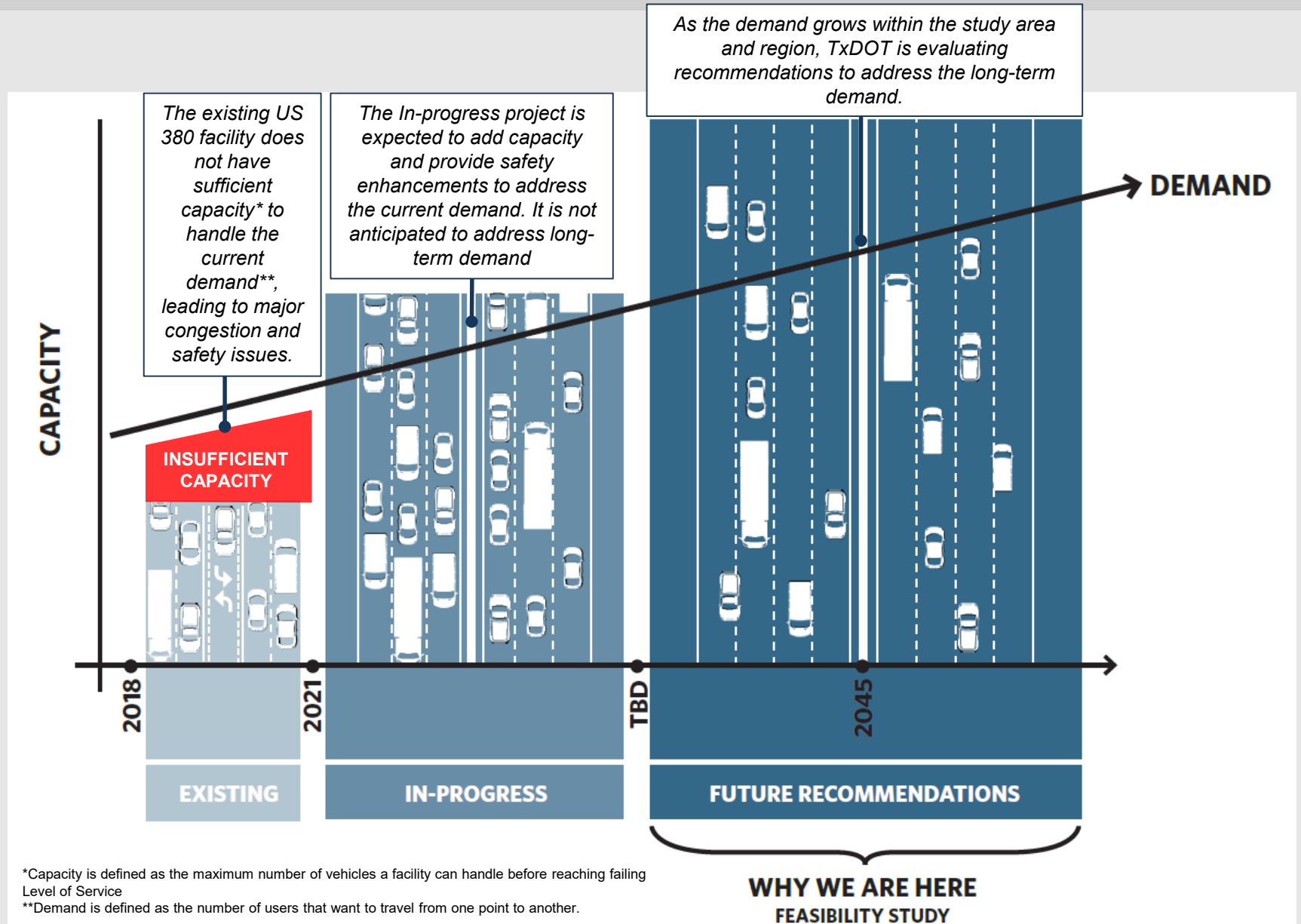
PROJECT LIMITS: From I-35 to the Collin County Line
COUNTY: Denton



- US 380 provides vital connectivity between Collin and Denton counties, similar to I-20 for Dallas and Tarrant counties. Currently, three major studies are working together to improve this connectivity. US 380 Denton County Feasibility Study and two recently completed studies: Loop 288 in Denton County and the US 380 Collin County Feasibility Study.



Purpose of Study



The study is anticipated to recommend a solution that has both regional and local benefits.

Regional



Provide regional connectivity by providing an East-West connection serving Collin and Denton Counties

Local



Provide reliable travel time and minimize congestion

Enhance driver expectations for travel on US 380

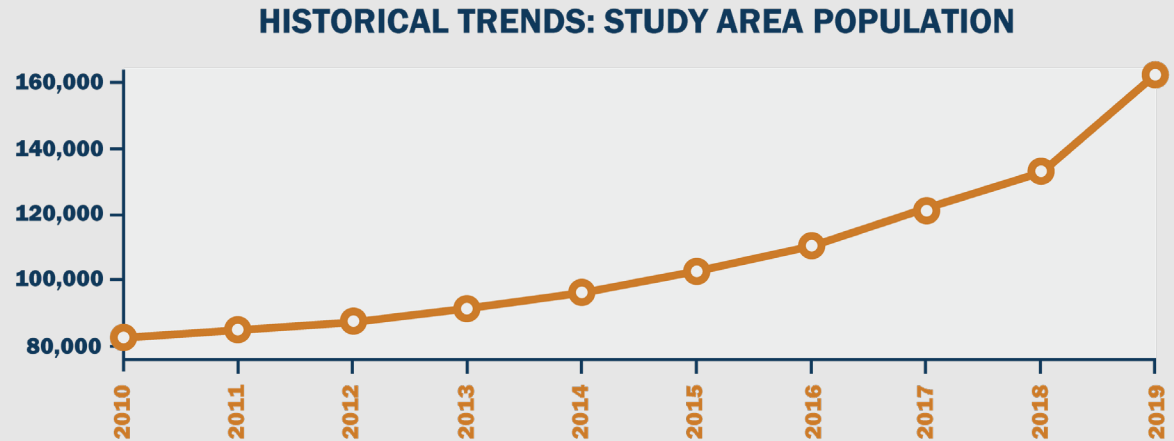
Minimize human and environmental impacts

Provide roadway network reliability



- Multiple cities within the study area have doubled in size over the past 10 years.

CITY	% INCREASE IN POPULATION 2010-2019*
CELINA	122%
PROSPER	160%
FRISCO	60.7%
LITTLE ELM	105.1%
PROVIDENCE VILLAGE	160.8%
AUBREY	87.1%
CROSS ROADS	3.5%
DENTON	26.1%

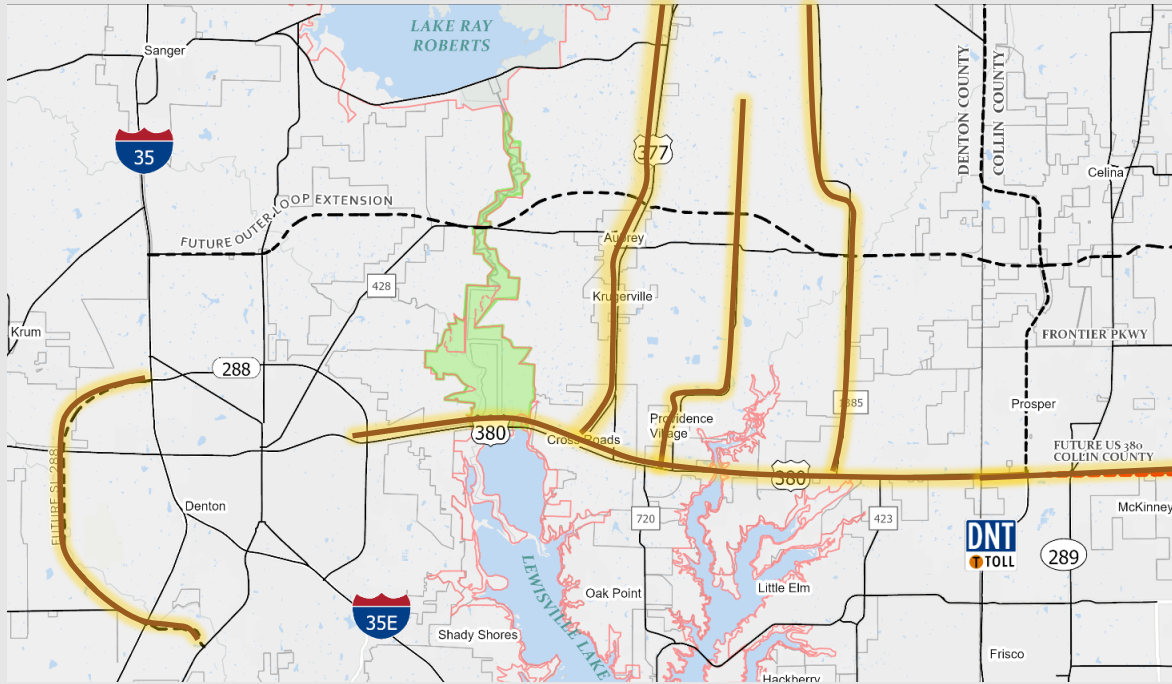


*<https://www.demographics.texas.gov/Data/TPEPP/Estimates/>

Existing Conditions – Planned TxDOT Improvements



TxDOT has several planned improvement projects in the study area, in various phases of completion. These include improvements that will enhance local and regional travel.



ARTERIAL IMPROVEMENTS

US 380
FM 2931
FM 1385
US 377



NEW FREEWAY

US 380 (COLLIN COUNTY)
LOOP 288 EXTENSION



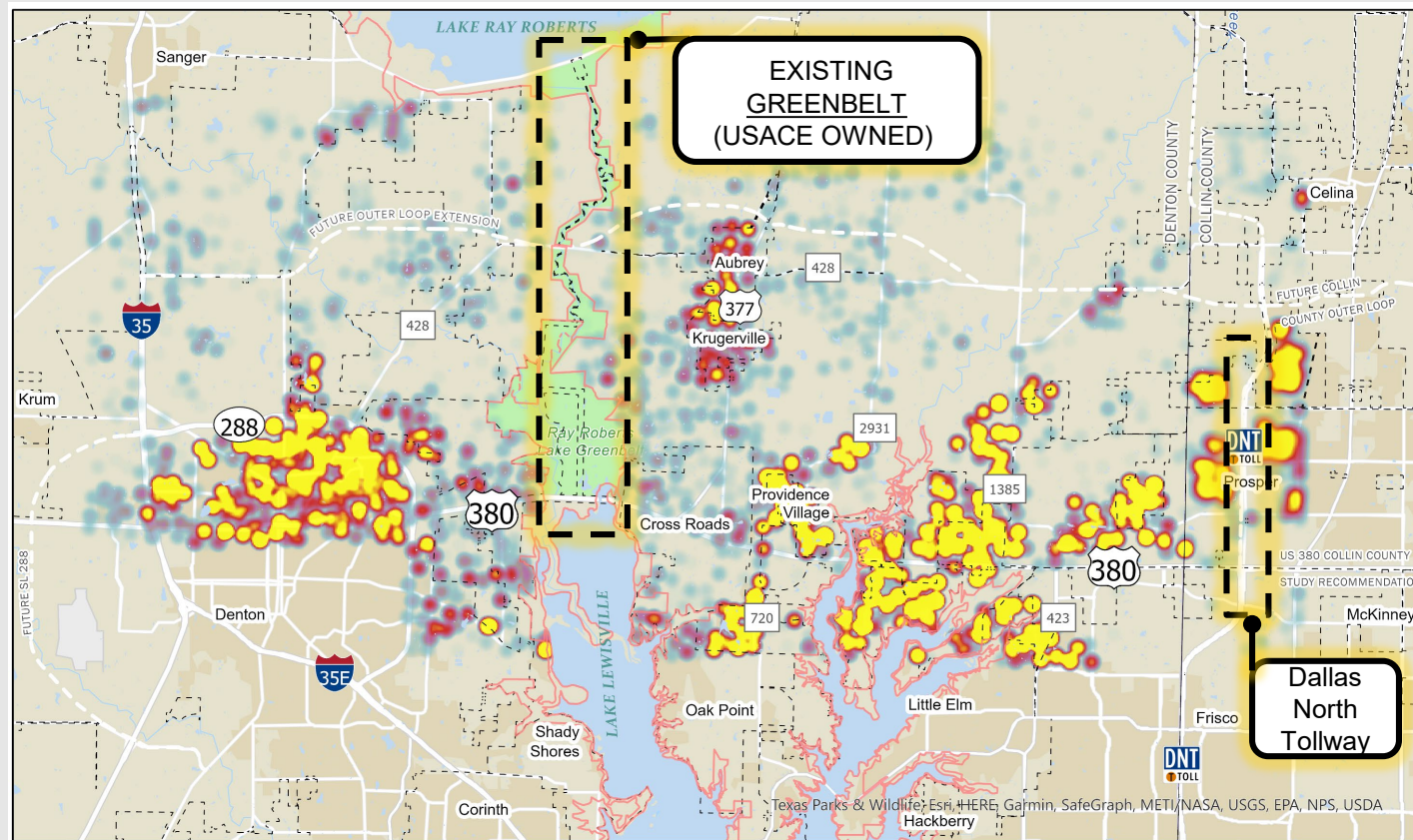
US 380 GRADE SEPARATIONS

FM 720
Legacy Drive
Teel Parkway
Navo Road
FM 423

Study Area Constraints



Environmental resources and current and future development limit opportunities for an ideal roadway grid system. US 380 serves as the primary east-west roadway within the immediate area.



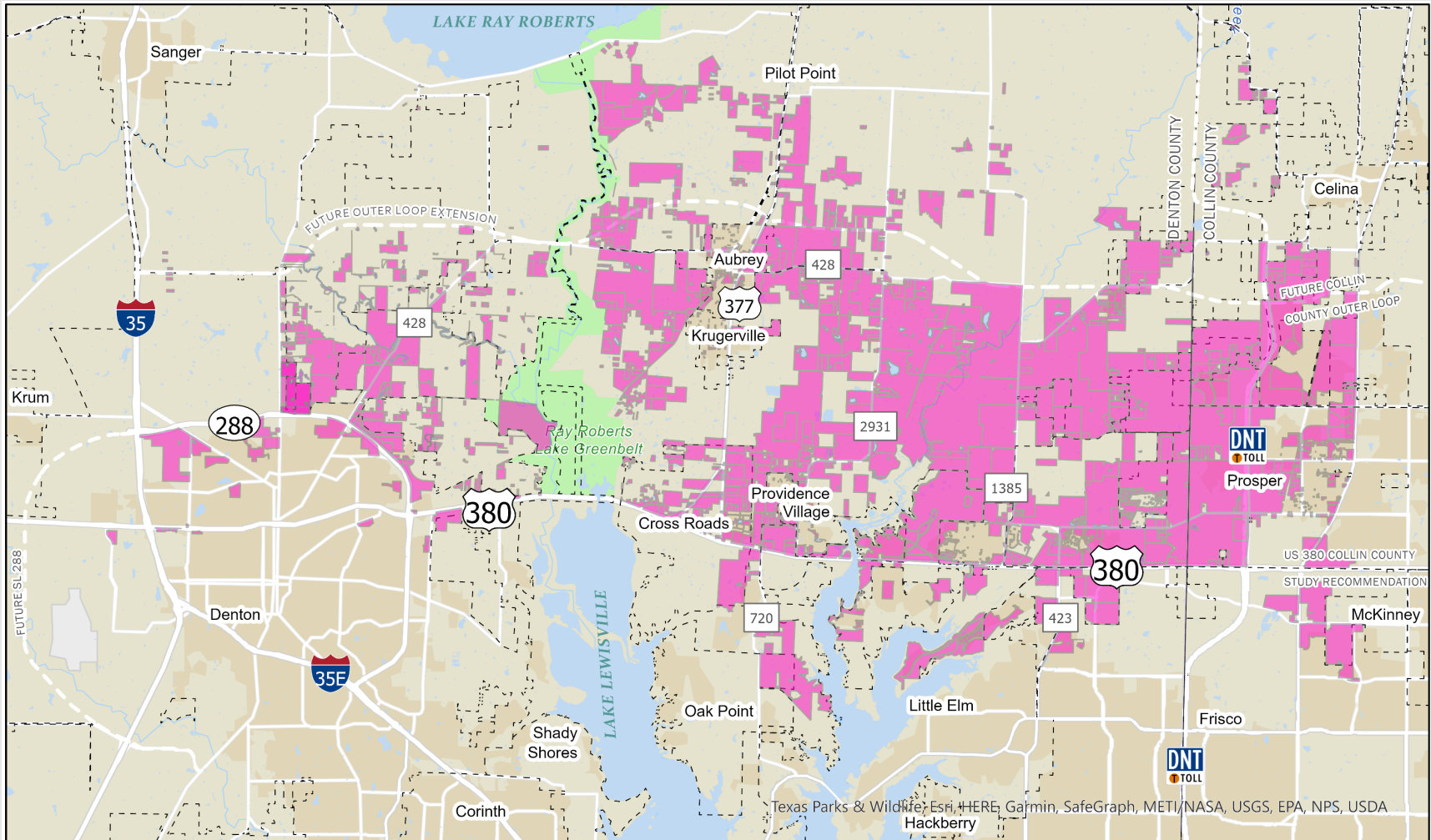
Residential and commercial constraints are shown on the map by density. Blue is less dense, red to yellow is higher density development.

Change in Land Use

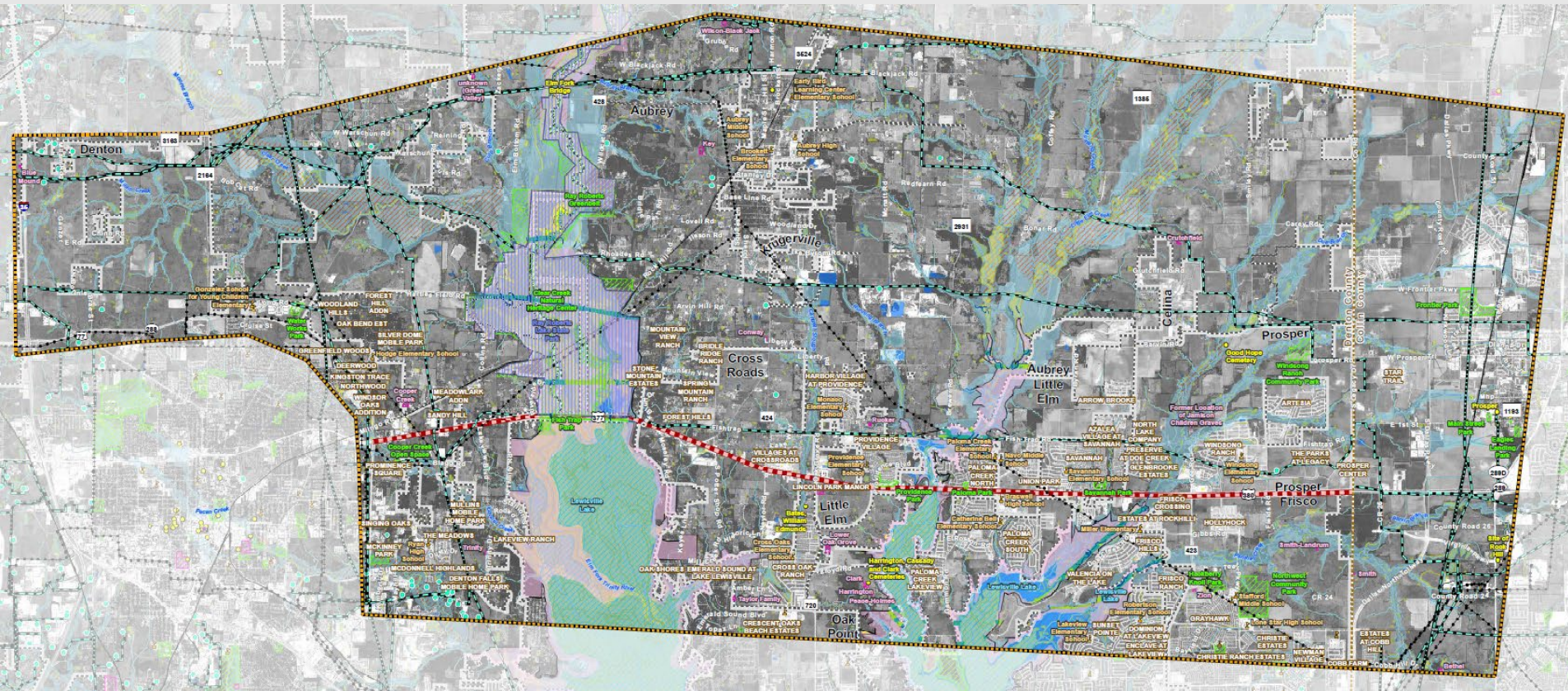


Change in land use from 2015 to 2019 is shown in pink on the map below.

- Over 20,000 acres of farmland, ranch land, timberland, and vacant land has been converted to single family or commercial use.

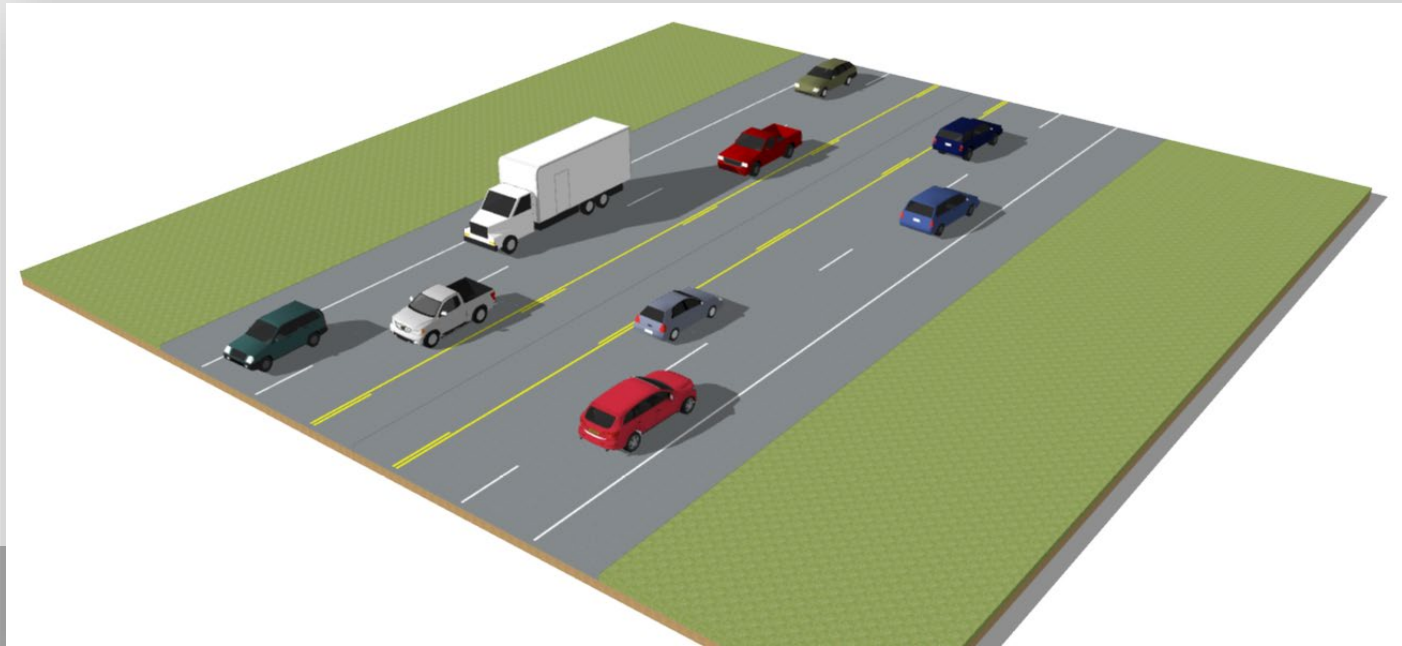


Environmental Constraints



- | | | | | | |
|---------------------------|-----------------------------|---------------------|---------------------------------------|--|--------------------------------|
| Existing US 380 Alignment | Pipeline | NHD Water | National Register Property | Forested Wetland | USACE Wildlife Management Area |
| Study Area | Trails | NWI Wetland | Cemetery | Potential Threatened and Endangered Species Habitat - Forested | |
| City Boundary | Oil/Gas Well | 100-Year Flood Zone | National Register District | Potential Threatened and Endangered Species Habitat - Non-Forested | |
| County Boundary | Park | Designated Floodway | National Register Archeology District | | |
| School | Ray Roberts Lake State Park | USACE Reservoir | LIDAR Verified Streams | | |
| Railroad | NHD Stream | USACE Property | Emergent Wetland | | |
| Transmission Line | | Historical Marker | | | |

FOUR-LANE WITH TWO-WAY LEFT TURN LANE



- Within existing right-of-way
- Continuous access
- 4-6 Lanes - Insufficient capacity for existing traffic
- Rated in engineering terms as an “F” level of service (the worst)

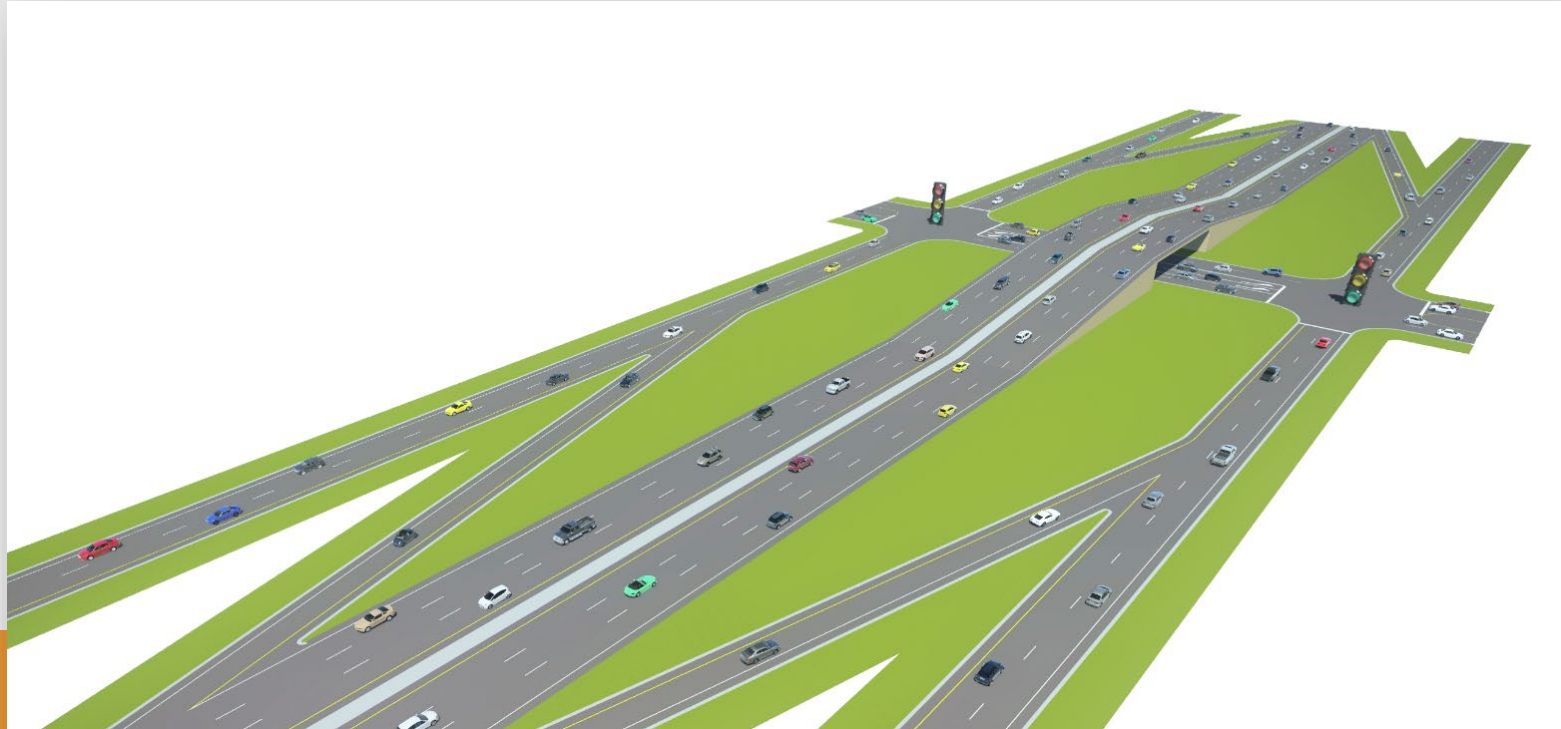
SIX-LANE WITH RAISED MEDIAN & GRADE SEPARATIONS

FM 720 * Legacy Drive * Teel Parkway * Navo Road * FM 423



- Construction to begin in 2021
- Enhanced safety/separated movements at grade separations
- Improves level of service at key intersections
- Does not accommodate 2045 travel demand volume forecast

EAST-WEST CONTROLLED ACCESS HIGHWAY

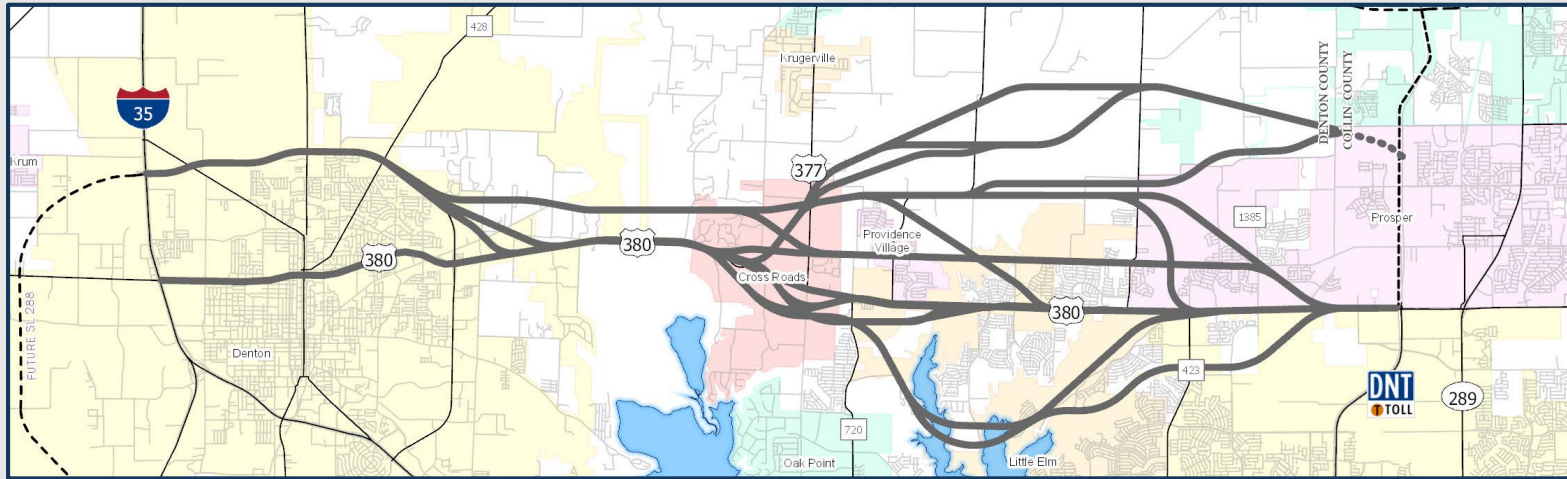


- 350'-400' right-of-way footprint
- Enhanced safety/limited access
- 6-8 mainlanes and 4-6 frontage road lanes
- Accommodates 2045 travel demand volume forecast with acceptable level of service

Initial Universe of Alignments and Feedback from Public Meeting #1

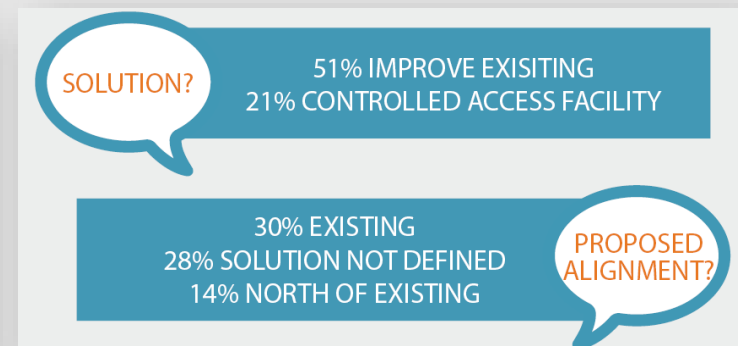
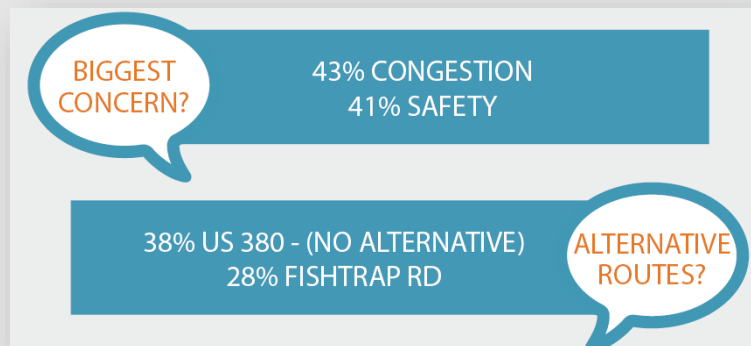


Initial Universe of Alignments

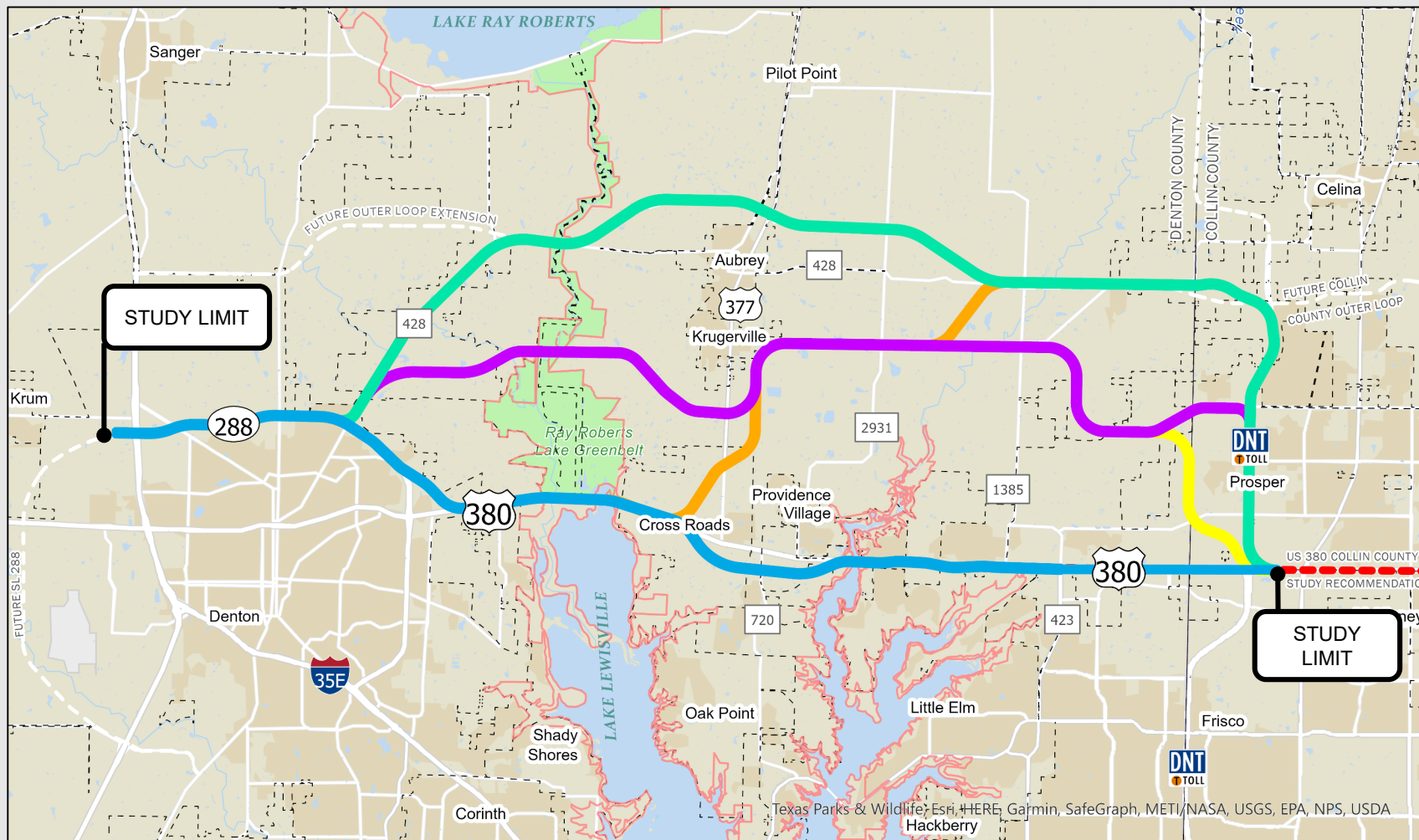


Public Meeting #1 Feedback

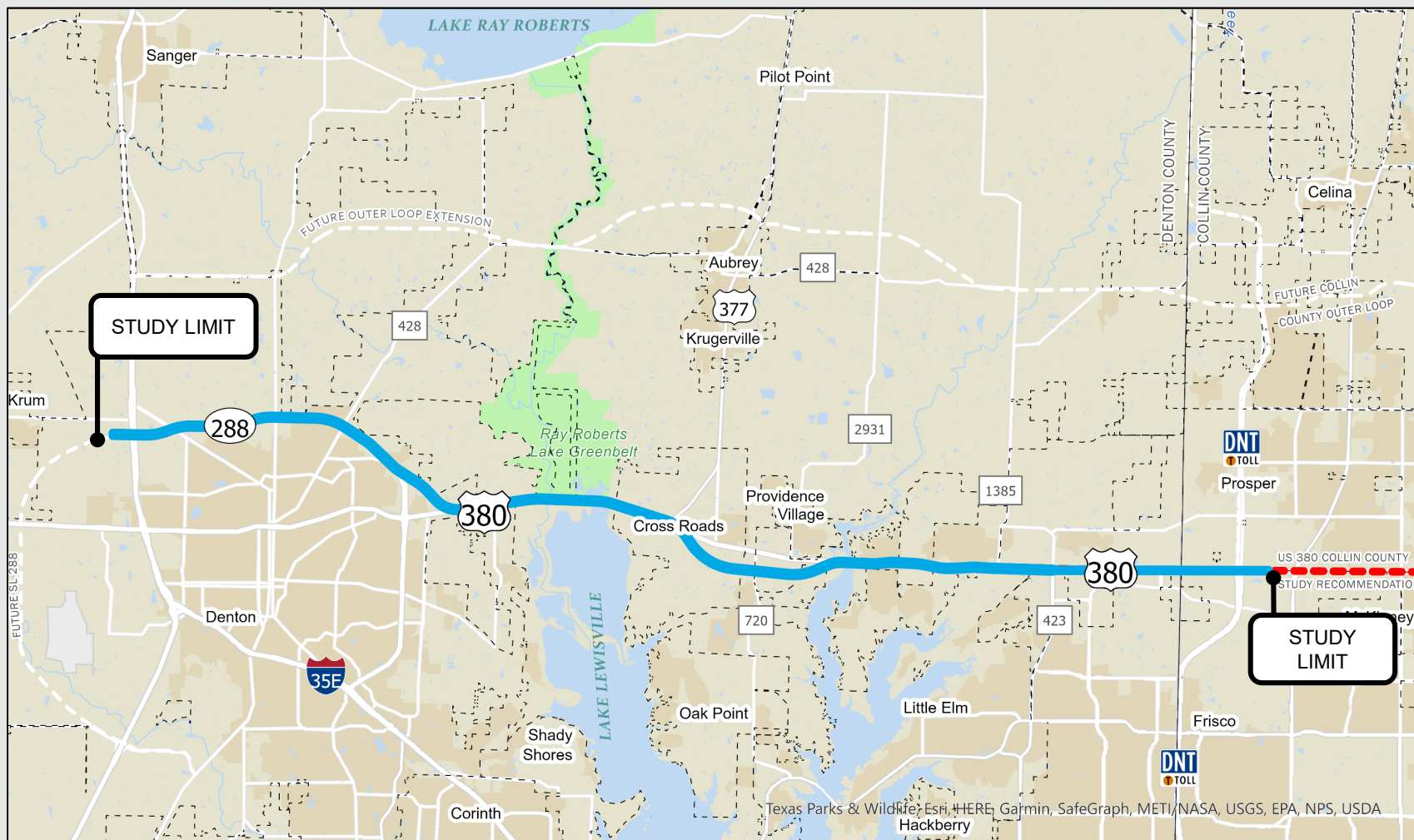
Public Meeting #1 was held in January 2019 and the public provided input on their concerns about the existing US 380 alignments as well as potential improvements.



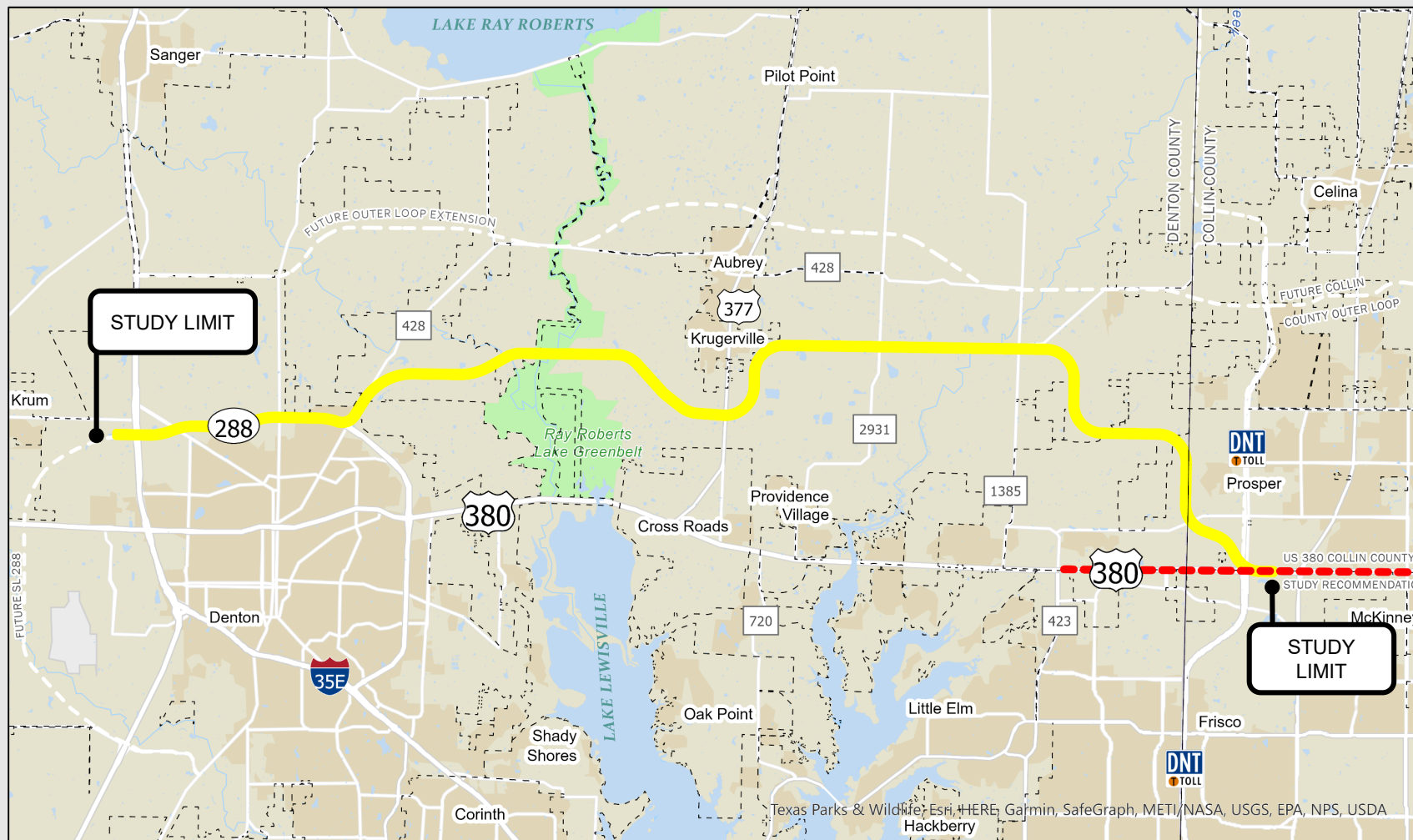
Draft Conceptual Alignments (Routes)



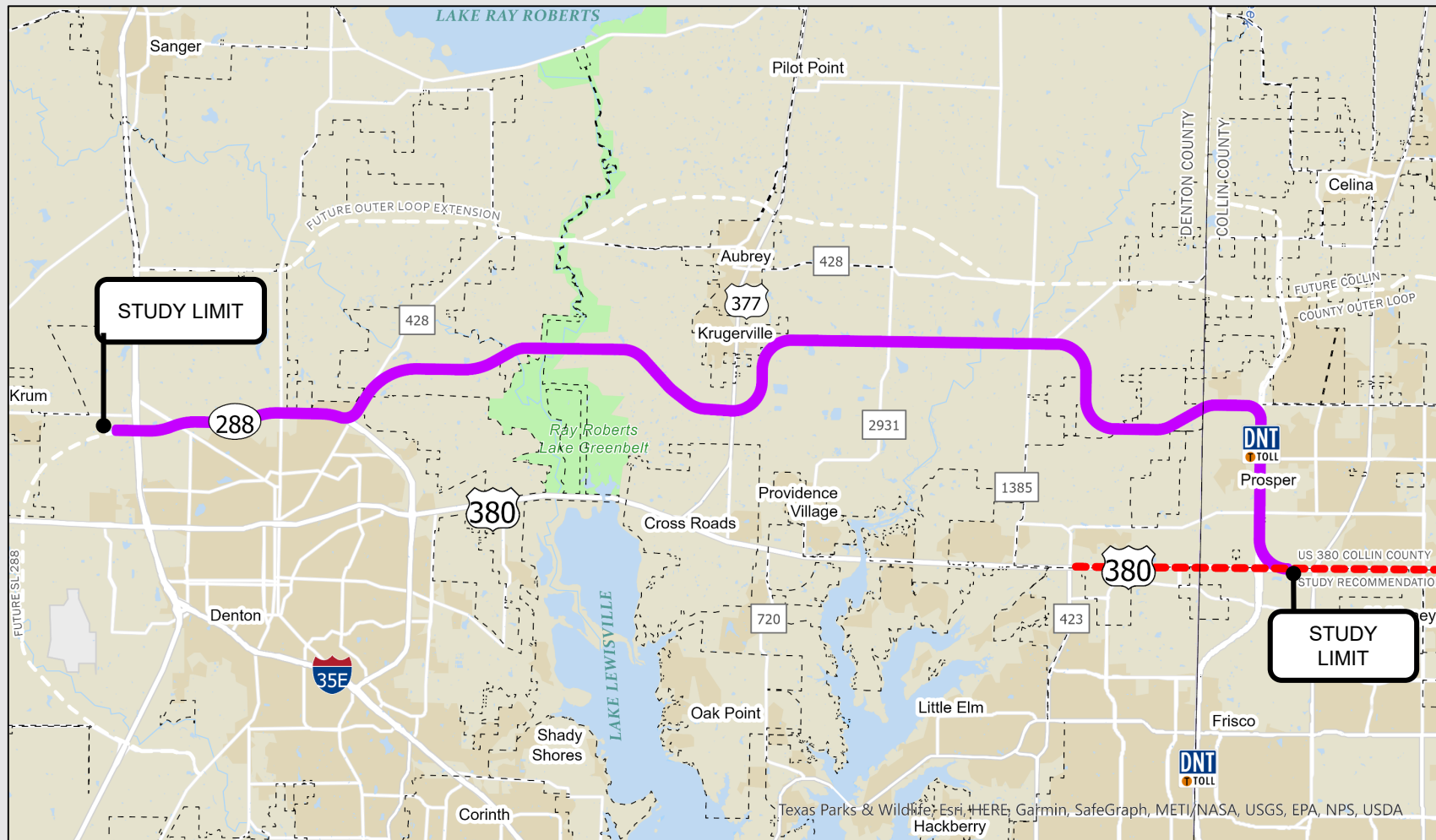
Draft Conceptual Alignments - Blue Route



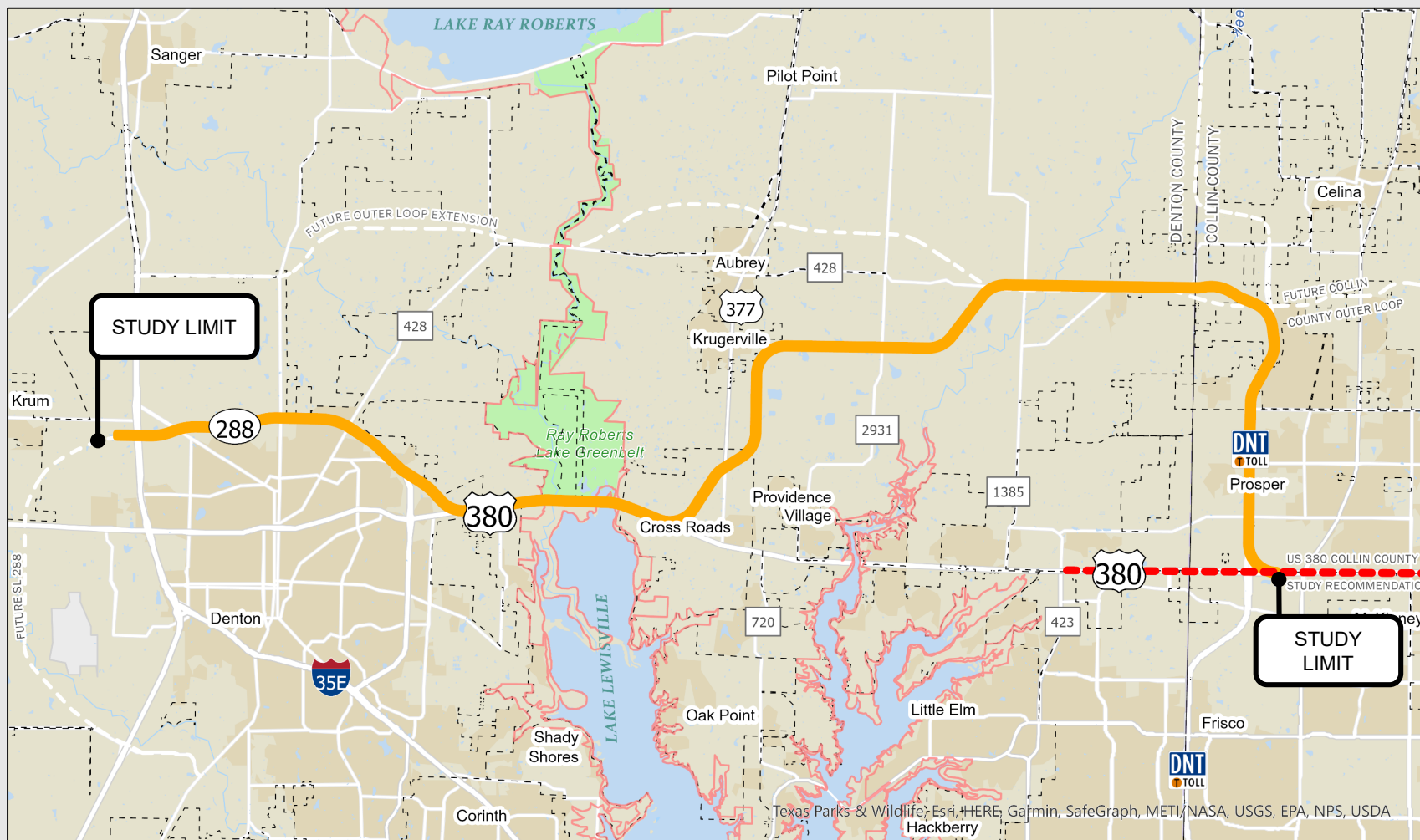
Draft Conceptual Alignments - Yellow Route



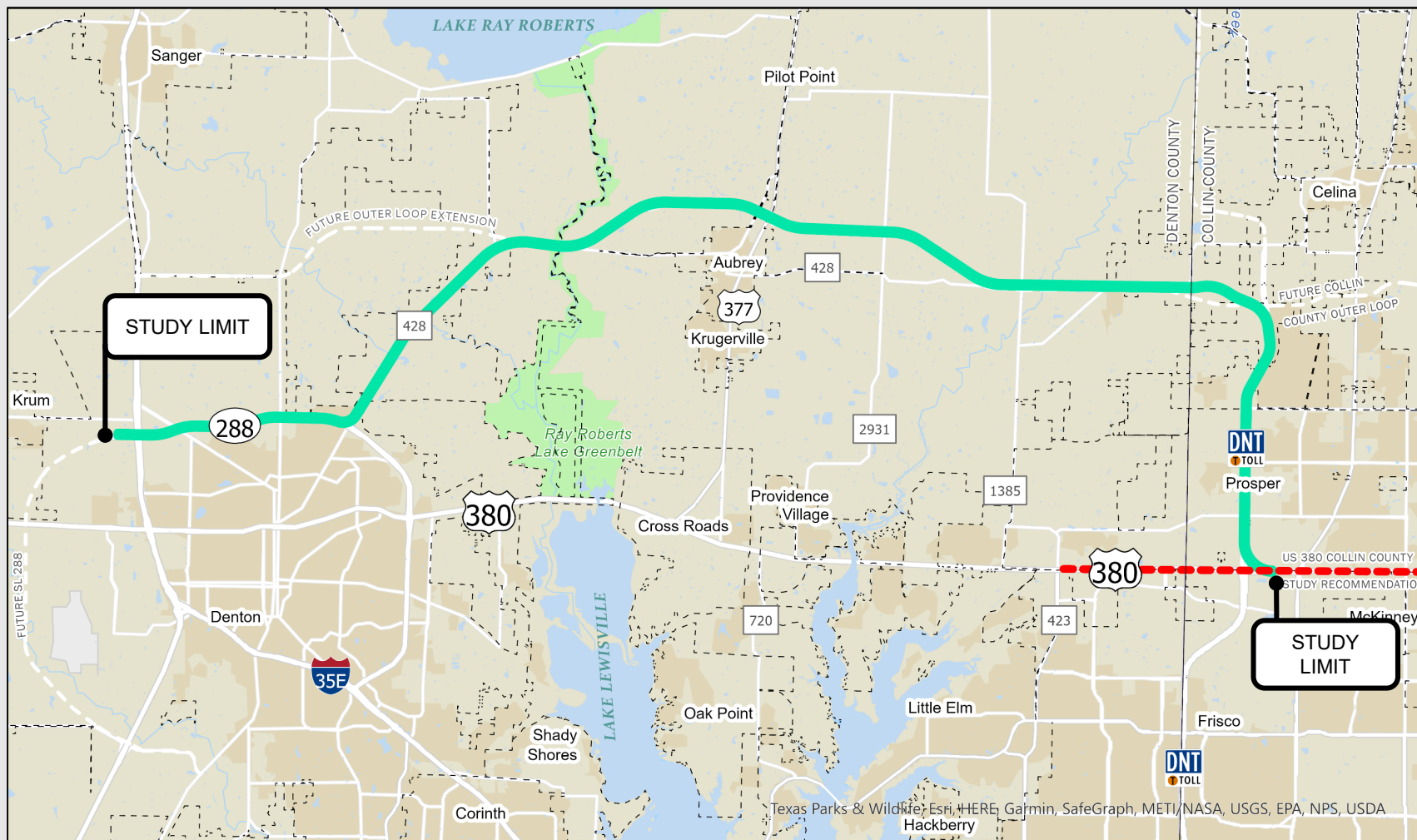
Draft Conceptual Alignments – Purple Route



Draft Conceptual Alignments – Orange Route



Draft Conceptual Alignments – Teal Route





Many factors are considered to determine the viability of an alignment. Evaluation criteria can be grouped into engineering, environmental, and economic factors. As part of the evaluation process, data is collected in each of these areas to fully understand the impact of each alignment.



ENGINEERING/ MOBILITY



Safety

- Minimize Crash Rates



Traffic

- Level of Service



ENVIRONMENTAL



Residential and Commercial Existing/ Future Developments

- Minimize Number of Impacts



Stakeholder and Public Input

- Included



USACE Protected Lands (Wetlands, WOTUS, etc.)

- Minimize Number of Impacts



Floodplains and Floodways

- Minimize Number of Impacts



ECONOMIC



Construction Costs

- Minimize Roadway Costs
- Minimize Bridge Costs



Right-of-Way to be Acquired

- Minimize Acres of Right-of-Way Needed


















Business Impacts

- Estimated Number of Businesses Impacted
- Estimated Business Sales Volume Impacted

Evaluation Criteria – Engineering/Mobility



Alternative Criteria		No Build	Blue	Yellow	Purple	Orange	Teal
Length*	Miles	22.8	22.7 	26.2 	27.3 	30.1 	29.0 
Crash Rate**	crashes/ mi/yr	N/A	22.4773 	23.4857 	23.5243 	23.0172 	22.8163 
Level of service		N/A	Good	Good	Good	Good	Good
US 380 Existing Alignment Level of Service		Failing		Failing	Failing	Failing	Failing




































Criteria Rating Scale				
Does not achieve criteria	Sometimes meets criteria	Partially meets criteria	Mostly meets criteria	Highly meets criteria
				






* Route includes distance from DNT to I-35.

** Predictive Crashes/rates were based on an assumed volume of 100,000 vehicles per day over 20-year study period

Evaluation Criteria - Environmental























Alternative Criteria		No Build	Blue	Yellow	Purple	Orange	Teal
Length*	Miles	22.8	22.7	26.2	27.3	30.1	29.0
Parcel Impacts	Each	N/A	252	197	200	259	305
							
Residential Displacements	Each	N/A	18	25	21	26	37
							
Commercial Displacements	Each	N/A	16	4	4	8	4
							
Floodplain Impacts	Acres	N/A	72	174	209	174	187
							
USACE Impacts (Lake, Greenbelt)	Acres	N/A	3	19	19	2	8
							
Future Residential Development Impacts	Acres	N/A	94	95	92	17	17
							
Future Commercial Development Impacts	Acres	N/A	250	140	133	46	53
							






Criteria Rating Scale				
Does not achieve criteria	Sometimes meets criteria	Partially meets criteria	Mostly meets criteria	Highly meets criteria
				

* Route includes distance from DNT to I-35.

Evaluation Criteria - Economics



Alternative Criteria		No Build	Blue	Yellow	Purple	Orange	Teal
Length*	Miles	22.8	22.7	26.2	27.3	30.1	29.0
Construction Costs**	\$ Millions	N/A	800 	900 	900 	850 	850 
Right of Way to be acquired	Acres	N/A	5,400 	10,300 	10,500 	8,100 	9,500 
Estimated Number of Businesses (2019) Impacted	EA	N/A	30 	7 	5 	12 	4 
Estimated Business Sales Volume*** (2019) Impacted	\$ Millions	N/A	10-20 	0-10 	10-20 	40-50 	0-10 

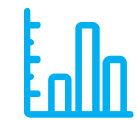
Criteria Rating Scale				
Does not achieve criteria	Sometimes meets criteria	Partially meets criteria	Mostly meets criteria	Highly meets criteria
				

* Route includes distance from DNT to I-35.

** Construction Costs include roadway, bridge, and utility costs

*** Data obtained from InfoUSA

Project Timeline



Data Collection

- Site Visits
- Crash Analysis
- Travel Demand Model Scenarios

Spring - Fall
2018



Initial Alternative Alignments

- Alternatives Development
- Stakeholder Meetings

Fall - Winter
2018



Public Meeting #1

- Solicit input from public on study and alignments

Winter
2018 - 2019



Conceptual Alignments

- Refine alignments per public's input.
- Screen Alignments

Spring - Summer
2019 - 2020



Public Meeting #2

- Solicit input from public on viable alignments

Winter
2020



Recommended Alignment

- Refine per public's input
- Stakeholder Meetings
- Identify preferred alignment

Fall - Summer
2020 - 2021



Public Meeting #3

- Solicit input from public on the preferred alignment

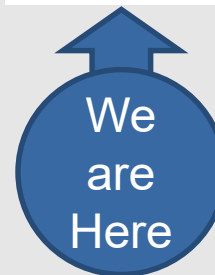
Fall - Winter
2021



Final Report

- Refine preferred alignment and document findings
- Develop draft schematic

Winter - Spring
2021 - 2022



Subject to Change

Please submit your comments regarding the design modifications presented in this Virtual Public Meeting by using any of the five methods below by our deadline, **December 17, 2020**.



Survey

Click the provided link on the website



Comment Online

Click the provided link on the website



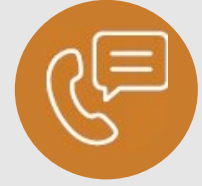
Email Us

Stephen.Endres@txdot.gov



Mail-in Comments

TxDOT Dallas District Office
Attn: Stephen Endres, P.E.
4777 E. Highway 80
Mesquite, TX 75150



Leave a Voicemail

(833) 933-0435

For general questions about the presentation or the project, please contact TxDOT Project Manager, Stephen Endres, P.E. at Stephen.Endres@txdot.gov.

Thank you!

