

# US 380 FEASIBILITY STUDY

Denton County

CSJ(s): 0135-10-061, 0135-10-062

Public Meeting(s): January 15 & 22, 2019





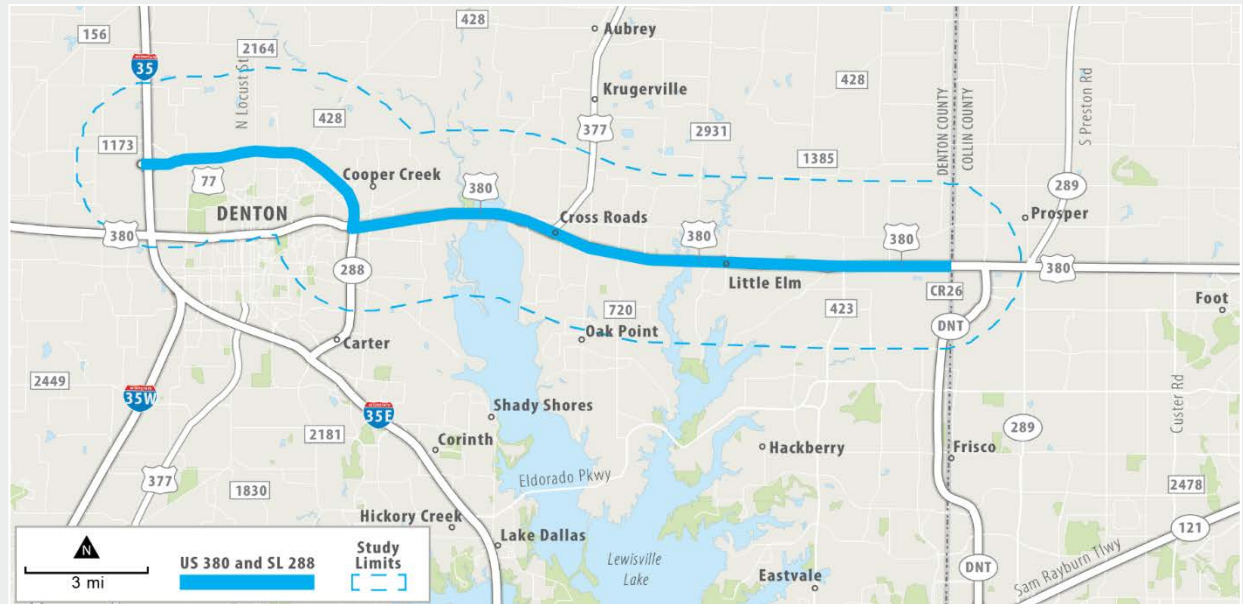
# WELCOME

## US 380 Denton County Feasibility Study

### DALLAS DISTRICT PUBLIC MEETING

**January 15 & 22, 2019**  
6:00 P.M. - 8:00 P.M.

Presentation at 7:00 P.M.





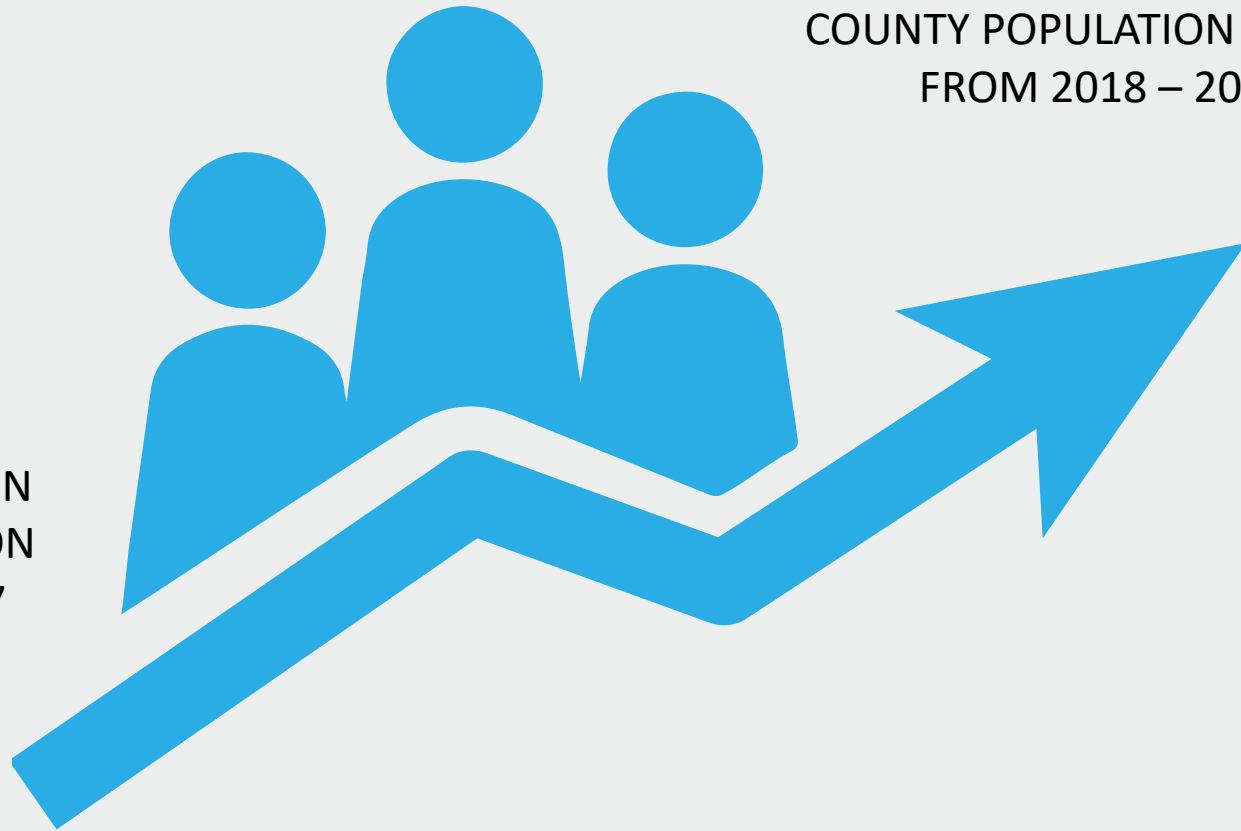
## DENTON COUNTY POPULATION

**136%**

PROJECTED INCREASE IN DENTON  
COUNTY POPULATION GROWTH  
FROM 2018 – 2045\*

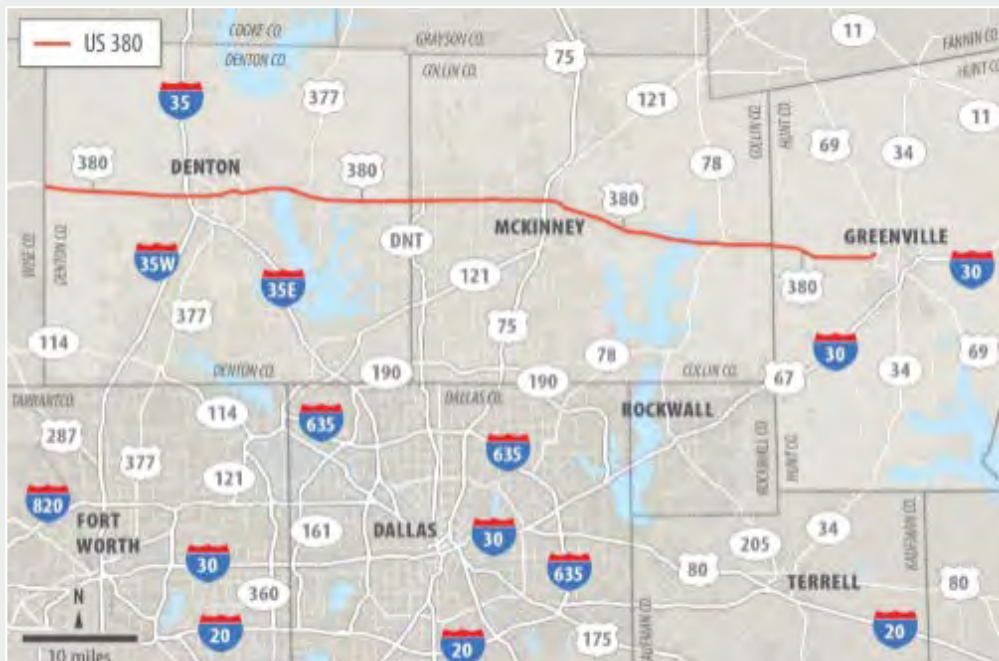
**23.5%**

INCREASE IN DENTON  
COUNTY POPULATION  
FROM 2010 – 2017



\*Assume the 2000-2010 Migration scenario for 2014 Texas Population Projections

## EXISTING CONDITIONS



## 4-6 LANE ARTERIAL

## SIGNIFICANT CONGESTION DURING PEAK HOURS

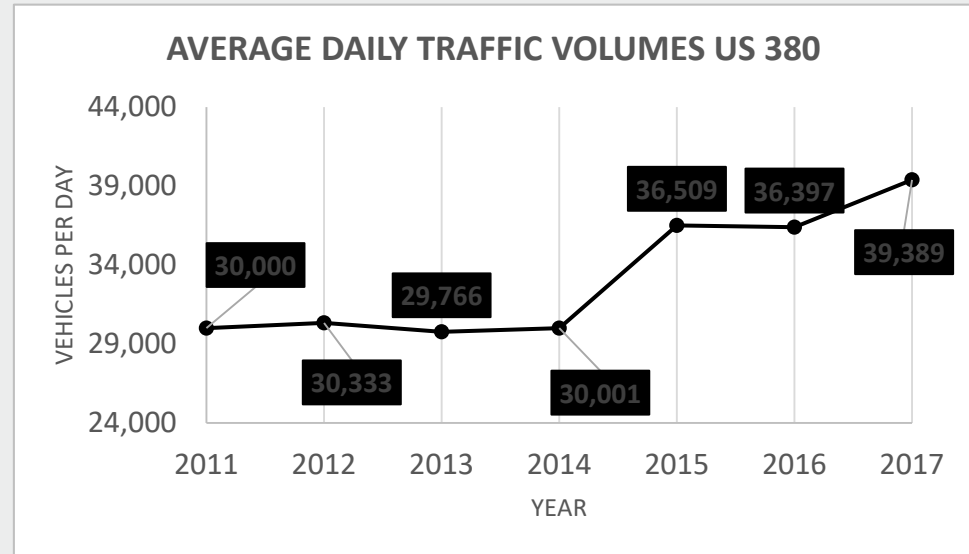
RATED IN ENGINEERING TERMS AS AN "F" LEVEL OF SERVICE (THE WORST)

ROW WIDTH VARIES (120'-180')



## TRAFFIC INCREASES

LOCATION	PERCENT INCREASE (2011-2017)
DENTON	22%
CROSS ROADS/ LITTLE ELM/ PROVIDENCE VILLAGE	25%
LITTLE ELM/ FRISCO/PROSPER	50%



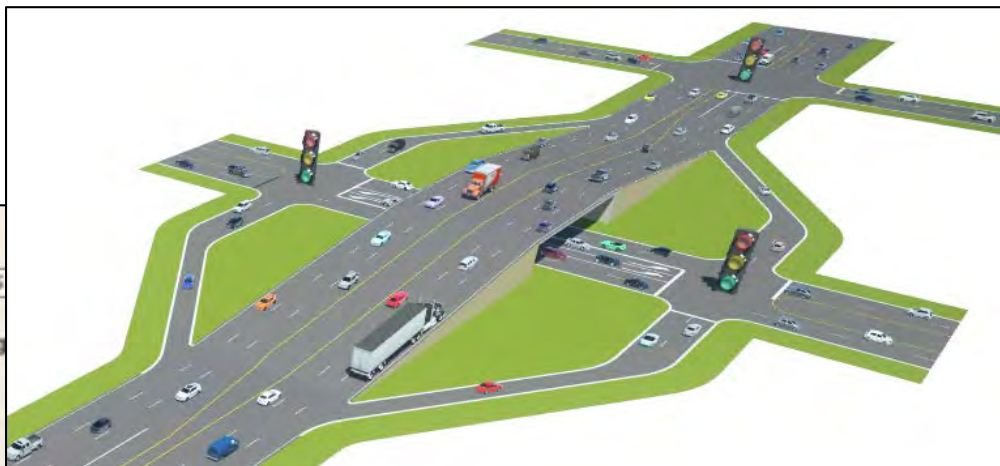
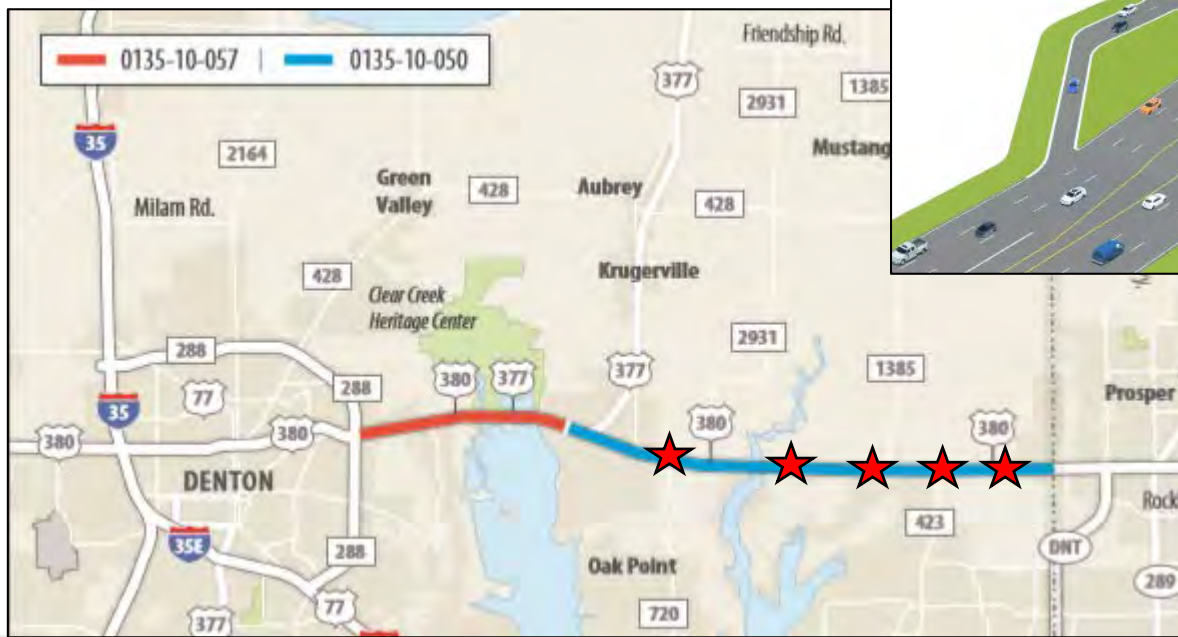
**TRAFFIC VOLUMES ALONG US 380  
IN DENTON COUNTY, EAST OF LOOP 288,  
INCREASED OVER 30% BETWEEN 2011 AND 2017.**





# PLANNED IMPROVEMENTS: US 380 DENTON WIDEN & GRADE SEPARATIONS (In-Progress)

## SIX-LANE WITH RAISED MEDIAN

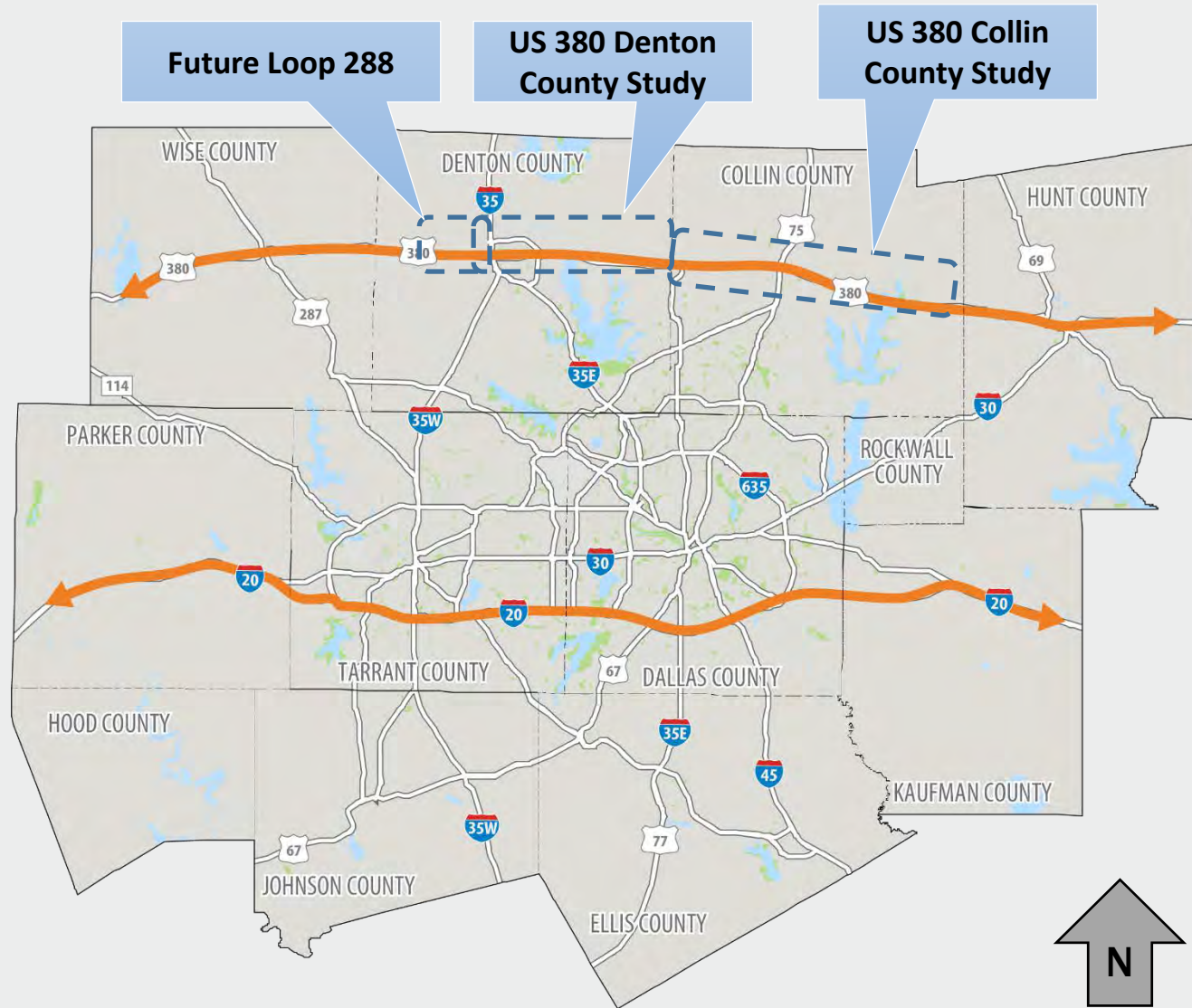


★ **GRADE SEPARATIONS AT**  
FM 720  
Legacy Drive  
Teel Parkway  
Navo Road  
FM 423



**US 380** provides **vital connectivity** between Collin and Denton counties. Similar to **I-20** for Dallas and Tarrant counties.

**Three studies working together.**





## PURPOSE OF FEASIBILITY STUDY



Analyze potential transportation options, including improving the existing alignment or utilizing new alignments.

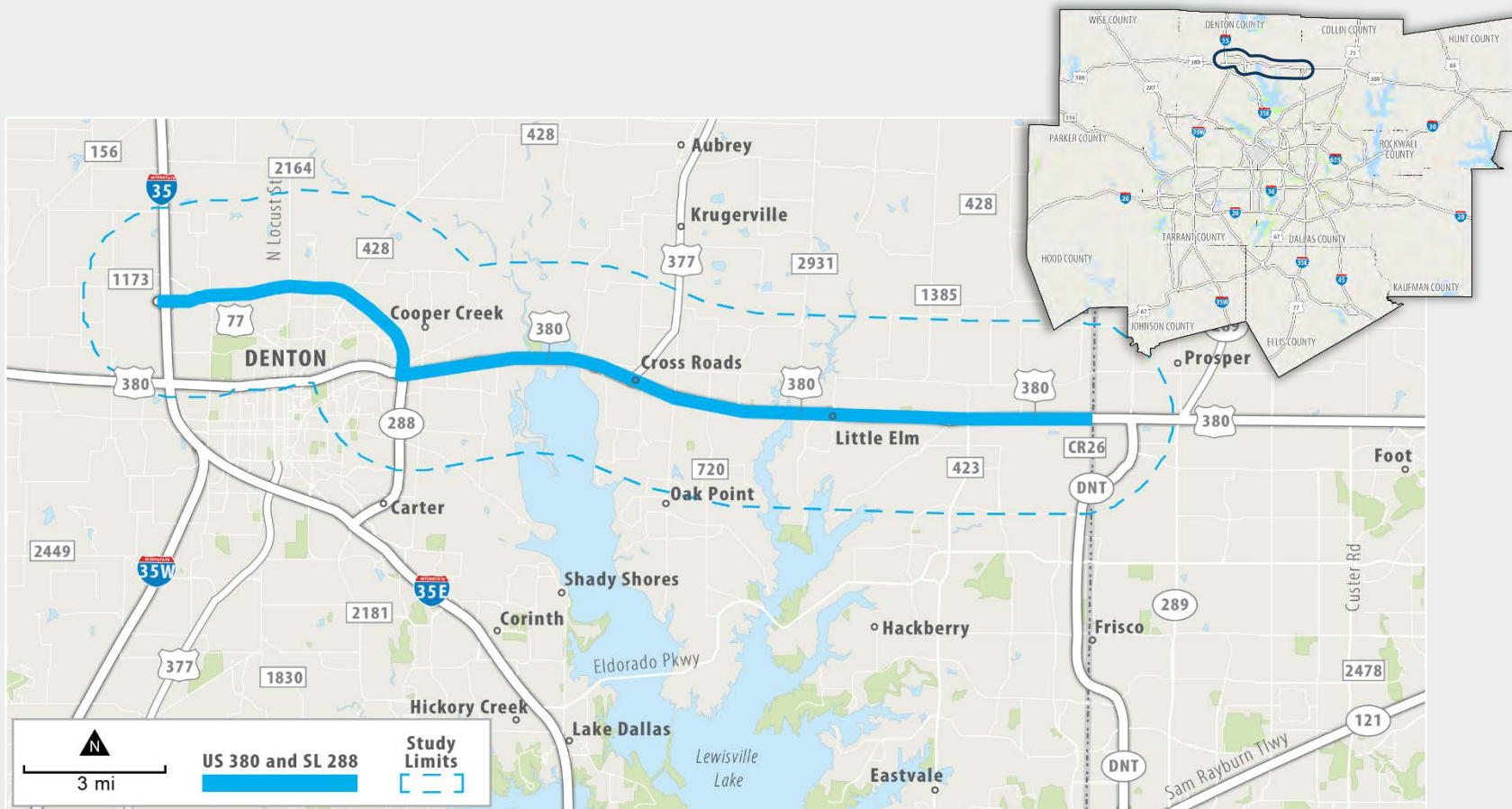
- Helps determine if the project should move on to more advanced phases of project development.
  - Do nothing (No Build) is a possible outcome.
- Identifies high level or critical elements of engineering, impacts to stakeholders and the public, and economic feasibility of potential new roadways or improvements to existing roadways.
- Provide a basis for corridor preservation

*Study is not intended to result in detailed design, environmental analysis, or cost estimates.*





# STUDY AREA



Limits: I-35 to west of CR 26 (Collin County Line) | Total Length: 21 miles



# GOALS AND OBJECTIVES

## 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

Minimize human and environmental impacts

Provide roadway network reliability



# EVALUATE MODES OF TRANSPORTATION TO RELIEVE CONGESTION

## BIKE/PEDESTRIAN



- Cannot relieve congestion alone, but facilities would be included in future plans

## TRANSIT



- Cannot solely relieve congestion as it only serves a small portion of the trips

## ROADWAY



- Variety of options ranging from no new improvements to grade separations to controlled access highway alignments

*All modes are critical to move goods, improve mobility, and provide access throughout the area*



# TRAVEL DEMAND MODEL EVALUATIONS

## 2017 EXISTING

APPROX. AVG DAILY  
TRAFFIC VOLUME

**40,300**

vehicles per day

## 2045

AVG. TRAFFIC DEMAND  
VOLUME FORECAST

**112,500**

vehicles per day

**SIGNIFICANT DEMAND FOR THIS CORRIDOR**

2017 Data – Obtained from TxDOT AADT Station Flag 61H4 for the year 2017

2045 Estimate Data – Travel Demand model scenarios which incorporated a controlled access highway down the existing alignment of US

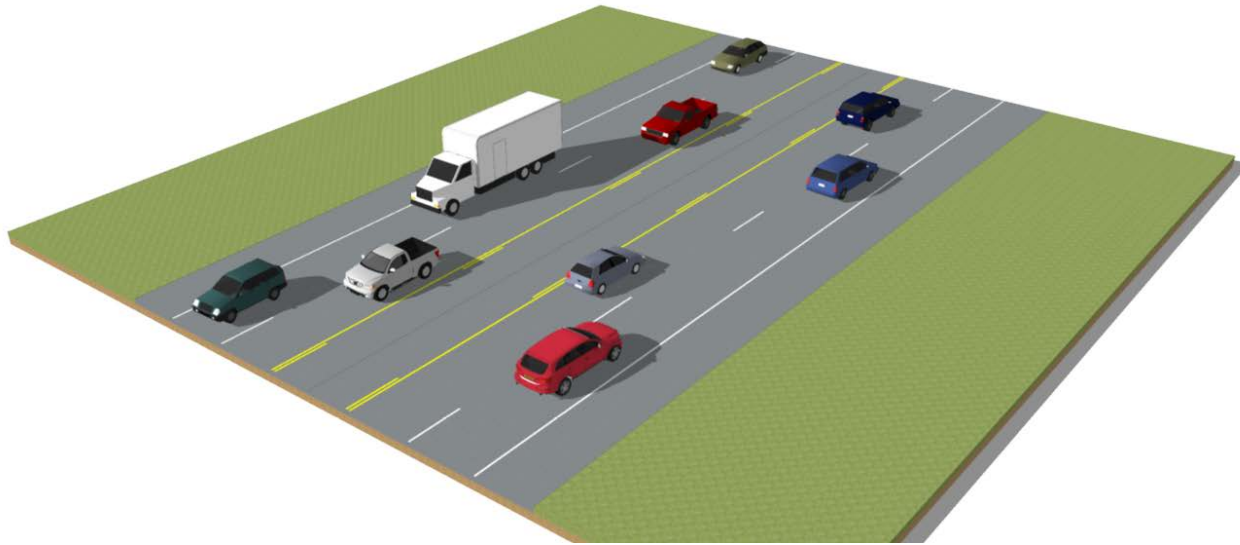






# TYPICAL SECTIONS

## FOUR-LANE WITH TWO-WAY LEFT TURN LANE (EXISTING)



- 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)



# TYPICAL SECTIONS

## SIX-LANE WITH RAISED MEDIAN & GRADE SEPARATIONS (IN-PROGRESS)



### Key Intersections:

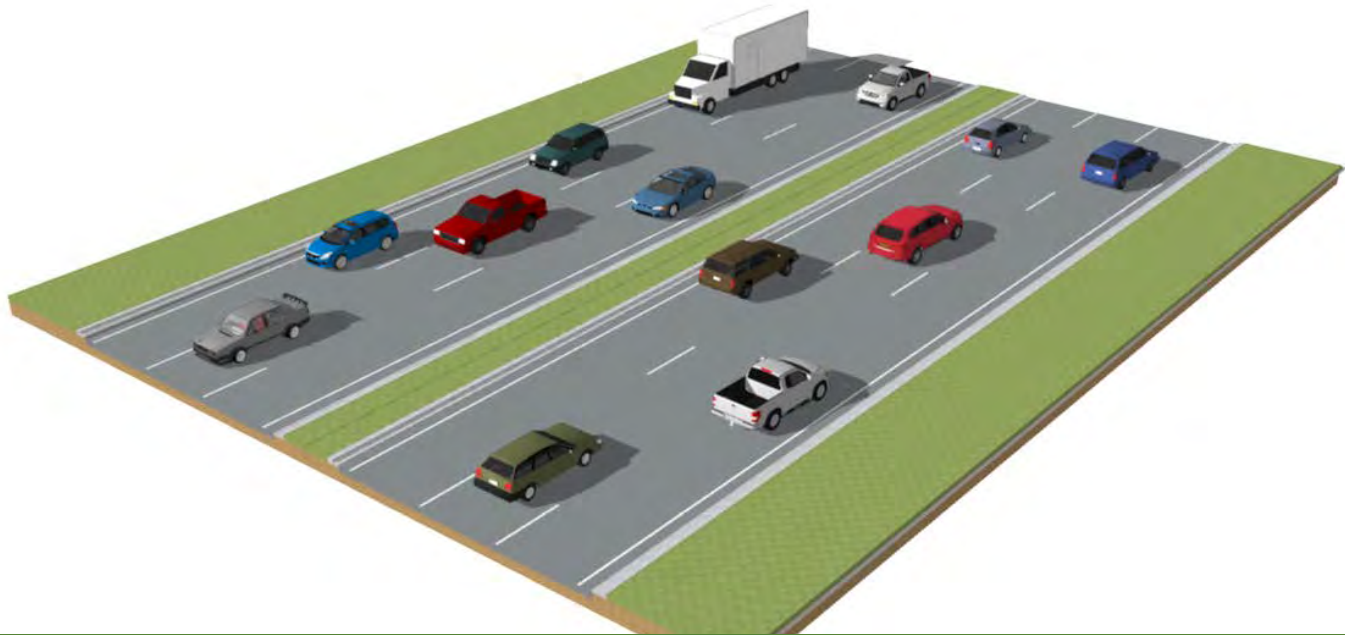
FM 720  
Legacy Drive  
Teel Parkway  
Navo Road  
FM 423

- Some additional right-of-way
- Enhanced safety/less access
- 6 Lanes
- Improves level of service at key intersections
- Does not accommodate 2045 travel demand volume forecast



# TYPICAL SECTIONS

## SIX-LANE WITH RAISED MEDIAN (URBAN ARTERIAL)

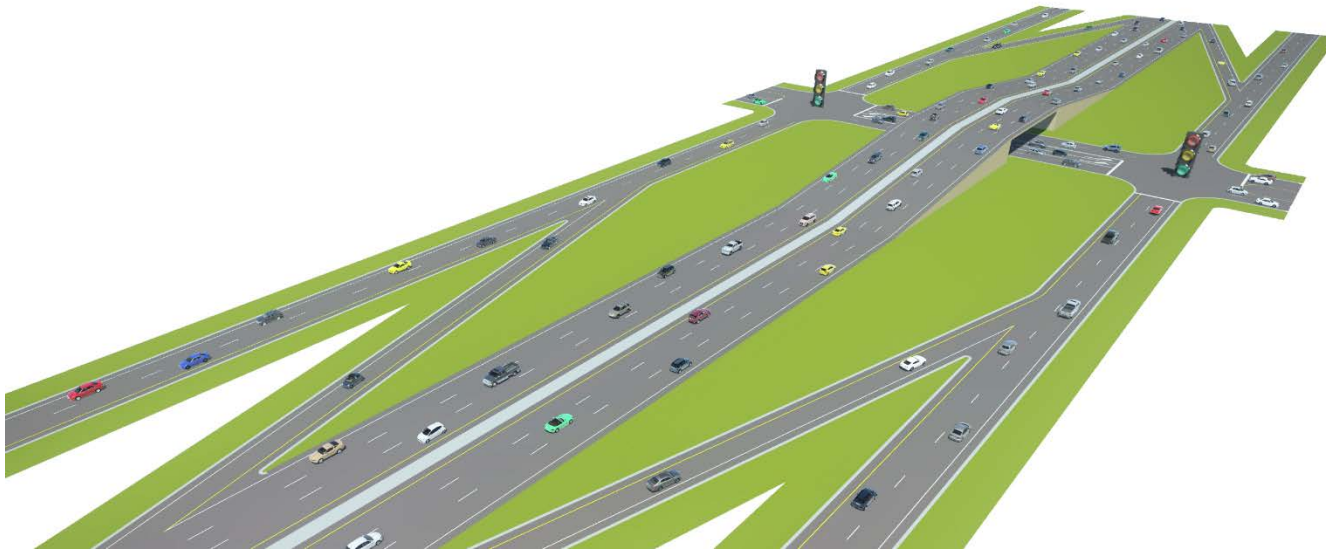


- Would be in addition to the In-progress project
- 180' right-of-way footprint
- 6 Lanes
- Does not accommodate 2045 travel demand volume forecast



# TYPICAL SECTIONS

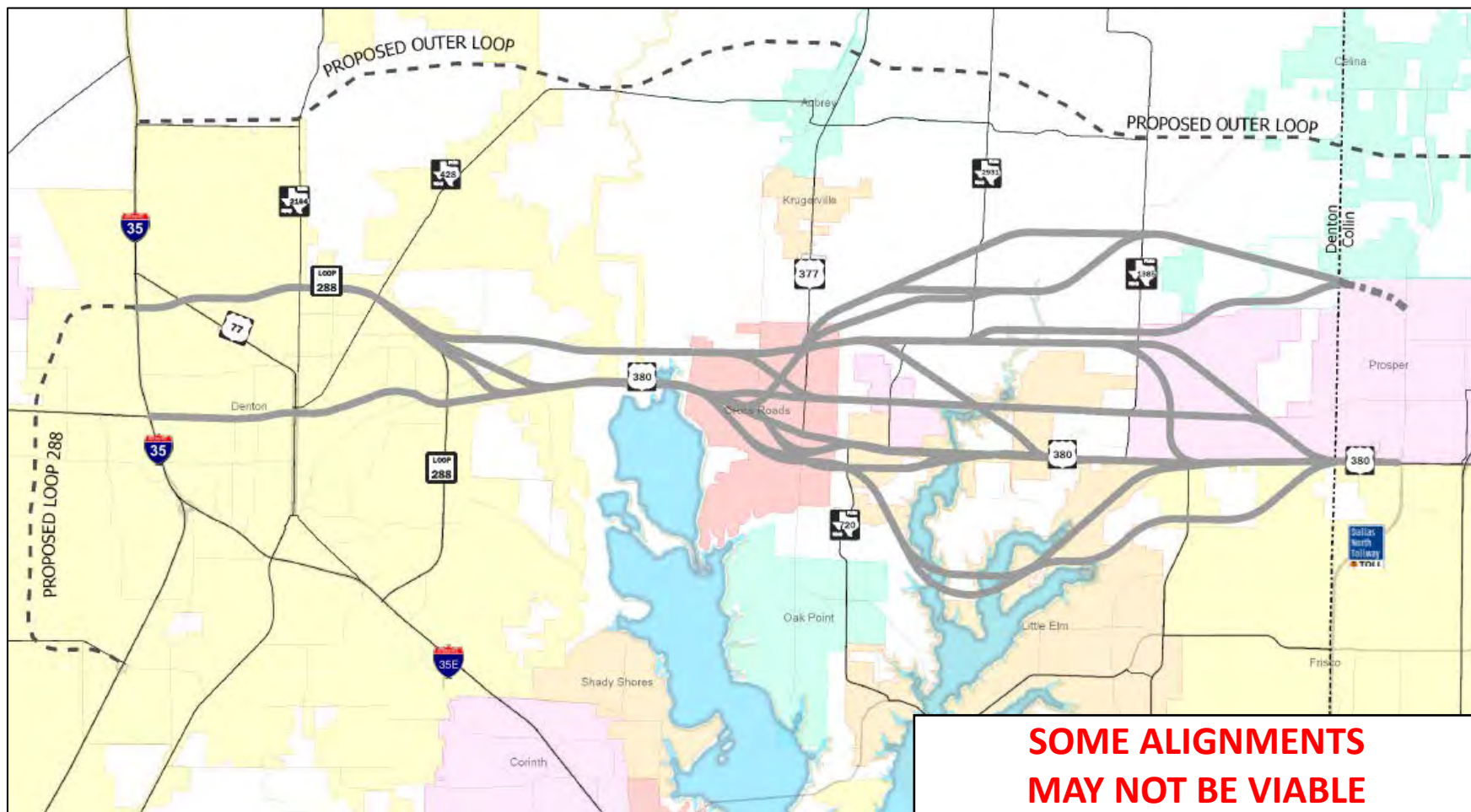
## CONTROLLED ACCESS HIGHWAY



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



# INITIAL ALTERNATIVE ALIGNMENTS



**SOME ALIGNMENTS  
MAY NOT BE VIABLE**

Initial Alternative Alignment

### Proposed Facility By Others



# KEY FACTORS FOR CONSIDERATION



## Engineering/Mobility



Safety



Traffic



Multimodal



Existing &  
Planned Utilities



Constructability



Planned  
Improvements



## Environmental



Residential and Commercial  
Developments



Community Elements (Parks,  
Schools, etc.)



Stakeholder & Public Input



Hazardous Materials



Endangered Species Habitat



Noise



USACE Protected Lands  
(Wetlands, WOTUS, etc.)



Floodplains and Floodways



## Economic



Construction Costs



Connectivity



Existing and  
Planned Land Use



**WE NEED YOUR INPUT**



**FILL OUT A SURVEY AND  
COMMENT FORM**

**PROVIDE VERBAL  
COMMENT TO COURT  
REPORTER**



## **SURVEY: ONLINE OR PAPER COPY**

Go online to [www.drive380.com](http://www.drive380.com) & click on  
“Denton County Feasibility Study”

Surveys and comment forms must be submitted by

**February 6, 2019**

to be included in study documentation





## NEXT STEPS





## TXDOT HAS DONE ANALYSIS OF THE NEED AND POTENTIAL SOLUTIONS

Planning the next steps for the US 380 corridor will take time.  
That is why it is so important work begins NOW to plan for the future





## STUDY CONTACTS

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# THANK YOU

For taking the time to provide input and help shape the future of US 380 and Denton County.

Visit [Drive380.com](http://Drive380.com) and click on “DENTON COUNTY US 380 FEASIBILITY STUDY” for study information and updates.