



# Purpose and Need Statement

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## Loop 9, Segment A

From United States 67 (US 67) to Interstate 35 East (IH 35E)

Control-Section Job (CSJ) Number(s): 2964-10-006; 0261-01-041

Dallas and Ellis Counties, Texas

April 2019

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 December 16, 2014 and executed by FHWA and TxDOT.

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## Section 1. Project Need and Purpose

### 1.1 Introduction and Project History

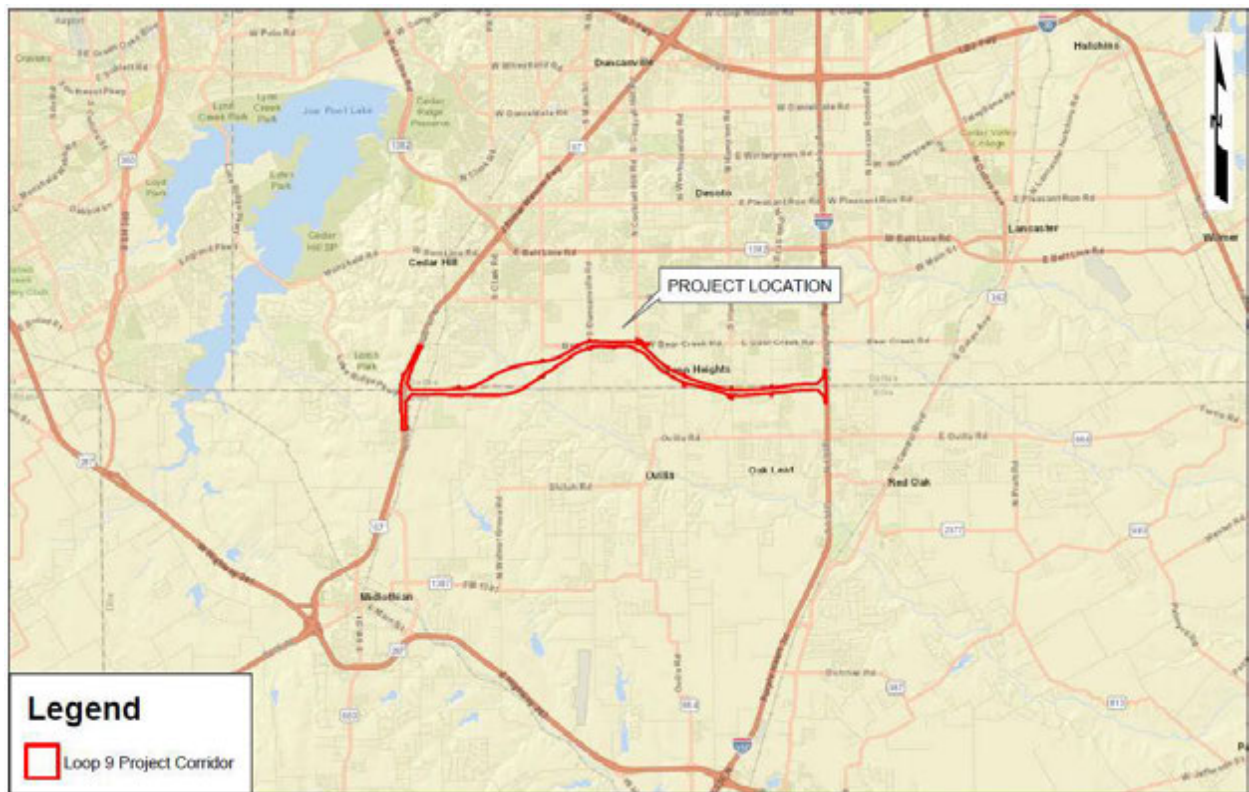
Loop 9 has been identified in transportation plans for a number of years. Originally conceived as a circumferential loop around the Dallas metropolitan area, changes in demographics, legislation and forecasted traffic growth have altered the development of the project as an “outer loop”.

In September 2012, TxDOT began the Loop 9 Southeast Corridor/Feasibility Study (Feasibility Study) for the revised Loop 9 project concept from United States (US) Highway 67 to Interstate (I) Highway 20 (Southeast project). The purpose of Feasibility Study was to assist in guiding future infrastructure investments to advance the proposed Loop 9 Southeast project. The Feasibility Study also follows the Planning and Environment Linkages (PEL) approach to help evaluate environmental issues early in the planning process. The Feasibility Study incorporates more flexible design standards, a reduced right-of-way (ROW), a shorter project length, and minimizes the overall impacts when compared to past studies. These changes alter the project to be more closely aligned with the transportation and development needs of the southeast Dallas region.

The ultimate goal of the Feasibility Study was to develop a program of independent projects to advance into the National Environmental Policy Act (NEPA) process based on mobility needs, engineering and environmental data, and coordination with the North Central Texas Council of Governments (NCTCOG), local officials, the public, and resource agencies. Based on discussions with local governments and major stakeholders within the study area along with consideration of logical termini (project endpoints such as major thoroughfares), and independent utility (the ability of a transportation project to function without recurring additional transportation improvements), the project area was divided into three major corridors for development: Corridor A, Corridor B and Corridor C.

The proposed Loop 9 project discussed in this document represents Corridor A **as identified in the feasibility study**. For the purpose of this report, Corridor A will now be referred to as Loop 9 - Segment A moving forward. The proposed project would provide a facility creating a direct east-west link from Interstate Highway 35 East (IH 35E) to US 67 through Dallas and Ellis counties, Texas (**Figure 1-1**). This proposed Loop 9 project would likely be constructed in phases based on traffic needs and project funding. Sufficient design will be conducted during the first phase of project development to determine the ROW requirements for the full phase roadway facility. This would allow TxDOT to purchase the necessary ROW for the entire future facility during Phase 1 of the project for this corridor. It should be noted that policies provided by the RTC encourages preservation of ROW in key transportation corridors and RTC Policy FT3-002 requires TxDOT to evaluate all new limited access capacity for priced facility potential.

Figure 1-1: Loop 9, Segment A Vicinity Map



The proposed project is consistent with the currently effective Metropolitan Transportation Plan (MTP) of NCTCOG, Mobility 2045 and the NCTCOG 2019-2022 Transportation Improvement Program (TIP). The proposed project is also included in the Texas Department of Transportation (TxDOT) Unified Transportation Program (UTP) Projects listing. Once constructed, the Loop 9 roadway would be included in the National Highway System for roadways important to the nation's economy, defense, and mobility.

## 1.2 Need for the Proposed Project

### 1.2.1 Need

The need for the Loop 9 project is to address transportation demand resulting from population and economic growth in the region, system linkages, and connectivity among the existing roadway facilities. Loop 9, Segment A would provide a direct link from IH 35E to US 67 and would serve the residents in the area.

The substantial transportation improvement needs for the proposed Loop 9 study area:

- Population growth: Population and economic growth, as indicators for travel demand, is forecasted to increase nearly 32.5 percent in Dallas County and approximately 84 percent in Ellis County between 2017 to 2045.

- **Transportation Demand:** Increasing development of industrial and commercial facilities has positively affected economic growth for communities within the study, which has in-turn increased transportation demand. The current transportation system neglects to provide efficient connections (or linkage) for east-west travel routes between major suburban communities within the study area such as Cedar Hill, Ovilla, DeSoto, Glenn Heights, and Red Oak. Additionally, there is a demand to promote intermodal connections in the study area and surrounding Dallas-Fort Worth (DFW) Region. All roadways in the study area would experience deterioration in Level of Service (LOS) between 2018 and 2045. The transportation demand exceeds the current and future capacity of the existing transportation infrastructure.
- **System linkage:** Within the study area, the existing roadway system provides sufficient north-south radial access along IH 35E and US 67 but lacks continuous east-west transportation facilities to serve these growing communities.
- **Connectivity of existing roadway facilities:** The current transportation infrastructure does not adequately provide connectivity between the communities in the study area thereby inhibiting emergency response, access to services, employers, major freight and trucking yards, transit services, and other community facilities.

### *1.3 Supporting Facts and/or Data*

Population and employment growth are primary demographic and economic indicators for travel demand. In 2010, the NCTCOG 12-county Metropolitan Planning Area (MPA), which includes Dallas and Ellis counties, had a population of 6.4 million. According to NCTCOG, the total population of the 12-county MPA is projected to increase to 11.2 million residents by 2045, which represents a 75% increase for the region within a 35-year period. The expected growth in and around the study area would continue to strain existing transportation infrastructure. The existing transportation infrastructure serving these communities is insufficient to effectively meet the access and mobility needs associated with this growth.

#### **1.3.1 Population Growth**

Population (as indicated by an increase in the number of households) and total employment growth are primary demographic and economic indicators for travel demand, which is defined as the number, purpose, and type of trips. The statistics below are indicative of the need for transportation improvements within the proposed Loop 9 study area to accommodate growth. The existing transportation infrastructure serving these communities is insufficient to effectively meet the access and mobility needs associated with this growth.

NCTCOG uses demographic forecasts to develop transportation recommendations. The year 2017 is used as a base year to illustrate general trends in population and employment growth through 2045. **Table 1-1** shows the historical and projected population distribution for Dallas and Ellis counties.



**Table 1-1: Historical and Projected Population Data**

County	1990	2000	2010	2017 Projected	2045 Projected	Percent Change (1990- 2000)	Percent Change (2000- 2010)	Percent Change (2010- 2017)	Percent Change (2017- 2045)
Dallas	1,852,810	2,218,899	2,368,139	2,600,408	3,445,204	19.8%	6.7%	9.8%	32.5%
Ellis	85,167	111,360	149,610	163,695	300,954	30.8	34.3%	9.4%	83.9%

Source: NCTCOG "Mobility 2045", 2018.

According to NCTCOG's Mobility 2045 plan, Dallas County's population is expected to grow by approximately 32.5 percent from 2,600,408 in 2017 to approximately 3,445,204 in 2045. Neighboring Ellis County is expected to have an even greater population increase, about 84 percent, from 163,695 in 2017 to 300,954 residents in 2045.

**Table 1-2** shows the historical and projected population distribution for each of the communities within the study area.

**Table 1-2: Forecasted Population Growth by City, 2017 through 2050**

	1970	1980	1990	2000	2010	2020**	2030**	2040**	2050**
<b>Cedar Hill</b>	2,160	6,849	19,976	32,093	45,028	53,244	65,133	76,989	83,579
<b>Percent Population Change</b>		1970- 80 217 %	1980-90 192 %	1990-2000 61%	2000-10 40%	2010-20 18%	2020-30 22%	2030-40 18%	2040-50 9%
<b>DeSoto</b>	6,617	15,538	30,544	37,646	49,047	54,505	58,941	64,281	70,078
<b>Percent Population Change</b>		1970- 80 135%	1980-90 97%	1990-2000 23%	2000-10 30%	2010-20 11%	2020-30 8%	2030-40 9%	2040-50 9%
<b>Glenn Heights</b>	257	1,033	4,564	7,224	11,278	13,822	18,831	23,973	29,555
<b>Percent Population Change</b>		1970- 80 302%	1980-90 341%	1990-2000 58%	2000-10 56%	2010-20 23%	2020-30 36%	2030-40 27%	2040-50 23%
<b>Midlothian</b>	2,322	3,219	5,141	7,480	18,037	20,660	30,895	32,500	34,500
<b>Percent Population Change</b>		1970- 80 39%	1980-90 60%	1990-2000 45%	2000-10 141%	2010-20 15%	2020-30 50%	2030-40 5%	2040-50 6%

<b>Red Oak</b>	767	1,822	3,124	4,301	10,769	7,667	8,635	11,660	16,615
<b>Percent Population Change</b>		<b>1970- 80</b>	<b>1980-90</b>	<b>1990-2000</b>	<b>2000-10</b>	<b>2010-20</b>	<b>2020-30</b>	<b>2030-40</b>	<b>2040-50</b>
		138%	71%	38%	150%	-28%	13%	35%	42%

\* = 1970, 1980, 1990, 2000, 2010 US Census Bureau

\*\* = 2021 Regional Water Plan – Population Projections - Texas Water Development Board

As population increases, employment is also expected to increase by over 53 percent in Dallas County and 49 percent in Ellis County. Dallas County is expected to have the highest percentage of employment growth for the 12-county MPA. Employment projections for Dallas and Ellis counties are shown in **Table 1-3**.

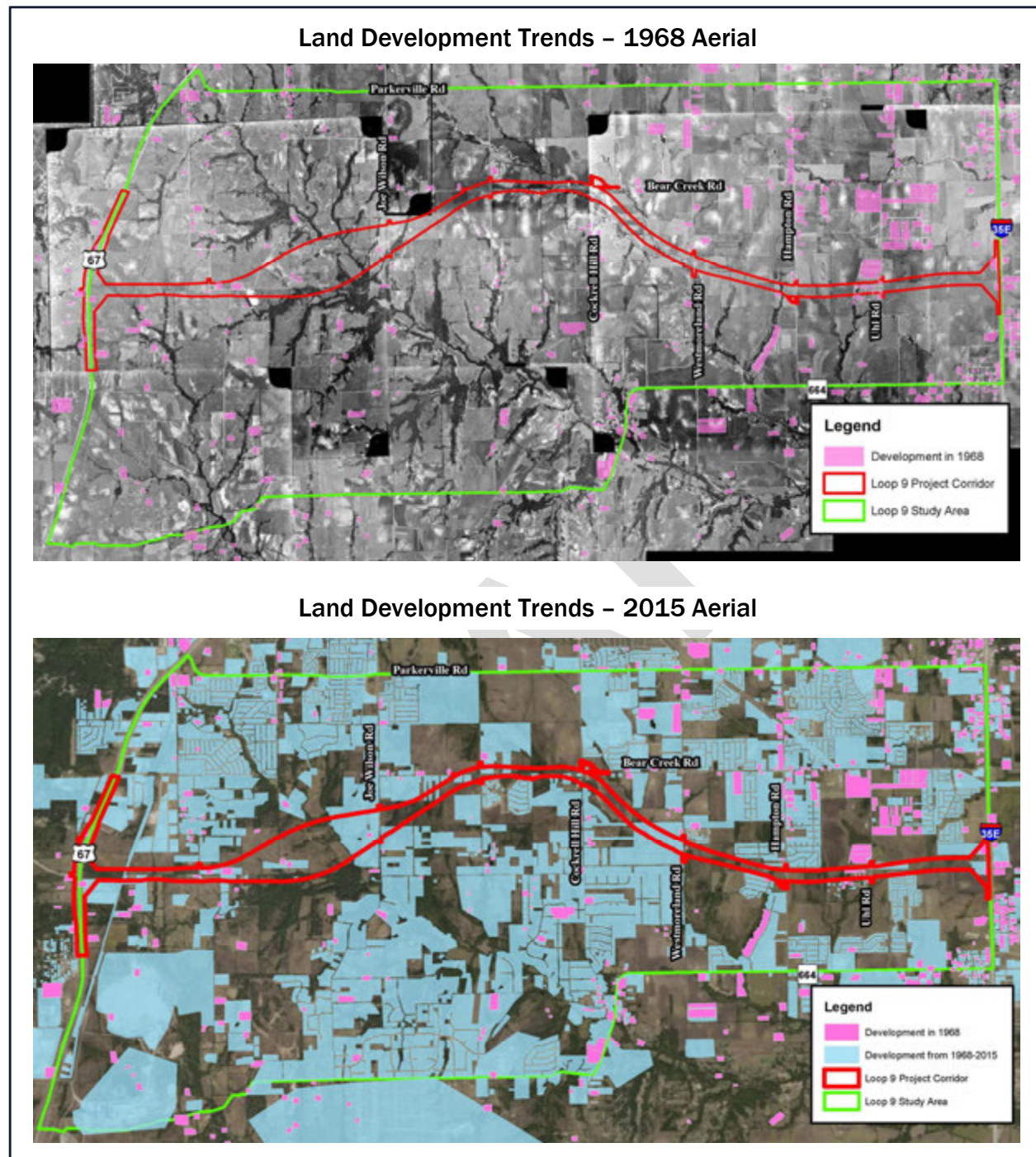
*Table 1-3: Forecasted Employment Growth by County, 2017 and 2045*

County	2017	2045	Growth	Percent Growth
<b>Dallas</b>	2,147,027	3,298,213	1,151,186	53.6%
<b>Ellis</b>	68,913	102,692	33,779	49%

Source: NCTCOG "Mobility 2045", 2018

Given the availability of undeveloped land and a discontinuous east-west roadway network in the study area, mobility impacts are likely and the need for transportation improvement to these newly developed and developing areas of the counties are necessary. **Figure 1-2** illustrates the increase in land development within the study area over the past nearly 50 years.

Figure 1-2: Historic and Current Land Development





In 1968, there was approximately 3,292 acres (16 percent) of developed land within the study area. By 2015, approximately 16,763 acres of land had been developed representing approximately 81 percent of the 20,689-acre study area.

Mobility improvements for the Dallas-Fort Worth (DFW) metropolitan area have traditionally focused on improving travel time and reducing traffic congestion along the major roadway corridors. Historically, the majority of industrial and commercial developments have been in urban centers within the major loop facilities such as I-635. Most of the peak hour travel demand originated from commuters in suburban communities traveling to and from their respective places of employment. Industrial and commercial developments have now expanded beyond the major loop freeways/tollways into the suburban communities, causing a change in travel patterns. Increasing development of industrial and commercial facilities has positively affected economic growth for these communities, which has in-turn increased population growth and transportation demand (*Loop 9 Southeast Corridor/Feasibility Study, 2014*).

Not only have population and travel increased, but the nature of travel has changed in ways that contribute to greater traffic congestion. The travel patterns of many people have altered with changes in land use. The changes in land use associated with suburbanization influence the characteristics of travel, causing more widely scattered inter- and intra-suburban travel as opposed to the more suburb-to-central city commute of the past. As commercial establishments and employers increase in these suburban areas, changes in travel patterns inherently result in increased localized traffic and congestion.

The study area for the proposed Loop 9 facility is primarily rural and has historically been characterized as a relatively low-density, rural suburban area of Dallas and Ellis counties. A major development northeast of the study area is the International Inland Port of Dallas (IIPOD), a regional intermodal development focused on logistics and freight distribution (IIPOD, 2013). The IIPOD is a public-private partnership that serves as a third phase of regional intermodal development. It is a coordinated effort partnering communities and developers and a key driver in making Dallas one of the nation's premier logistics and distribution centers. The IIPOD is a catalyst for investment, job growth, and development of sustainable communities.

The IIPOD is considered an influence within the Loop 9 study area due to the anticipated industrial/commercial growth and heavy freight traffic within and adjacent to the development. It is also a key factor in transportation demand within the study area. Projected growth and traffic generation from this area has been incorporated into the Loop 9 traffic forecast analysis obtained from the Feasibility Study. The IIPOD development area encompasses 7,500 acres and five municipalities, including Dallas County. The project has direct access to three major interstate highways (IH 35E, I-45, and I-20) and currently

employs over 17,000 people. (<http://www.dallasecodev.org/414/International-Inland-Port-of-Dallas>).

### 1.3.2 Transportation Demand

A traffic study for the proposed Loop 9 project is currently ongoing; however, the traffic study generated for the Feasibility Study used the NCTCOG's regional travel demand model as its basis of analysis and evaluates traffic growth potential for two scenarios within the study area: Baseline Forecast and Higher Growth Forecast. The Baseline Forecast utilizes historic traffic growth as well as the estimated population and employment growth between the base year (2012) and horizon year (2035) in the NCTCOG *2040 Demographic Forecast*. The Higher Growth Forecast considers future land use plans of jurisdictions within the study area, potential timing of different developments that are envisioned to occur in the vicinity of the corridor, and accelerated developments usually associated with the opening of a new road. The network used for this evaluation included all planned projects in Mobility 2035, except the Loop 9 project. Between 2012 and 2035, the study projected a daily increase in vehicle miles travelled (77% increase) and vehicle hours of travel (89%) within the study area. The increased travel would result in an increase in vehicle hours of congestion delay (125% increase). In addition, the percentage of lane miles operating at level of service (LOS) E is forecasted to increase from 5.6 to 12.6% (126.4% increase), and the percentage operating at LOS F is forecasted to increase from 4.2 to 18.7% (349.5% increase). Based on this analysis, all functional roadway classifications in the study area would experience deterioration in LOS between 2012 and 2035, thereby inhibiting overall mobility

#### Level of Service

Level of service (LOS) is a qualitative measure for rating roadways based on operating conditions. LOS categories range from ratings of A through F, and the range describes a progressive deterioration of operating conditions from A (which indicates very good operating conditions) through F (which essentially represents the functional failure of the roadway in terms of traffic movement). **Table 1-4** describes the characteristics of LOS and **Table 1-5** presents the traffic volume thresholds for arterial and freeway facilities used in the Feasibility Study.

**Table 1-4: LOS Characteristics**

LOS Rating	Description
A	Free flow with low volumes and high speeds
B	Reasonably free flow, but speeds beginning to be restricted by traffic conditions
C	In stable flow zone, but most drivers are restricted in the freedom to select their own speeds
D	Approaching unstable flow where drivers have little freedom to select their own speeds

LOS Rating	Description
E	Unstable flow and may require short stoppages
F	Unacceptable congestion, stop-and-go, and forced flow

*Table 1-5: Criteria for Determination of Project Phasing-Traffic Volume Thresholds (Passenger Cars)*

Arterial Level of Service					
Number of Lanes (Directional)	A	B	C	D	E
1	2,300	4,500	5,700	6,800	7,500
2	4,500	9,000	11,300	13,500	15,00
3	6,800	13,500	16,900	20,300	22,500
Freeway Level of Service					
Number of Lanes (Directional)	A	B	C	D	E
1	5,300	8,700	12,800	16,300	19,200
2	10,800	17,300	25,700	32,600	38,300
3	16,100	25,900	38,500	48,900	57,500
4	21,500	34,500	51,300	65,200	76,700

Source: Loop 9 Southeast Corridor/Feasibility Study: Traffic Analysis Memorandum, Revised February 2014.

Traffic LOS measures were used to evaluate justification to open the corridor or upgrade to the next phase. Traffic volumes that correspond to a LOS of B for arterials were deemed appropriate to justify opening Phase 1 of the project since LOS A would indicate that the corridor is underutilized. To move into next phases of the project, a LOS D or lower (E and F) was used. This would correspond to average daily traffic (ADT) volumes of 4,000 for Phase 1; 12,000 for Phase 2; and 38,000 for Phases 3 or 4.

#### Baseline Forecast

The results of the Baseline Forecast analysis show that a two-lane arterial road would be needed by 2025 between US 67 and IH 35E (Phase 1). The US 67 to IH 35E section would need to be upgraded to a four-lane arterial by 2040. **Table 1-6** presents the Baseline forecasted average daily traffic (ADT) projections and LOS for Warranted Configuration, illustrating the Baseline forecast project phasing.

**Table 1-6: Baseline Forecast Projected Traffic Volumes (Passenger Car Traffic) and LOS for Warranted Configuration**

Roadway Segment	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	2075
IH 35E to Duncanville Rd.	6,700	8,500	10,700	16,100	38,200	53,600	75,100	105,300	147,700	207,100	264,100
Duncanville Rd. to US 67	5,000	6,400	8,000	12,100	22,300	40,300	56,600	79,300	111,200	155,900	198,800
Roadway Segment	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070	2075
IH 35E to Duncanville Rd.	B	B	C	C	A	B	B	C	D	F	F
Duncanville Rd. to US 67	B	B	B	B	C	A	B	C	C	E	F

	Projected year recommended to open as 2-lane section arterial
	Projected year recommended to open as 4-lane section arterial
	Projected year recommended to open as 4 mainlanes and 4 frontage roads
	Projected year recommended to open as 6 mainlanes and 6 frontage roads

Source: Loop 9 Southeast Corridor/Feasibility Study: Traffic Analysis Memorandum, Revised February 2014.

### Higher Growth Forecast

In the Higher Growth Forecast, the intention was to first identify developments that may occur as a result of opening Loop 9 as well as full potential of some growing developments in the traffic study area. This information was gathered from comprehensive plans of jurisdictions within the traffic study area and examining availability of vacant land using Google Maps images. Some of these jurisdictions such as the cities of Cedar Hill, Glenn Heights, and Red Oak have considered Loop 9 in their future land use plans. For example, the city of Cedar Hill's comprehensive plan shows office and commercial developments along the corridor while the city of Glenn Heights's plans depict mixed residential and commercial developments in the vicinity of the corridor. The City of Red Oak's future land use plan also notes mixed use developments along this corridor. The City of DeSoto is considered a bedroom community with commercial and retail and some office developments scattered in the area. The City of Midlothian is industrial based with future industrial site plans in the vicinity of the Loop 9 interchange with US 67. While this data was compiled and used during the Feasibility Study, the ongoing traffic study will re-evaluate any updated comprehensive plans.

The Higher Growth Forecast analysis demonstrates the need for constructing a two-lane configuration for the sections from US 67 to IH 35E by 2025 (Phase 1). Other intermediate configurations would be justified approximately 10 years apart. The ultimate configuration in this scenario is estimated warranted in 2060. **Table 1-7** presents the Higher Growth forecasted daily traffic (ADT) projection and LOS for Warranted Configuration, illustrating the Higher Growth forecast project phasing.

**Table 1-7: Higher Growth Forecast Projected Traffic Volumes (Passenger Car Traffic) and LOS for Warranted Configuration**

Roadway Segment	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070
IH 35E to Duncanville Rd.	10,600	13,200	15,700	56,600	79,600	97,800	126,500	161,500	187,200	217,000
Duncanville Rd. to US 67	6,900	9,400	11,200	40,400	52,100	77,200	99,800	127,400	147,700	171,200
Roadway Segment	2025	2030	2035	2040	2045	2050	2055	2060	2065	2070
IH 35E to Duncanville Rd.	C	B	C	B	C	C	D	E	F	F
Duncanville Rd. to US 67	B	B	B	A	B	B	C	D	D	E

	Projected year recommended to open as 2-lane section arterial
	Projected year recommended to open as 4-lane section arterial
	Projected year recommended to open as 4 mainlanes and 4 frontage roads
	Projected year recommended to open as 6 mainlanes and 6 frontage roads

Source: Loop 9 Southeast Corridor/Feasibility Study: Traffic Analysis Memorandum, Revised February 2014.

### 1.3.3 System Linkage

Within the study area, the existing roadway system provides sufficient north-south radial access but lacks continuous east-west transportation facilities to serve these growing communities. There is one interstate highway (IH 35E) and one principal US highway (US 67) within the study area; both of which provide north-south travel access. Existing east-west facilities within the study area include, Bear Creek Road to the north (approximately 0.9 miles, intersecting at western termini of Bear Creek Road), Parkerville Road to the north (approximately 0.9 miles) and FM 664 (Ovilla Road) to the south (approximately 0.8 miles at its nearest location to the study area) (**Figure 1-3**). Parkerville Road and Bear Creek Road



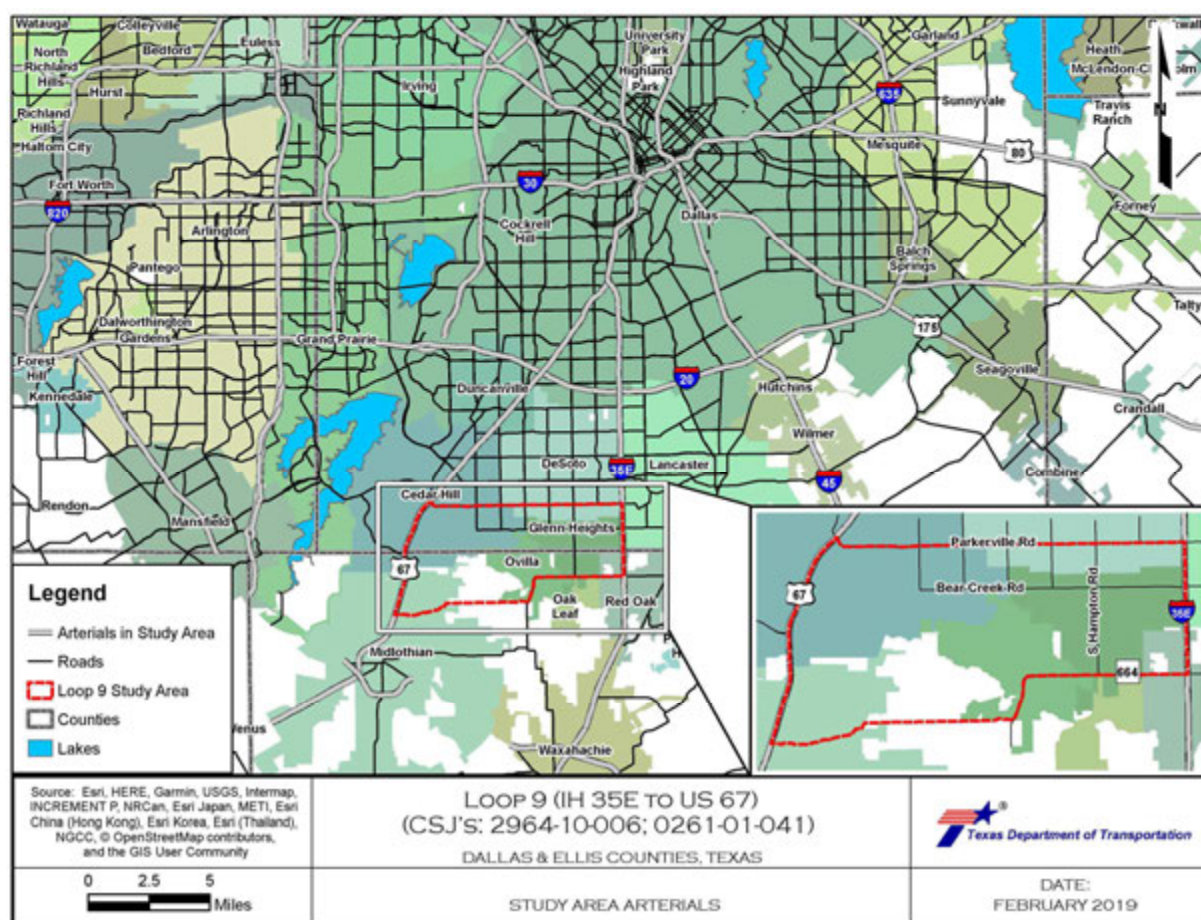
are not continuous throughout the study area, therefore do not provide a through connection between IH 35E and US 67.

- Bear Creek Road is an east-west, undivided, two-lane rural highway. The road is currently being considered for improvements by TxDOT. The proposed improvement would reconstruct and widen the undivided, two-lane rural highway from Hampton Road to Interstate 35 East over a two-mile length into Lancaster. According to a TxDOT press release, improvements would include two travel lanes in each direction with a raised median, curb and gutter, as well as continuous sidewalks and a 12-foot shared-use path. The project would also increase the existing right-of-way of 80 feet to approximately 112 feet. Additional improvements include reconstructing the intersection of Interstate 35-East and Bear Creek Road and replacing the Interstate 35-East frontage road bridges.

Additionally, in the City of Glenn Heights, East Bear Creek Road is planned for expansion. The East Bear Creek Road Expansion would take the existing two-lane road to four lanes with enhanced mobility for pedestrians and other transit modes for bikers from I-35E (Exit 412) to South Hampton Road. Overall, the project will enable automobile, bicycle and pedestrian traffic to travel through Glenn Heights safely and efficiently.

- Parkerville Road is an east-west, four-lane, divided rural roadway from the eastern terminus at IH 35E in the town of DeSoto to S. Uhl Road, and from S. Joe Wilson Road to the western terminus at US 67 in Cedar Hill. Parkerville Road is a two-lane, undivided rural roadway from S. Uhl Road to S. Joe Wilson Road with a discontinuous 0.5-mile section closed to traffic between Keswick Drive and Duncanville Road; at this location traffic must travel north to circumvent a private property before connecting back to Parkerville Road. Parkerville Road establishes the northern study area boundary and crosses most of the same north-south arterials that would be crossed by the proposed Loop 9 project. Parkerville Road ROW varies from approximately 40-80 feet.
- FM 664 (Ovilla Road) is an east-west, two-lane, undivided rural roadway, with an eastern terminus at IH 35E in Red Oak and a western terminus at US 67 in the city of Midlothian. FM 664 travels west from IH 35E for a distance of about 3.7 miles, then turns south for almost 3 miles before heading west again. While it establishes an east-west corridor, the 3-mile detour makes the roadway inefficient for communities more central to and north of the study area. FM 664 establishes the southern study area boundary and crosses most of the same north-south arterials that would be crossed by the proposed Loop 9 project. FM 664 ROW is approximately 100 feet. Various portions of FM 664 are currently undergoing studies for future widening to support the traffic demand in this region.

Figure 1-3: Study Area Arterials Map



While existing east-west roadways are available within the study area, these roadways serve local street access and do not provide sufficient east-west linkage for the current or proposed traffic demand to north-south major roadway networks. The proposed project may better serve the needs of area motorists resulting in the alleviation of traffic on parallel roadways. The project may allow area residents, who might work outside of the communities in which they reside, an easier commute.

Loop 9 has been a substantial and long-standing component of the regional long-range transportation plan and has been included in each of the 12 regional transportation plans developed since 1974. The inclusion of Loop 9 in *Mobility 2045* as well as future land use plans for many of the communities within the study area indicates continuing regional support for the proposed project.

### 1.3.4 Connectivity among Existing Roadway Facilities

The current transportation infrastructure does not adequately provide connectivity between the communities in the study area thereby inhibiting emergency response, access to services, employers, major freight and trucking yards, transit services, and other community facilities. Additionally, there is a demand to promote intermodal connections in the study area and the surrounding DFW region. **Appendix A** includes an environmental constraints map which identifies the community facilities and destinations located within the study area, including parks, cemeteries, places of worship, and educational facilities. Major employers within the study area were also identified using the NCTCOG Development Monitoring Employers Report and Employers geographic information system dataset. Due to the rural nature of the study area; there are a limited number of major employers.

Public transportation services within the study area include Community Transit Services which provides scheduled transportation services in Ellis and Navarro counties. Community Transit Services provides a safe and efficient mode of transportation to the general public and persons with special needs. Dallas Area Rapid Transit provides paratransit services in select cities - one of which is Glenn Heights. This public transportation service is for people with disabilities who are unable to use Dallas Area Rapid Transit fixed route buses or trains. Dallas Area Rapid Transit fixed bus routes within the study area are Bus Routes 206, 278 and DART on-call services for personalized neighborhood services. Dallas Area Rapid Transit's Glenn Heights Park and Ride is located on these routes. There are no rail services currently located within the study area. Loop 9 would provide a reliable route for transit, school buses, and potential future transit service within the project area.

No emergency facilities are near the study area. The closest major hospitals are located along I-20 near DeSoto and Duncanville. The distance to I-20 from the Loop 9 project area is approximately 3 miles in Red Oak. The Baylor Scott & White Medical Center in Waxahachie is located approximately 8 miles from Loop 9 and IH 35E in Red Oak. Smaller urgent care facilities are also located along I-20 and near IH 35E in Lancaster. Loop 9 would provide a reliable route for emergency response vehicles within the study area.

## 1.4 Purpose of the Proposed Project

### 1.4.1 Purpose

The purpose of the proposed action of the Loop 9 project is to develop a facility that would help address the regional growth, transportation demand, and system linkage within the study area by providing a direct link from IH 35E to US 67 that would serve the residents and businesses in the area.

- Population growth: The proposed project would support the rapid growth in population, as supported by local and regional planning plans and projections. The

proposed project will support the economic development within the region and provide adequate connectivity for commuters, as well as relieve congestion on local arterial roadways.

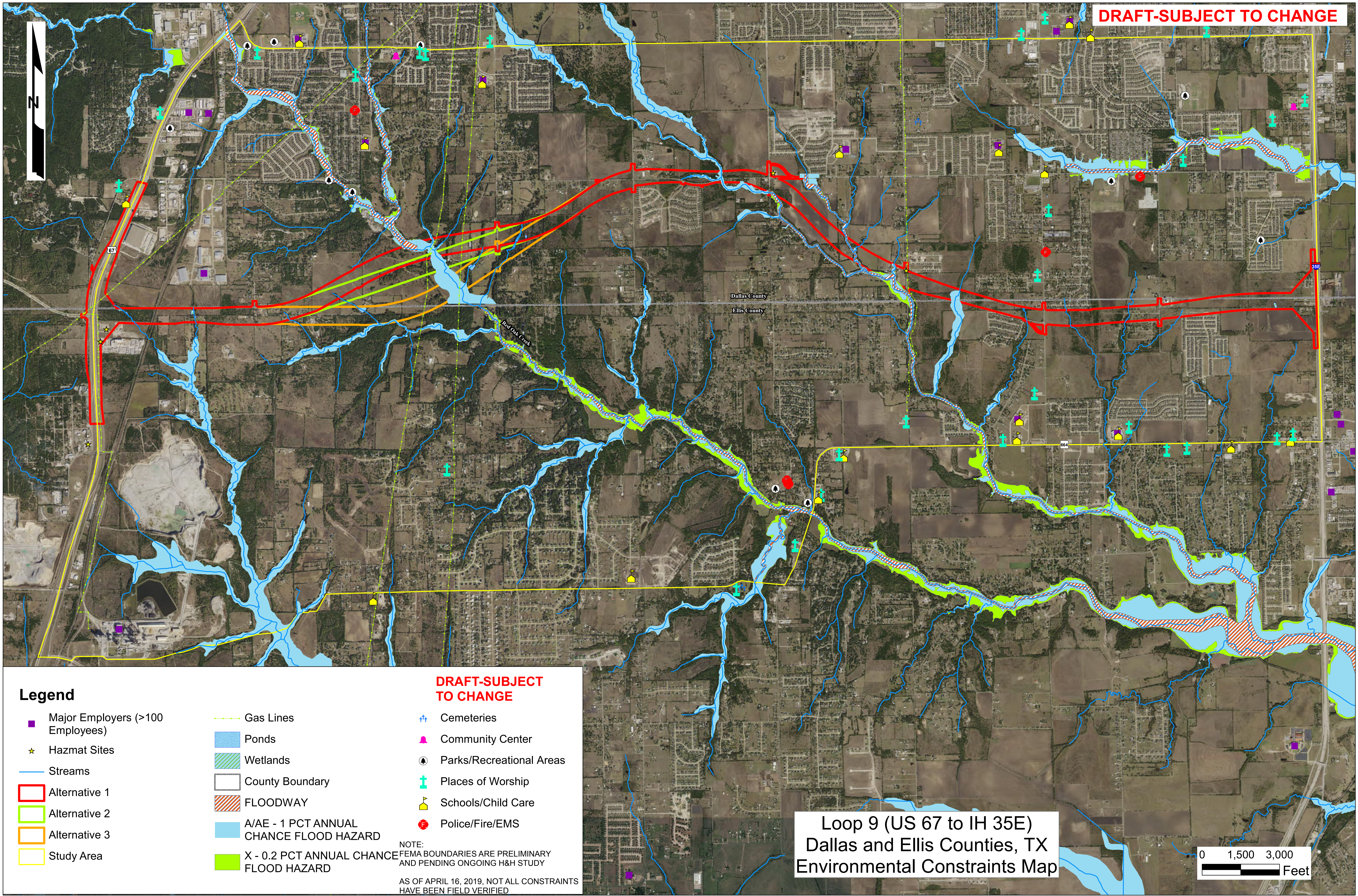
- **Transportation Demand:** The proposed Loop 9 project would increase capacity, mobility, and accessibility for the region. The proposed project would help manage the long-term regional congestion from population and employment growth by improving the movement of persons and goods, which would minimize barriers among businesses, consumers, and transportation infrastructure.
- **System linkage:** The proposed project would improve system linkage by providing access and connectivity to major highways/arterial roadways (IH 35E and US 67).
- **Connectivity among existing roadway facilities:** The proposed project would serve a population that is currently without a continuous east-west travel route and provide access to services, employers and other community facilities located within the study area.

## Appendix A: Environmental Constraints Map

DRAFT



DRAFT-SUBJECT TO CHANGE



**Legend**

- |                                  |                                         |                          |
|----------------------------------|-----------------------------------------|--------------------------|
| Major Employers (>100 Employees) | Gas Lines                               | Cemeteries               |
| Hazmat Sites                     | Ponds                                   | Community Center         |
| Streams                          | Wetlands                                | Parks/Recreational Areas |
| Alternative 1                    | County Boundary                         | Places of Worship        |
| Alternative 2                    | FLOODWAY                                | Schools/Child Care       |
| Alternative 3                    | A/AE - 1 PCT ANNUAL CHANCE FLOOD HAZARD | Police/Fire/EMS          |
| Study Area                       | X - 0.2 PCT ANNUAL CHANCE FLOOD HAZARD  |                          |

NOTE:  
FEMA BOUNDARIES ARE PRELIMINARY  
AND PENDING ONGOING H&H STUDY  
AS OF APRIL 16, 2019, NOT ALL CONSTRAINTS  
HAVE BEEN FIELD VERIFIED

Loop 9 (US 67 to IH 35E)  
Dallas and Ellis Counties, TX  
Environmental Constraints Map

0 1,500 3,000  
Feet