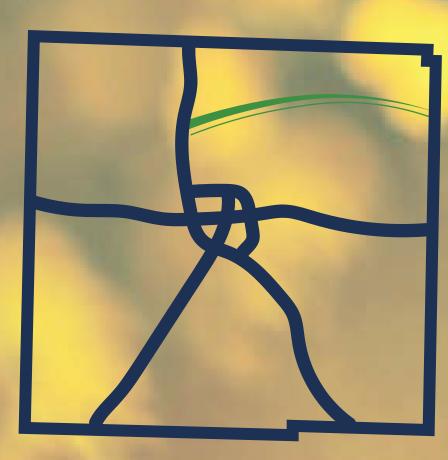
# **DENTON COUNTY OUTER LOOP**

# PUBLIC OPEN HOUSE May 18, 2023 | May 22, 2023

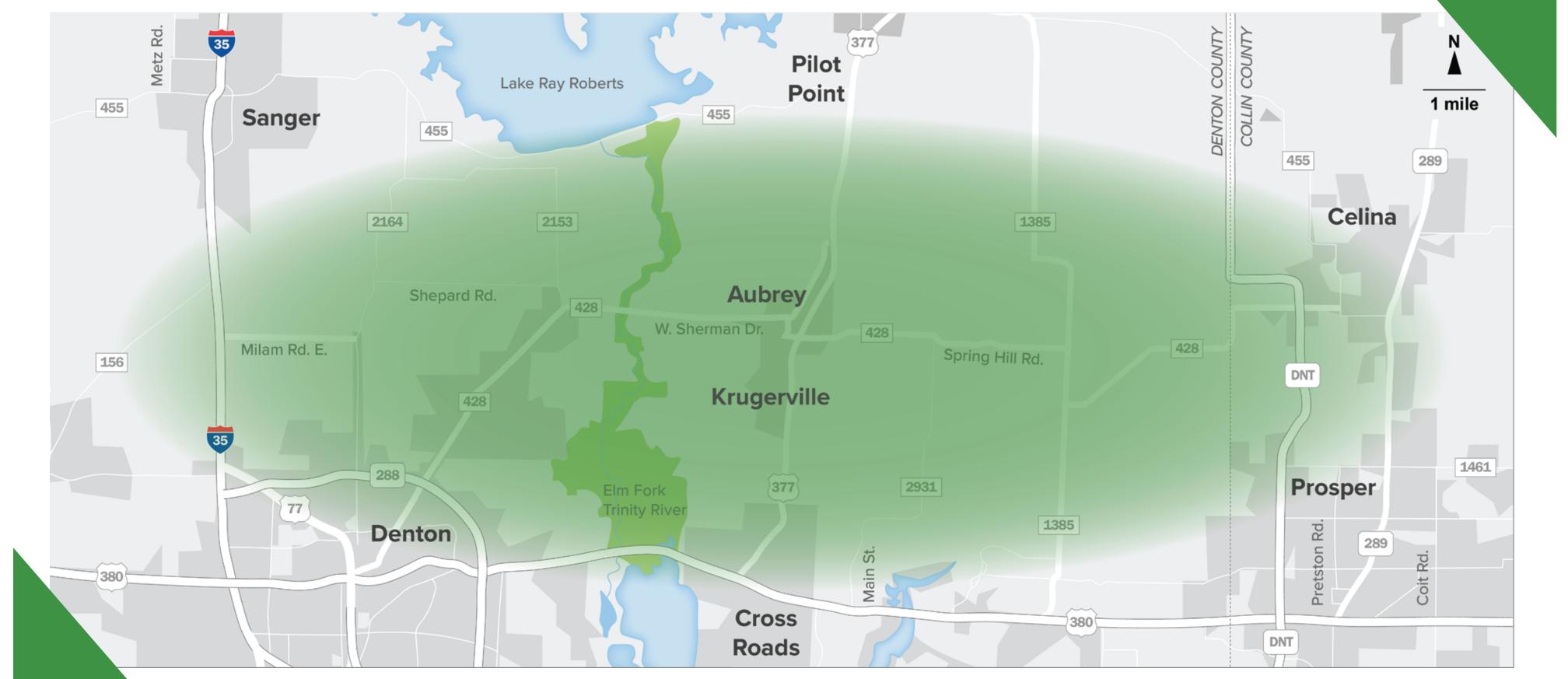


★ REGIONAL ★ OUTER LOOP IN DENTON COUNTY



## **PROJECT OVERVIEW** Schematic Design & Environmental Study

## **STUDY AREA**



Project New east-west roadway alignment in northeast Denton County from approximately I-35 to the Dallas North Tollway.

## Project Length: 23 miles

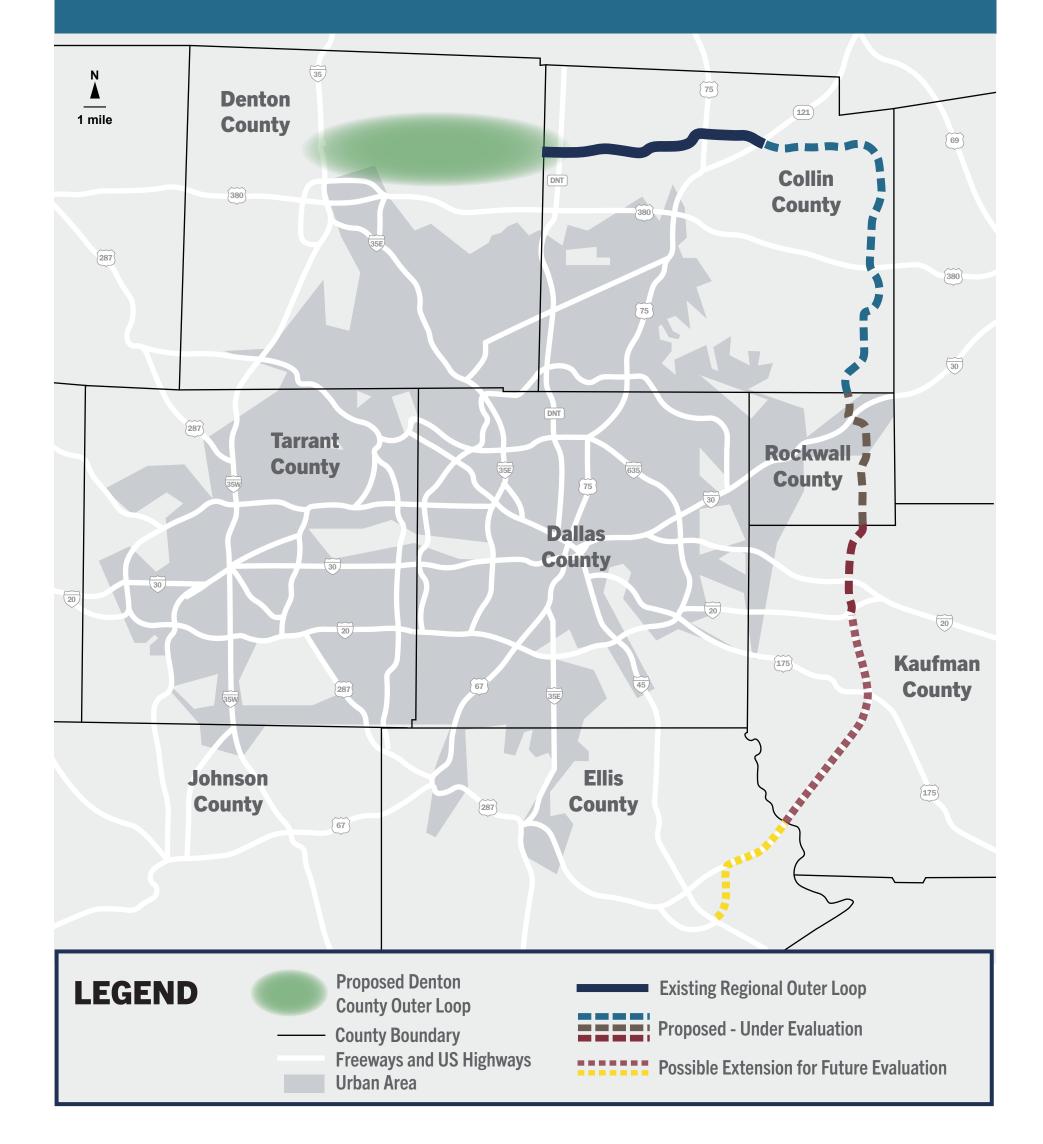
## STUDY TASKS

## **REGIONAL VISION**



### **Schematic Design**

Develop and analyze roadway alignments, including those previously studied.





### **Environmental Documentation** Conduct field studies to analyze impacts of alignments and develop an Environmental Impact Statement (EIS) document.

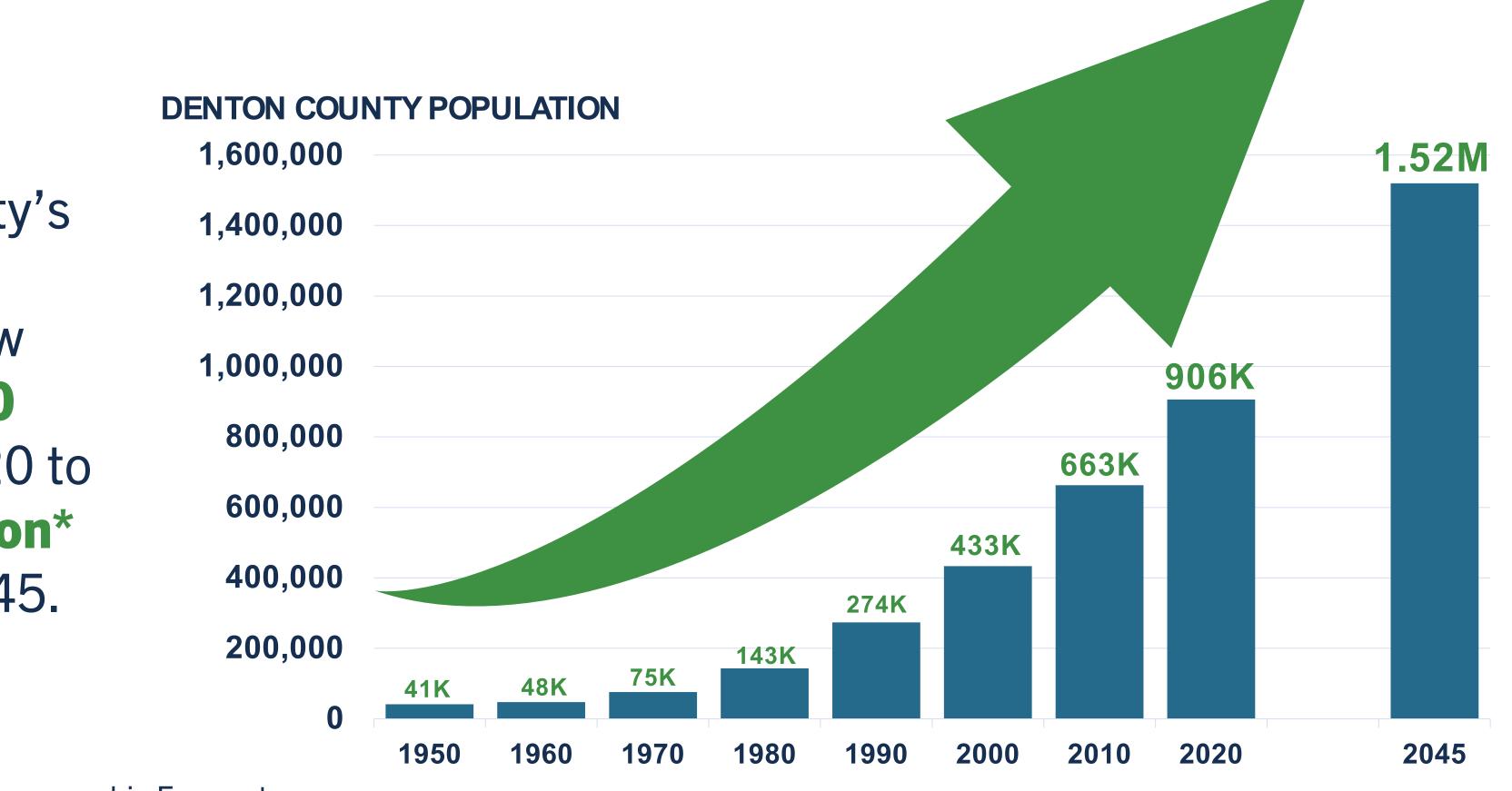
## The Regional Outer Loop is

envisioned to extend from Denton and Collin Counties, through Rockwall, Kaufman, and possibly Ellis Counties.



## **STUDY PURPOSE** *Why is this project needed?*

## DENTON COUNTY IS GROWING RAPIDLY

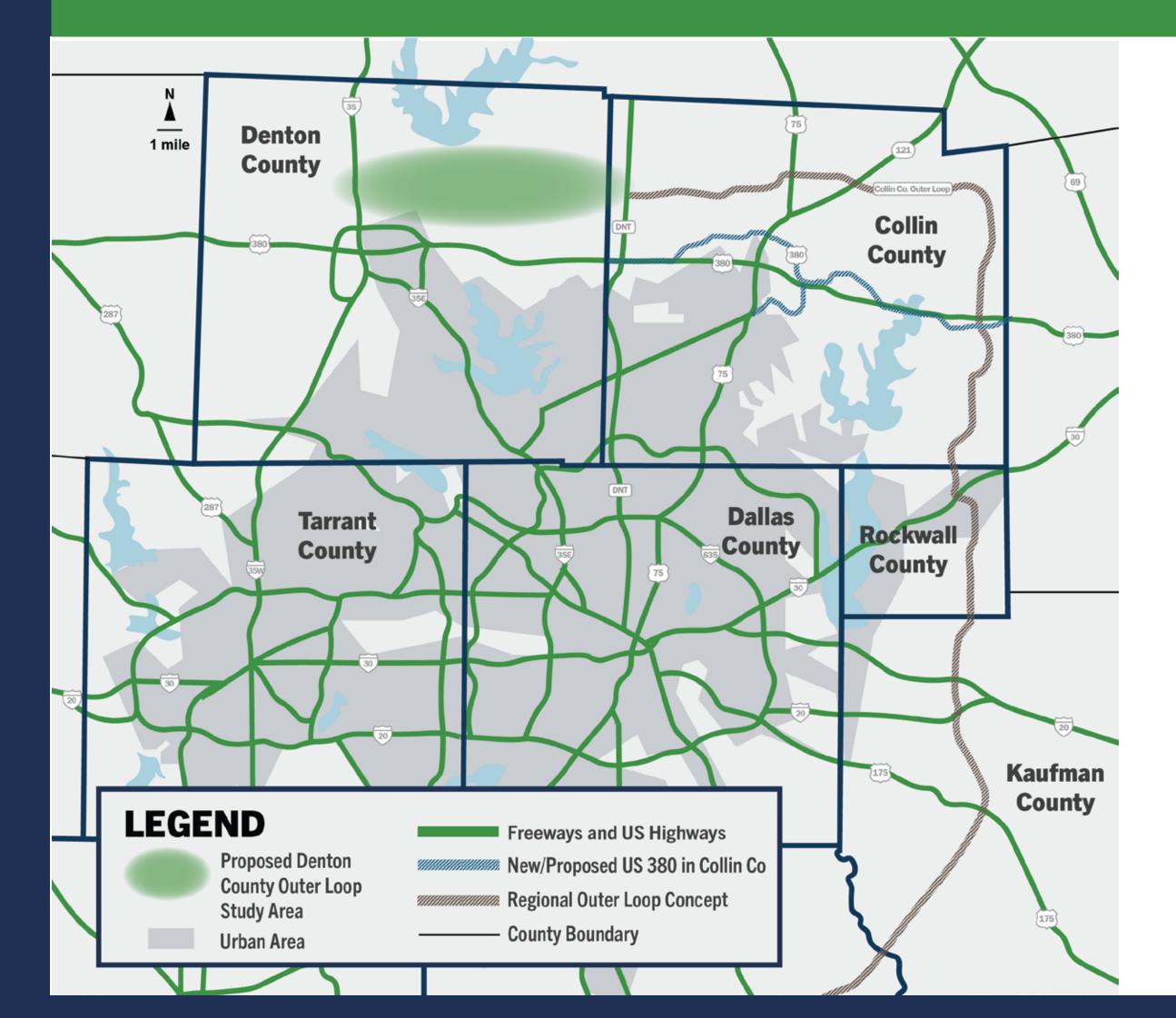


Denton County's population is expected grow

from **900,000** people in 2020 to over **1.5 million\*** people by 2045.

\* Source: NCTCOG 2045 Demographic Forecasts

## THE CURRENT ROAD NETWORK IS LIMITED

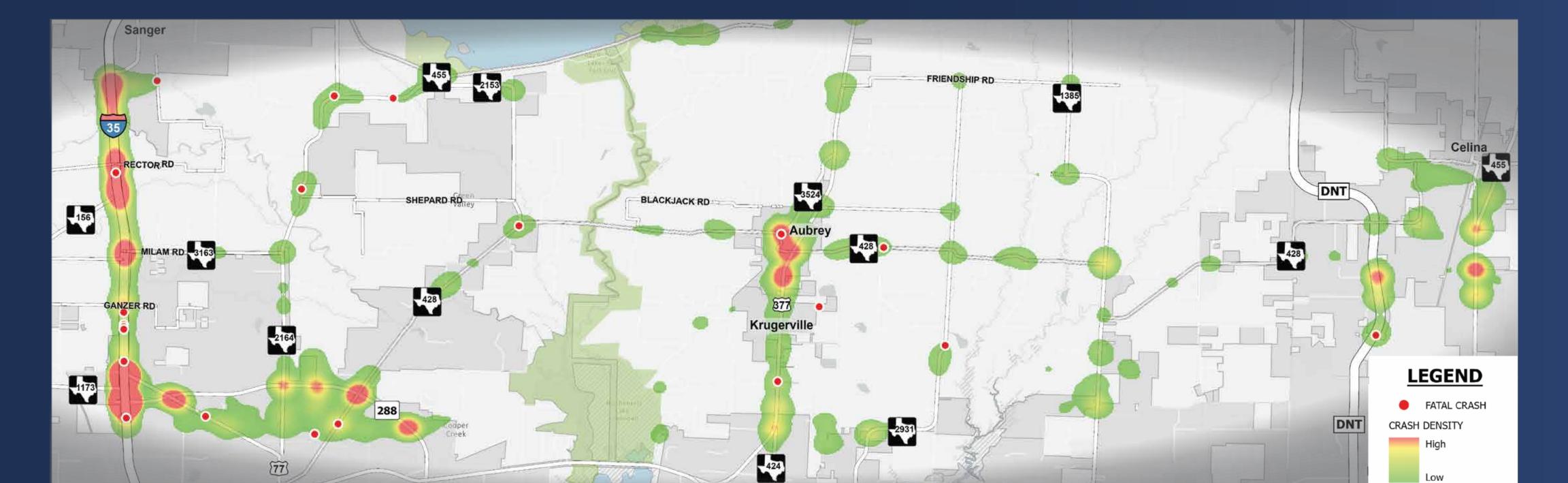


Denton County's population in 2045 will be similar to Tarrant County's population in 2010, with fewer controlled access highways in the current and planned network to support increased traffic demand.





## ROAD NETWORK SAFETY **Current Conditions**



### Fatal and Severe Injury Crashes within the Study Area (2018 - 2022)

**Cross Roads** 



77

30



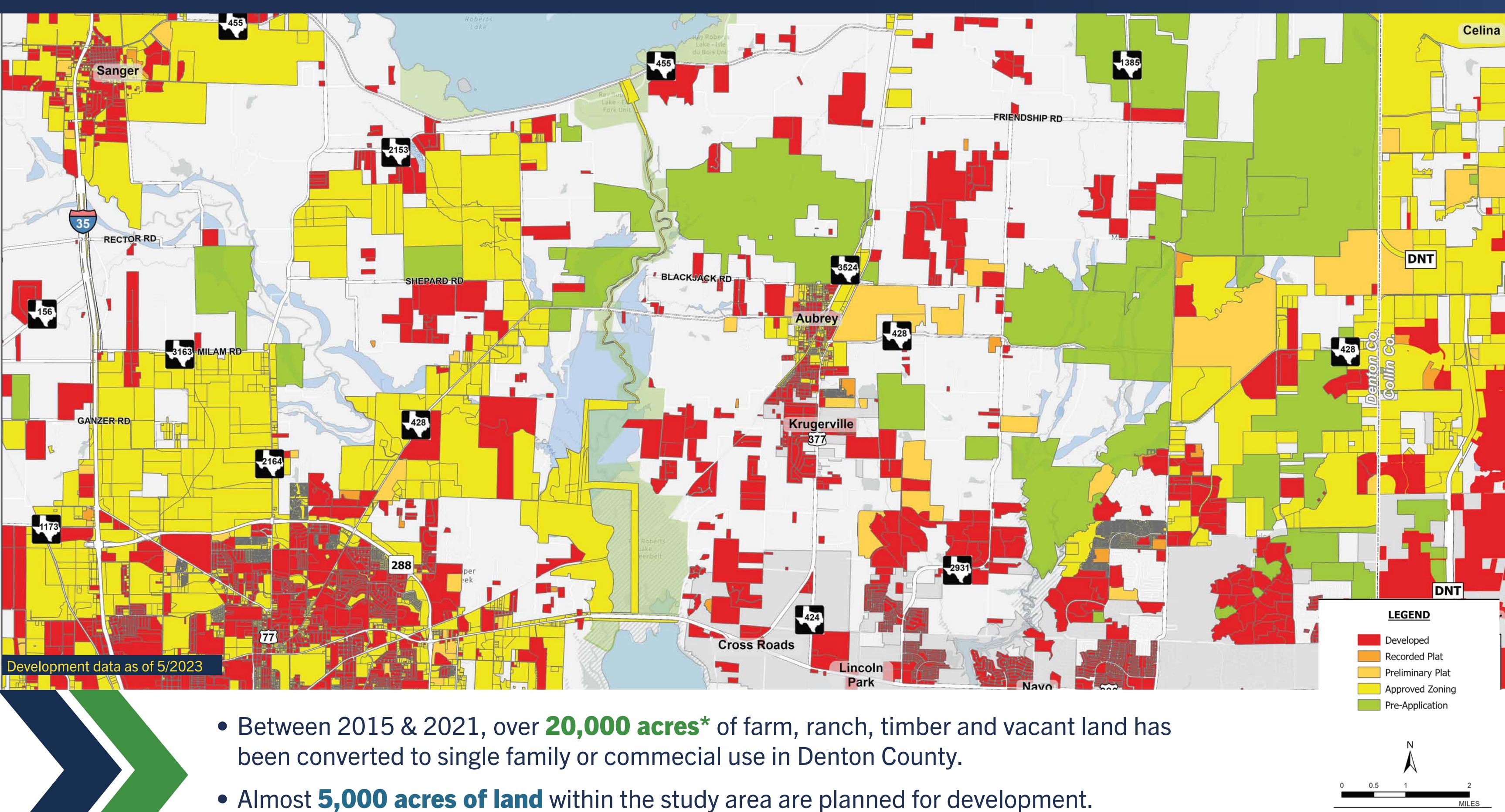
As the area grows, increased traffic volumes will lead to greater congestion and increased crashes in both number and severity. The study will evaluate the proposed

### project's impact on future road network safety.





## RAPIDLY DEVELOPING STUDY AREA Existing & Planned Development



\* Source: US 380 Denton County Feasibility Study (2020)

# PREVIOUS PLANS & STUDIES

### 2007 - 2011

A Feasibility Study for a **Regional Outer Loop** around the DFW metroplex was conducted by the North Central Texas Council of Governments (NCTCOG). It found that an east-west route in Denton County may be warranted based on expcted growth.



The Outer Loop was added to the **Denton County 2013** Thoroughfare Plan update,

which identified long-range county transportation vision and direction.





Previous plans and studies have found that an east-west route in Denton County is feasible and warranted based on exepected growth in the area.

### 2016 & 2021

**NCTCOG** recommended the **Denton County Outer Loop** 

as an eventual six-lane freeway in its Mobility 2040 plan, and again in Mobility 2045, the region's long-range transportation plan.



## The Denton County 2017

**Thoroughfare Plan** included additional analysis that validated the need for US 380 and the Outer Loop as higher-capacity east-west connectors through Denton County.

### 2019

### **The Denton Greenbelt Corridor Feasibility Study**

conducted by NCTCOG examined the viability of the **Outer Loop across northeast** Denton County and determined it was feasible and warranted based on expected growth.



## National Environmental Policy Act (NEPA)

## Following the NEPA Process Overview



NEPA requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions.

An Environmental Impact Statement (EIS) is prepared when it is anticipated a proposed project could significantly affect the quality of the human and natural environment.



Adhering to NEPA is required on any project that would receive any federal funding.



The County intends to obtain environmental clearance for the project from TxDOT through the NEPA process in order to use federal funds to construct the proposed roadway.

### **TxDOT's NEPA Assignment**

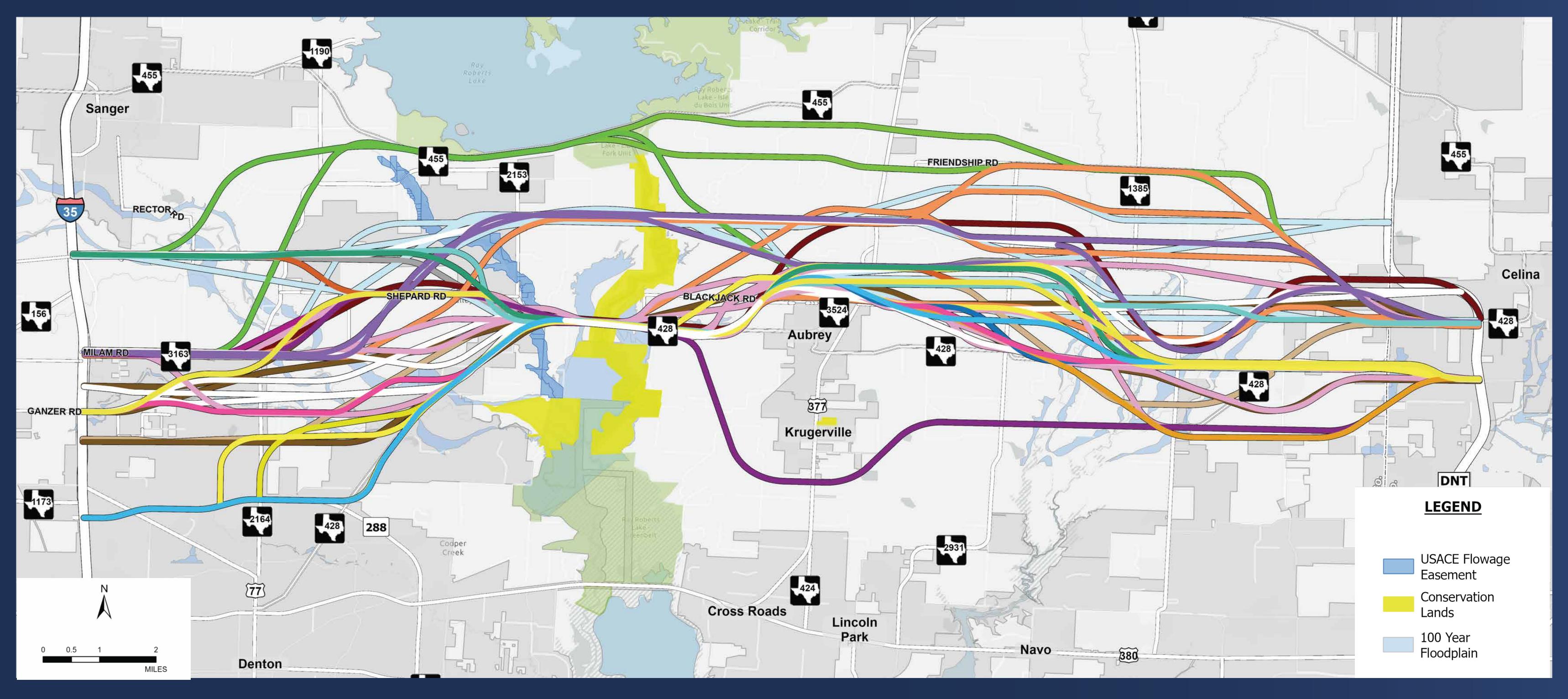
The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated Dec. 9, 2019, and executed by the Federal Highway Administration and TxDOT.

Las revisiones y consultas ambientales, y otras acciones requeridas por las leyes ambientales Federales aplicables para este proyecto están siendo, o han sido, llevadas a cabo por TxDOT con respecto al 23 U.S.C. 327 y un Memorándum de Entendimiento con Fecha el 9 de Diciembre, 2019, y fueron ejecutadas por FHWA y TxDOT.



# **CONCEPTUAL ALIGNMENTS**

## 48 possible freeway alignments were developed across the study area.



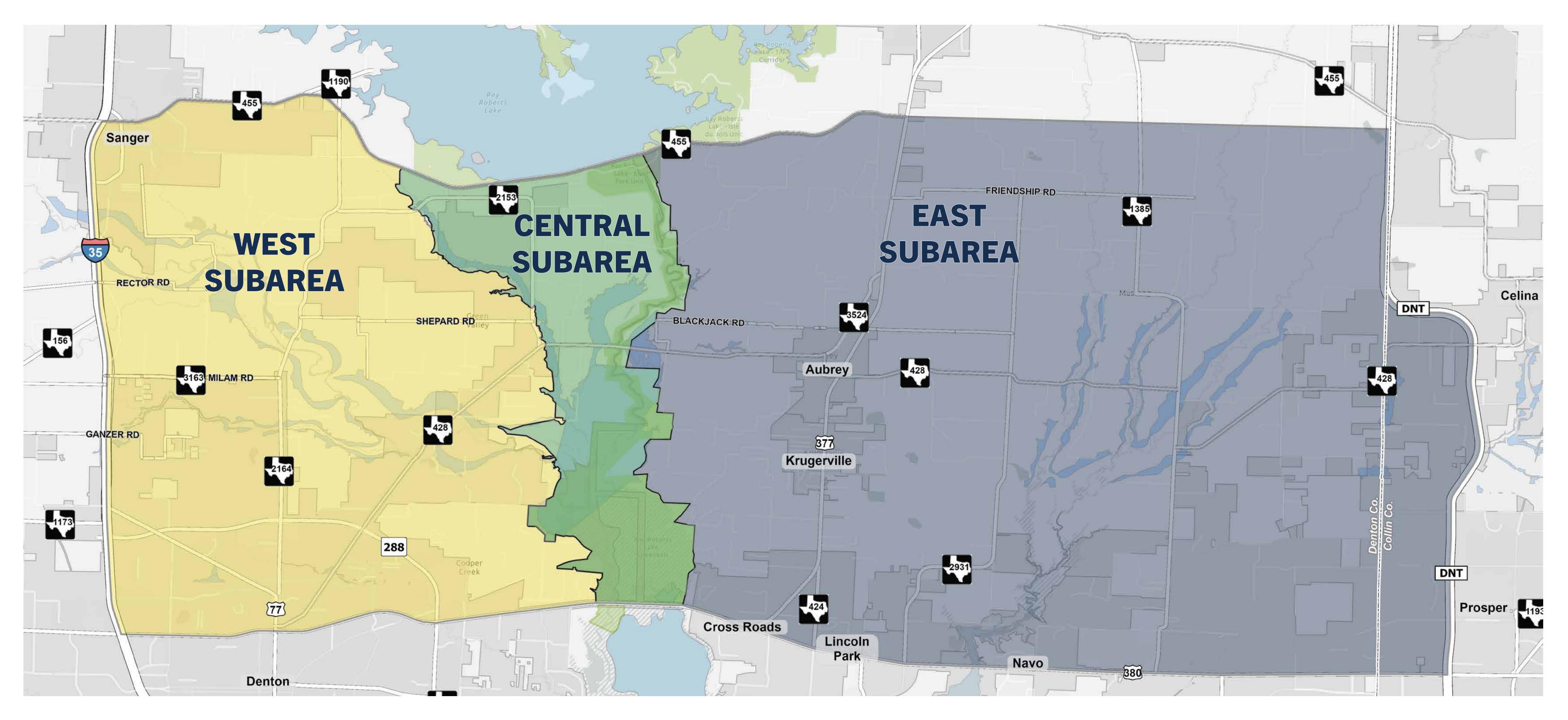
### **Key Considerations:**



- Previous Studies
- Previously Identified Alignments
- Thoroughfare Plans
- Established Design Criteria
- **Engineering Feasibility** ullet
- Traffic Analysis
- Community & **Environmental Impacts**







## STUDY SUBAREAS West, Central and East

To further analyze the conceptual alignments, the study area was divided into West, Central and East Subareas. The study subareas represent areas with similar features and potential constraints.





Many factors are considered to determine the viability of an alignment. As part of the early evaluation process, data was collected in each of these areas to assess the potential impact of each alignment.

## **ENVIRONMENTAL IMPACTS**

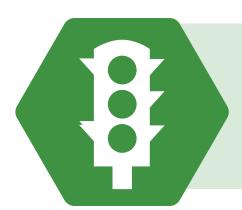


Wetlands and Streams





Oil & Gas Well Properties



## **MOBILITY IMPACTS**



System Connectivity



Tra



## **FEDERAL PROPERTY AND MAJOR INFRASTRUCTURE IMPACTS**



Airstrips



Major Utilities

- Longitudinal (parallel)
- Transverse (crosses)



# SCREENING CRITERIA CONSIDERED

S	COMMUNITY
oodplains	Residential Property*
	Potential Residential Displacements
	Potential Business Displacements
affic Level of Service	
	Community input

- US Army Corps of **Engineers (USACE)** Flowage Easements\*\*
- **Conservation Lands**

- billboards will also be considered as the study moves forward.
- within the flowage easement.

## **IMPACTS**



**Community Facilities** (religious property, cemeteries, schools, universities, etc.)



Parkland (existing)



Future Open Space (planned parks, recreation and open space areas)

### t will be an important part of the

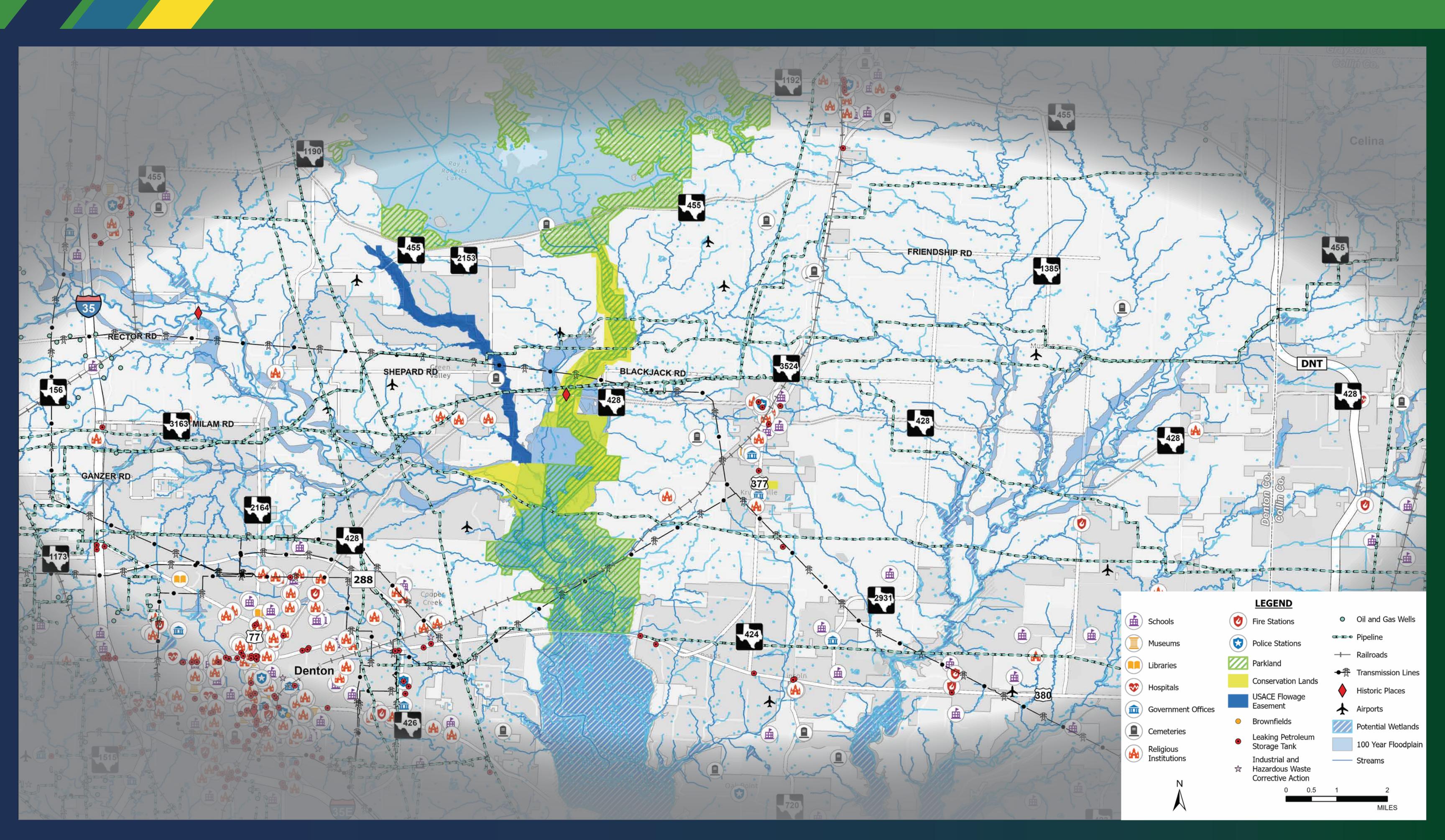
evaluation process as the study progresses.

\* In addition to residences and businesses, displacements such as garages, sheds, barns and

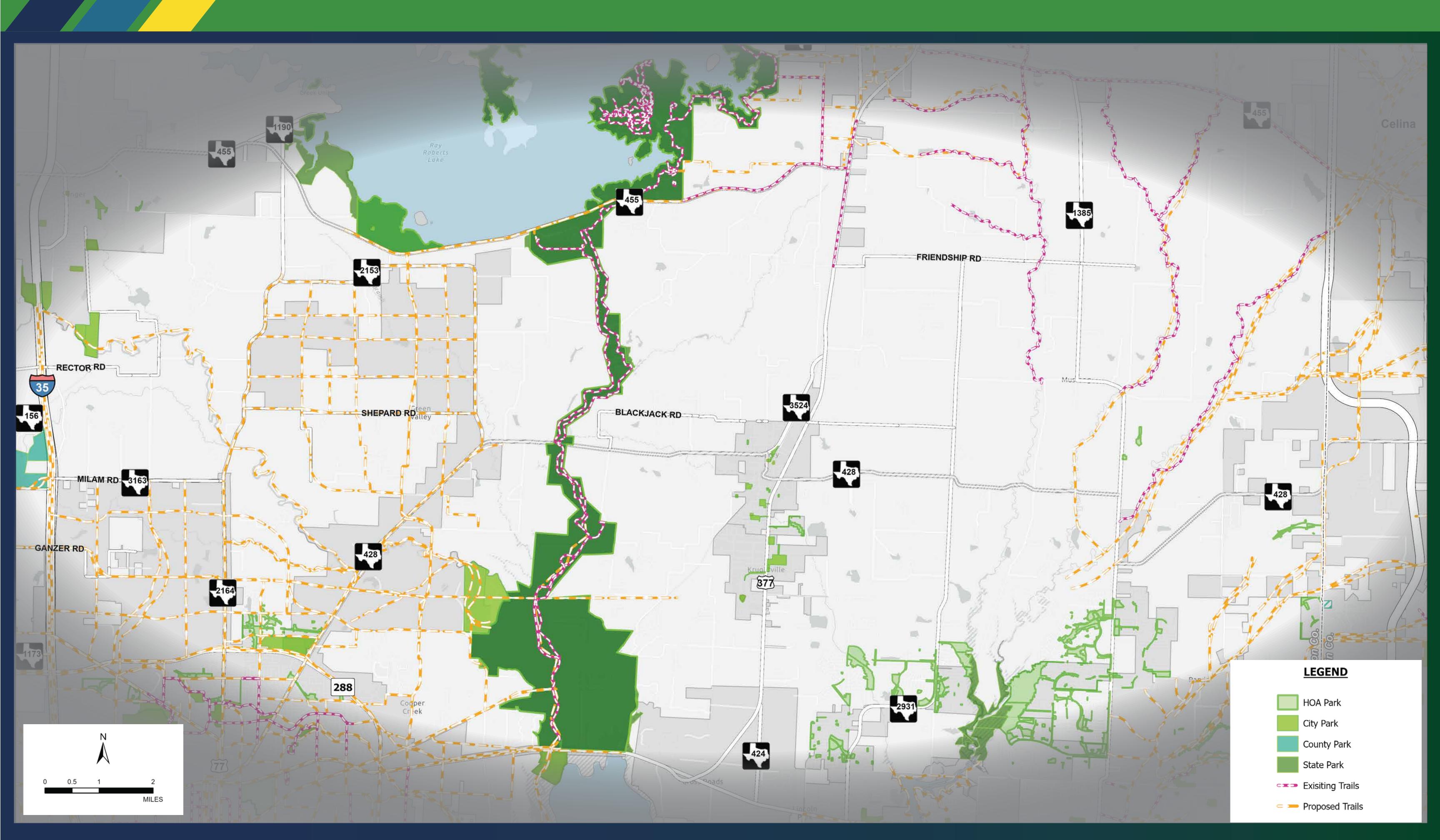
\* \* Flowage Easements are non-federal land on which the United States Government has acquired certain perpetual rights, including the rights to overflow, flood, and submerge the land, prohibit structures for human habitation, and approve all other structures proposed for construction



# ENVIRONMENTAL CONSTRAINTS



# PARKS & TRAILS IN THE STUDY AREA



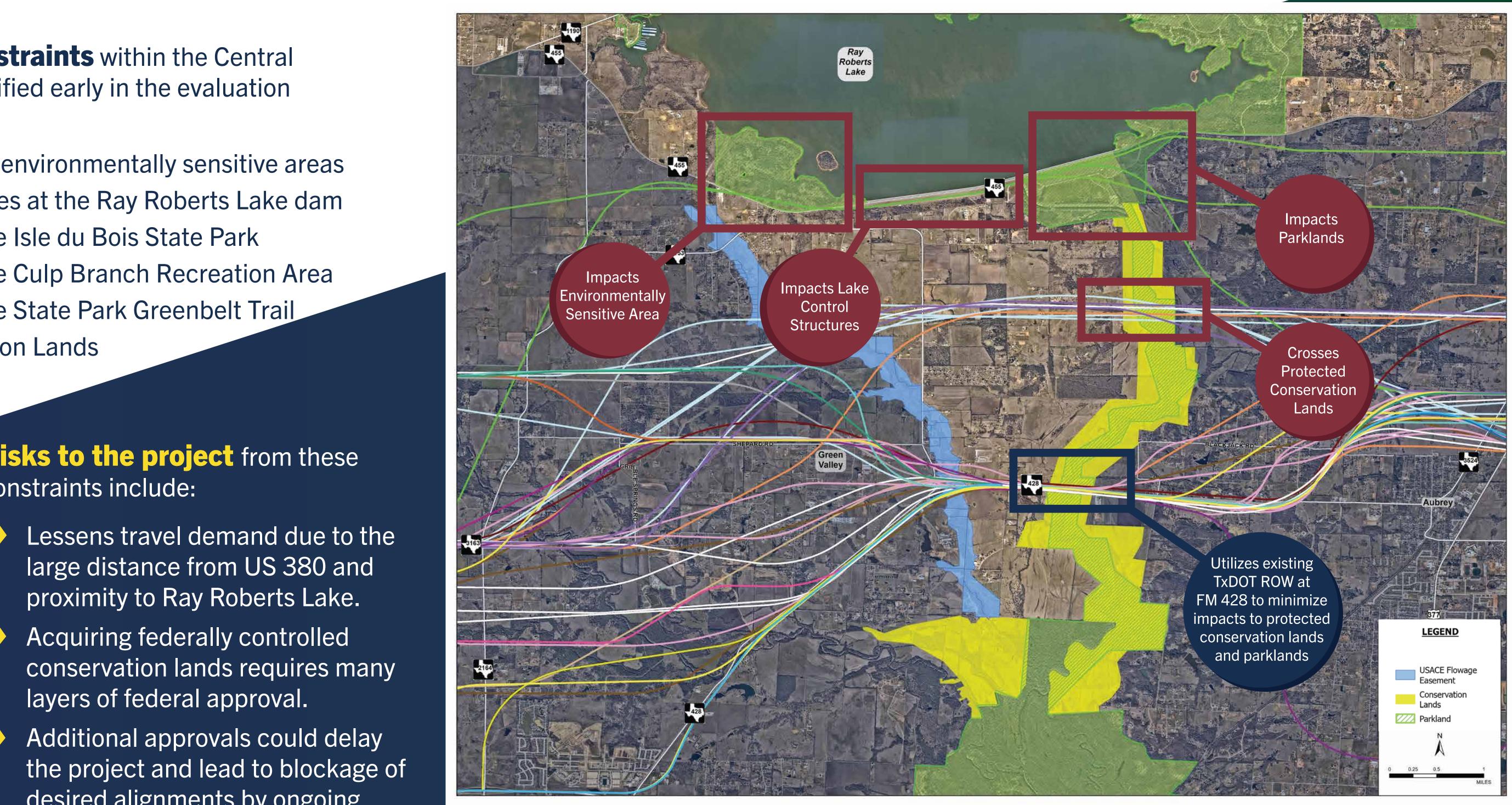
## CENTRAL SUBAREA IN FOCUS High-Risk Constraints

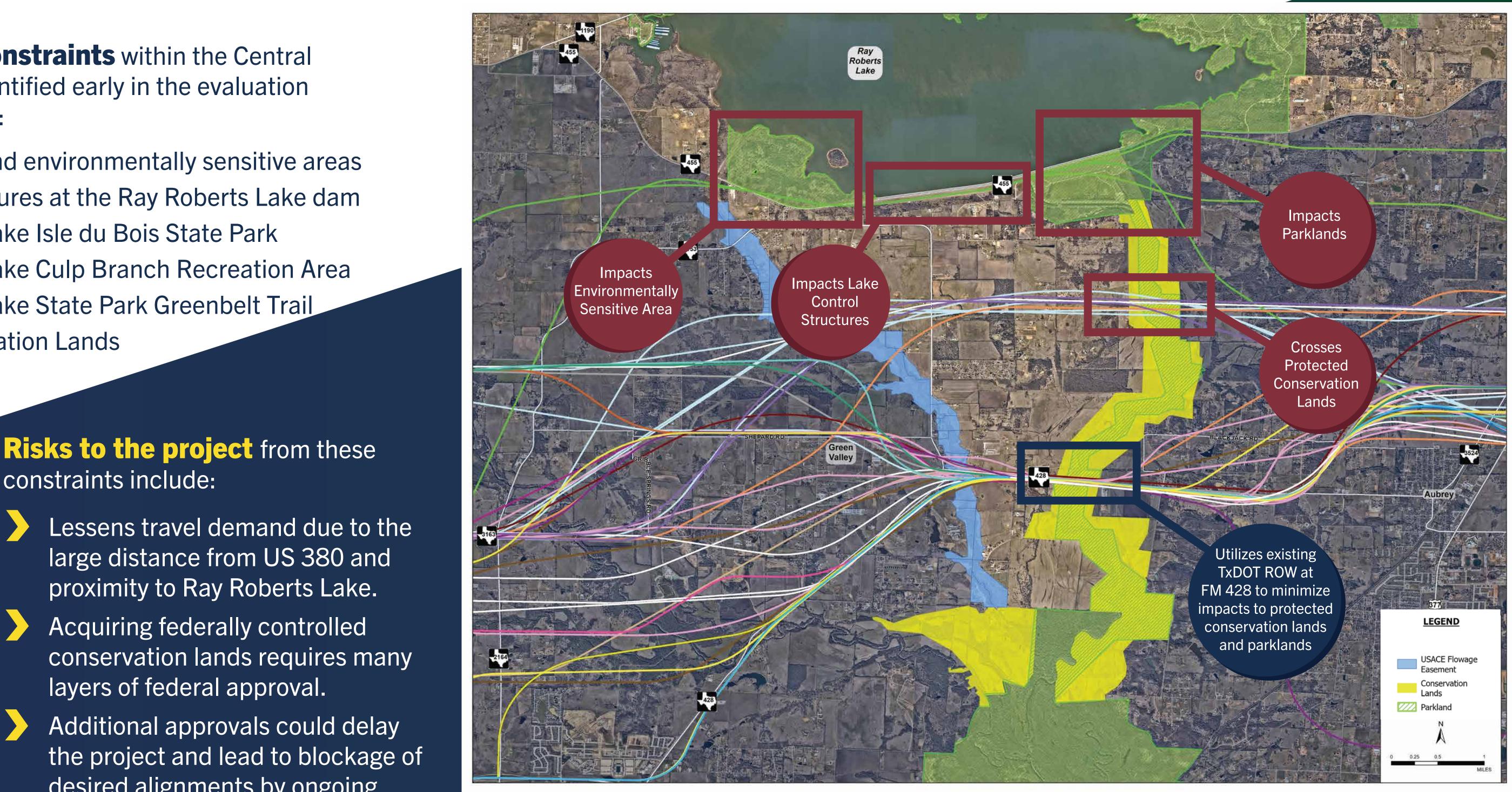
Several high-risk constraints within the Central Subarea have been identified early in the evaluation process. These include:



Federally owned and environmentally sensitive areas Lake control structures at the Ray Roberts Lake dam The Ray Roberts Lake Isle du Bois State Park The Ray Roberts Lake Culp Branch Recreation Area The Ray Roberts Lake State Park Greenbelt Trail **Protected Conservation Lands** 

constraints include:



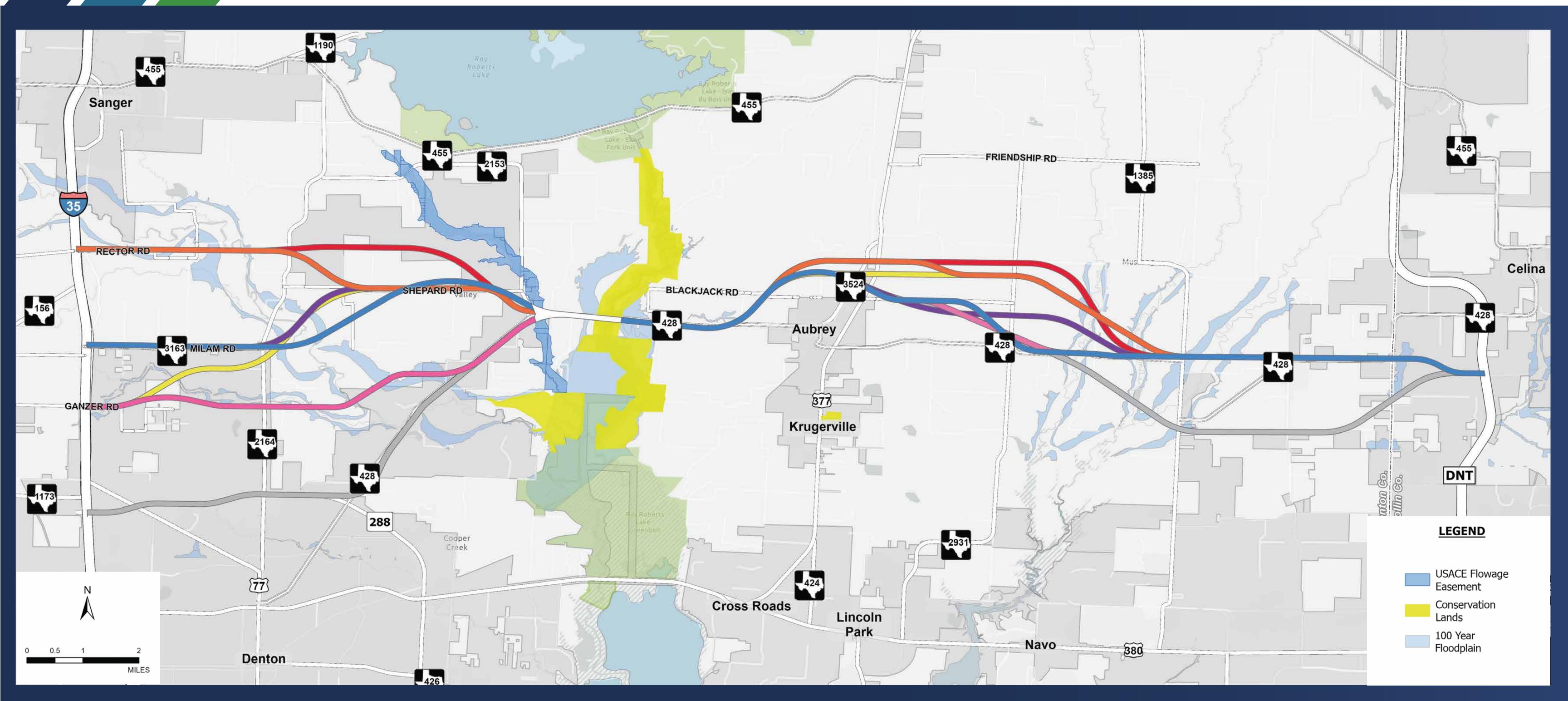


desired alignments by ongoing development activities.

**Recommendation:** Focus on the alignments that cross the Greenbelt at FM 428 because they utilize existing TxDOT right-of-way through the federally protected conservation and park lands. These alignments are considered least impactful and have a lower risk of delaying the project. Remove the northern alignments within the Central Subarea from further consideration as they pose a higher risk to project approval.



## **FEASIBLE ALIGNMENTS** For Further Consideration



The remaining alignments that cross at FM 428 were evaluated based on their ability to meet future needs of the County and minimize impacts. Seven alignments in the West and East subareas and one alignment in the Central Subarea are recommended for further consideration.

These alignments may be viewed in greater detail at the Roll Plot tables and Interactive Map station.



# SCREENING MATRIX

	Evaluation Criteria WEST SUBAREA	Purple West	Red West	Blue West	Yellow West	Pink West	Orange West	Grey West		Evaluation Criteria CENTRAL SUBAREA	White Central		Evaluation Criteria EAST SUBAREA	Grey East	Purple East	Pink East	Blue East	Orange East	Red East	Yellow East
	COMMUNITY IMPACTS							(		COMMUNITY IMPACTS			COMMUNITY IMPACTS							
	Residential Property (Acres)									Residential Property (Acres)			Residential Property (Acres)	$\bullet$						
	Potential Residential Displacements (Each)	<10	<10	<10	<10	<10	<10	>50		Potential Residential Displacements (Each)	<10		Potential Residential Displacements (Each)	<10	<10	<10	10 - 20	<10	<10	<10
	Potential Business Displacements (Each)	≤1	2 - 5	≤1	0	≤1	2-5	2-5		Potential Business Displacements (Each)	≤1		Potential Business Displacements (Each)	≤1	≤1	≤1	≤1	2-5	2-5	2-5
	<b>Community Facilities</b> ( <i>i.e., religious property, cemeteries, schools, universities</i> )							Ο		Community Facilities (i.e., religious property, cemeteries, schools, universities)			<b>Community Facilities</b> ( <i>i.e., religious property, cemeteries, schools, universities</i> )							
	Parkland (Acres)							Ο		Parkland (Acres)	0		Parkland (Acres)							
	Future Open Space (Acres)									Future Open Space (Acres)			Future Open Space (Acres)							
	Stakeholder and Public Input	TBD	TBD	TBD	TBD	TBD	TBD	TBD		Stakeholder and Public Input	TBD		Stakeholder and Public Input	TBD	TBD	TBD	TBD	TBD	TBD	TBD
$\mathbf{\Pi}$	FEDERAL PROPERTY AND MAJOR INFRASTRUCTURE IMPACTS					FEDERAL PROPERTY/MAJOR INFRASTRUCTURE														
	Airstrips (Each)								Airstrips (Each) USACE Flowage Easements (Acres)	Airstrips (Each)			Airstrips (Each)							
	USACE Flowage Easements (Acres)	0	0	0	0	0	0	0		USACE Flowage Easements (Acres)	10		USACE Flowage Easements (Acres)	0	0	0	0	0	0	0
	Conservation Lands (Acres)	0	0	0	0	0	0	0		Conservation Lands (Acres)	18		Conservation Lands (Acres)	0	0	0	0	0	0	0
	Major Utilities (Linear Feet)							$\bullet$		Major Utilities (Linear Feet)			Major Utilities (Linear Feet)							
	ENVIRONMENTAL IMPACTS				'	1	1			ENVIRONMENTAL IMPACTS			ENVIRONMENTAL IMPACTS		· ·			· ·		
	Floodplains (Acres)									Floodplains (Acres)			Floodplains (Acres)							
	Oil & Gas Well Properties (Each)									Oil & Gas Well Properties (Each)			Oil & Gas Well Properties (Each)							
	Wetlands and Streams (Acres)									Wetlands and Streams (Acres)			Wetlands and Streams (Acres)							
	MOBILITY IMPACTS							MOBILITY IMPACTS			MOBILITY IMPACTS									
	System Connectivity							$\bullet$		System Connectivity			System Connectivity							
	Traffic Level of Service							$\bullet$		Traffic Level of Service			Traffic Level of Service							

LEGEND	Highly	Mostly	Partially	Sometimes	Does Not		
	Meets	Meets	Meets	Meets	Meet		
	Criteria	Criteria	Criteria	Criteria	Criteria		
					0		

Results of data analysis may change as routes are further defined and evaluated. A "No Build" alterantive will also be considered during development of the EIS.





# PROJECT DEVELOPMENT PROCESS



### Identify Regional Needs & Conduct Feasibility Studies



Study

లు

Design



## Preliminary Engineering & Environmental Studies

Final Design, Detailed Construction Plans & Cost Estimates

uction

ostri

Ŭ

Corridor Preservation - Land use planning & right-of-way purchases



# uction Constri

## Phased Construction

Construction cannot begin until full funding is secured.

## PHASED CONSTRUCTION

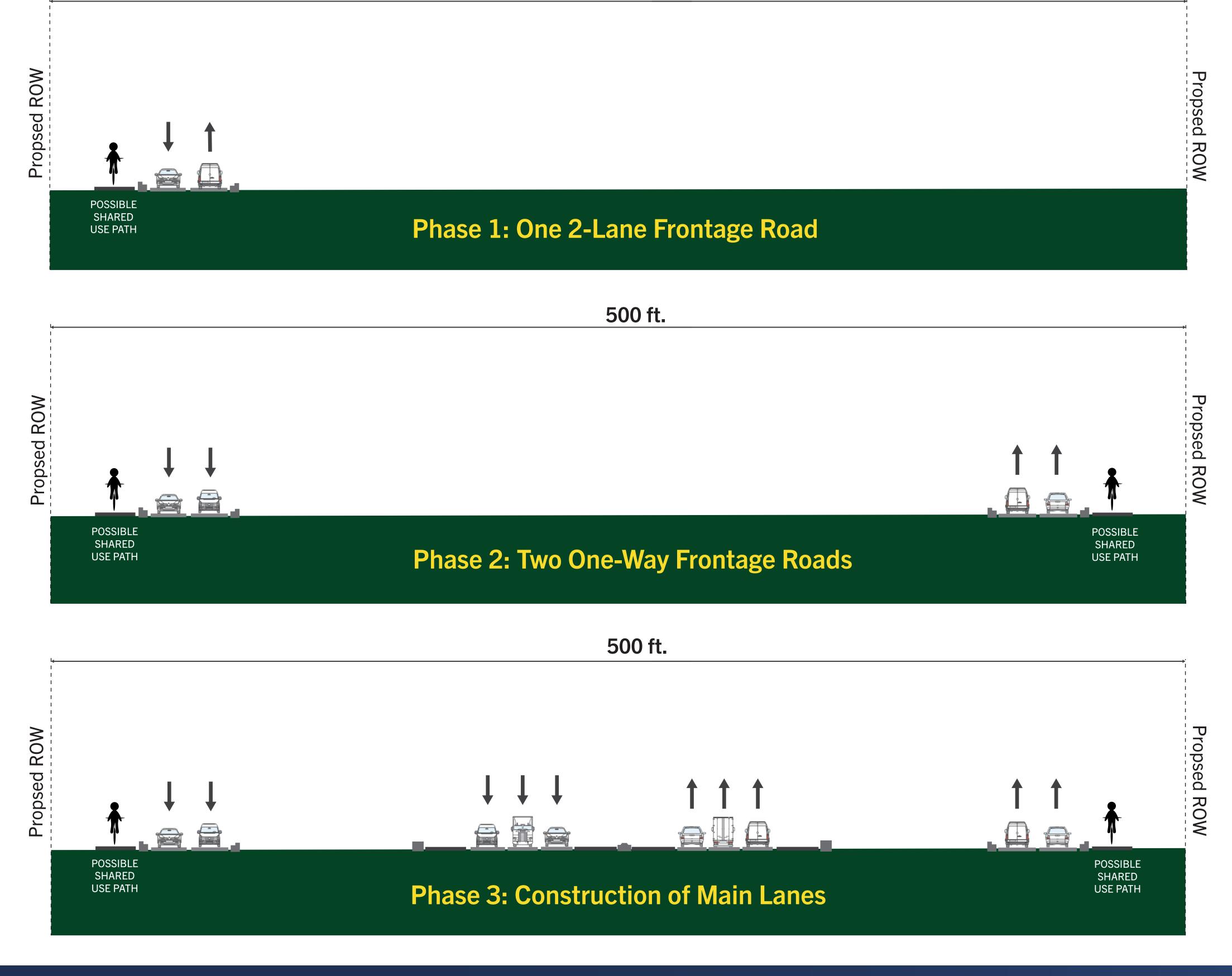
means construction of the roadway would be phased over time. Frontage roads may be built first, and then the main lanes of a freeway as demand increases.

## ILLUSTRATIVE **PURPOSES ONLY**

These diagrams are for illustration purposes only and do not represent the final design or lane configuration for the roadway. Modifications to the lane configuration and right-of-way width will occur as the study progresses.

## PHASED CONSTRUCTION Freeway Typical Section Example

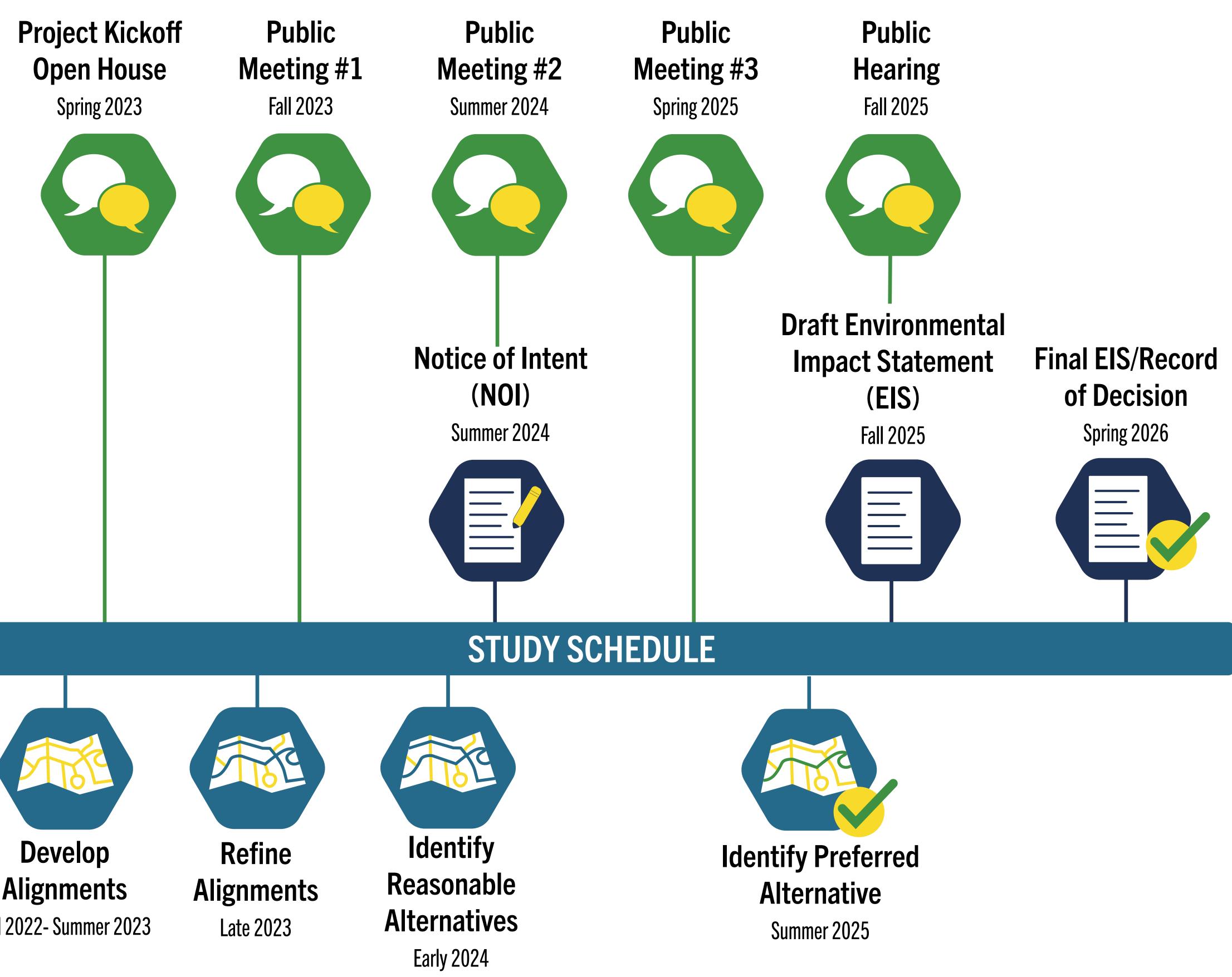
500 ft.

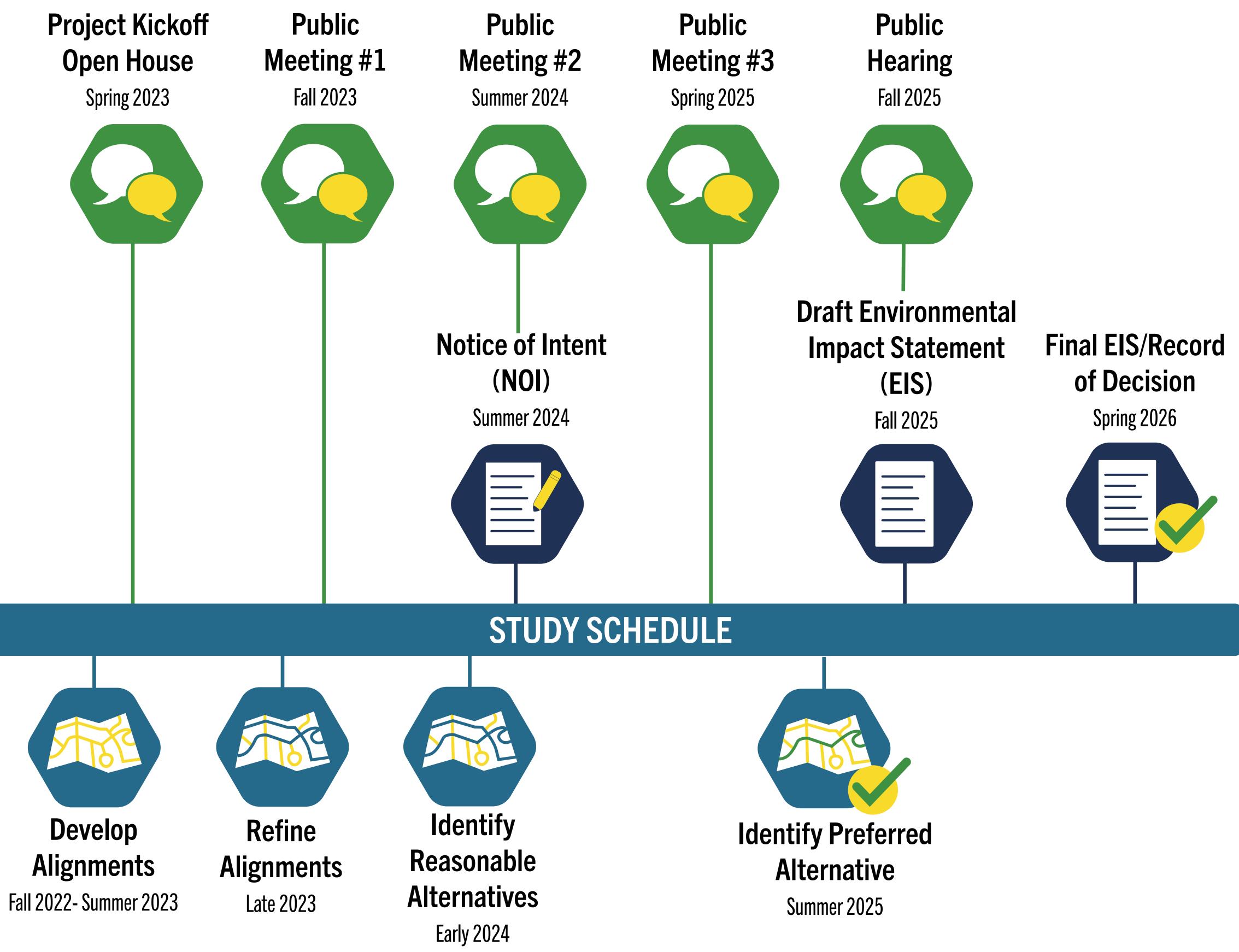


























All comments must be received by the study team or postmarked no later than June 22, 2023 to be part of the official meeting record.

# PROVIDE YOUR INPUT





Website Survey & Interactive **Comment Map DentonCountyOuterLoop.com** 

## Email info@dentoncountyouterloop.com





Mail

**Project Team Attn: Denton County Outer Loop** 13737 Noel Rd., Suite 700 Dallas, TX 75240



# www.DentonCountyOuterLoop.com

