



# Draft US 69 Relief Route Environmental Impact Statement

## Purpose and Need Statement

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Cherokee County, Jacksonville, TX

CSJ: 0910-36-133

July 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.

## Table of Contents

1.0 Background and Introduction.....	1
1.1 Project History .....	1
1.2 Logical Termini and Independent Utility .....	1
2.0 Purpose and Need.....	4
2.1 Need for the Proposed Project.....	4
2.2 Purpose of the Proposed Project.....	6
3.0 Planning Process.....	7
4.0 References.....	8

## Tables

Table 1. Census Population Data and UTSA Population Projections for Cherokee County ...	4
Table 2. Weekday AM Peak Period Intersection Level of Service (LOS) .....	5
Table 3. Weekday PM Peak Period Intersection Level of Service (LOS) .....	5
Table 4. TxDOT Crash Record Data for US 69 near Jacksonville.....	6

## Figures

Figure 1. Project Location Map.....	3
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## **1.0 Background and Introduction**

The Texas Department of Transportation (TxDOT) Tyler District is currently preparing an Environmental Impact Statement (EIS) for a US 69 relief route around Jacksonville, Texas. US 69 originates in Port Arthur, passes through the Cities of Beaumont, Lufkin, Jacksonville, and Tyler, and terminates in Denison, Texas. The US 69/US 175 Corridor from the Hardin and Tyler County Line to the Kaufman County Line is classified as a Phase 1 Corridor of the Texas Highway Trunk System. The Texas Highway Trunk System defines a Phase 1 Corridor as a two-lane highway (or four-lane highway without a median) as priority projects for expansion to the desired four-lane divided facility.

The 2016 Texas Freight Mobility Plan identifies US 69 as a Secondary Freight Network/Emerging Freight Corridor. Additionally, TxDOT classifies US 69 as a Hurricane Evacuation Route from the origination of US 69 in Port Arthur to the City of Tyler.

### ***1.1 Project History***

In 2001, TxDOT performed a feasibility study of a relief route around the City of Jacksonville. The result of the study indicated that a relief route located in a corridor west of the city would “provide traffic relief in the greatest manner”. In 2009, the City of Jacksonville and the Jacksonville Economic Development Corporation funded a route location study report which examined five relief route alternatives west of Jacksonville. Public meetings for the 2009 US 69 relief route study were held on May 6, 2004, December 2, 2004, and February 10, 2005, to show the proposed alternatives to the public and collect feedback. Those opposed to the construction of a relief route included some of the property owners located near the proposed alignment as well as some of the business owners in downtown Jacksonville. The study resulted in the recommendation of a preferred alternative on the west side of the city.

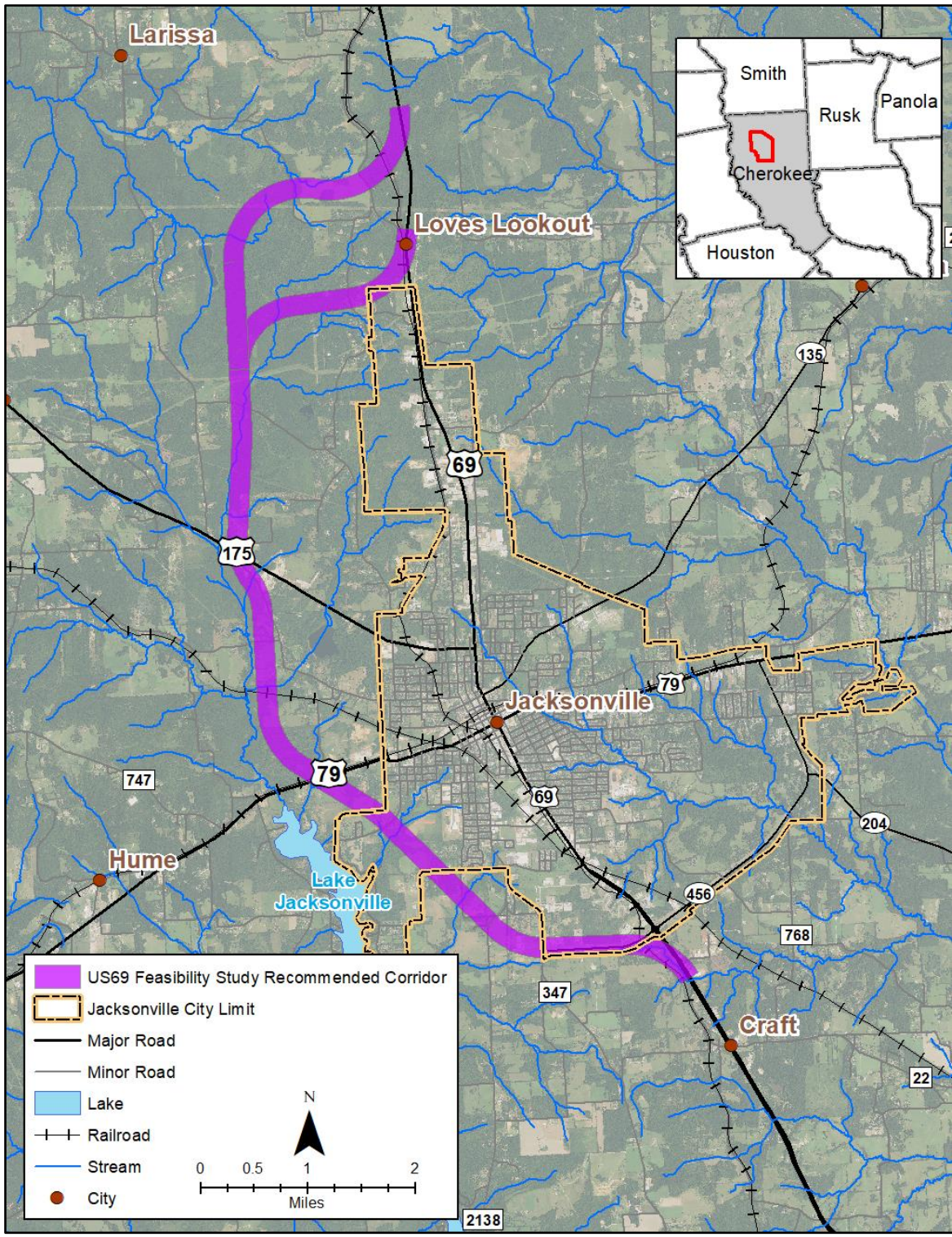
In May of 2017, TxDOT began the US 69 relief route alternative analysis study, which included preliminary analysis of the existing transportation system, environmental constraints analysis, analysis of current and future transportation needs, preparation of preliminary cost estimates, traffic forecasts, conceptual development of corridor alternatives, and corridor alternatives evaluation. Three public meetings were held during the study (February 22, 2018; May 29, 2018; and August 28, 2018). The study was completed in late 2018 and resulted in two recommended corridors for further alignment evaluation located on the west side of Jacksonville. Details regarding the feasibility study can be found in the *US 69 Jacksonville Relief Route Study Feasibility Study Summary Report* (TxDOT, 2018).

### ***1.2 Logical Termini and Independent Utility***

The Federal Highway Administration (FHWA) requires each alternative to connect logical termini. The FHWA defines logical termini as, “(1) rational end points for a transportation improvement, and (2) rational end points for a review of environmental impacts.” Additionally, the FHWA

requires each alternative to have independent utility and not restrict alternatives for future transportation improvement projects. The US 69 EIS study area consists of the recommended corridors from the feasibility study. The northernmost corridor connects with existing US 69 approximately 1.3 miles north of CR 3908, travels on the west side of Jacksonville, and reconnects with existing US 69 at the existing TX 456 Loop (**Figure 1**). The southernmost corridor connects with existing US 69 at CR 3908 and joins the previously described corridor north of US 175. Alternative route alignments will be studied within the recommended corridors identified in the feasibility study and logical termini and independent utility will be assessed as the study progresses, including identification of segments of independent utility (SIU) that could be used for phased construction.

Figure 1. Project Location Map



## 2.0 Purpose and Need

The Purpose and Need Statement is intended to clarify the challenges presented to constructing a relief route around the City of Jacksonville. The statement will be utilized to guide the development and evaluation of project alternatives. The Purpose defines the transportation problems or conditions to be solved. The Need further describes the problems or unsatisfactory conditions and provides data that supports each problem or unsatisfactory condition.

### 2.1 Need for the Proposed Project

The proposed US 69 relief route in the City of Jacksonville is needed because the current facility through downtown Jacksonville (a) is inadequate to meet current and future travel demand, resulting in degraded Level of Service (LOS), (b) exhibits a higher crash rate than the TxDOT average crash rates for similar roadways, and (c) has experienced increased congestion and decline in efficiency during hurricane evacuations.

a) Population growth in the project area is anticipated to increase according to Texas Demographic Center projections, which in turn, will result in greater travel demand and congestion on US 69. The population of Cherokee County grew by 33% from 38,127 in 1980 to 50,845 in 2010 according to the US Census. Population in this decade is expected to increase at an annual rate of 1.1% through 2018 when the population is estimated at over 54,000. By 2050, the population will increase by over 41% since 2010 (**Table 1**).

**Table 1. Census Population Data and UTSA Population Projections for Cherokee County**

Census	Total Population	% Change from 2010
1980	38,127	-
1990	41,049	-
2000	46,659	-
2010	50,845	-
<b>Texas Demographic Center Estimate</b>		
2018	54,191	6.58%
<b>Texas Demographic Center Projections</b>		
2020	55,557	9.27%
2030	60,764	19.51%
2040	65,857	29.53%
2050	71,816	41.24%

Source: US Census 2010 and 2000 Census of Population and Housing. Summary File 1 Urban/Rural Update 9/27/2013 and the Texas Demographic Center Projections/Estimates at UTSA (April 2019).

According to TxDOT Statewide Traffic Analysis and Reporting System II (STARS II) data, average daily traffic (ADT) volumes along US 69 north of Jacksonville have increased 23.5% from 12,000 in 2010 to 14,816 in 2017. Additionally, ADT volumes along US 69 south of Jacksonville have increased 10.3% from 11,700 in 2010 to 12,906 in 2017. The US 69 Relief Route Feasibility Study reported that under Existing conditions, all intersections were operating at LOS D or better in the AM and PM peak hours (see **Tables 2 and 3**). In the absence of project improvements under the No-Build condition, five intersections are expected to operate at LOS E or F during the peak hours.

**Table 2. Weekday AM Peak Period Intersection Level of Service (LOS)**

Intersection	Existing 2017 LOS	No-Build 2040 LOS
FM 347 at US 69	C	D
US 175/Alexander Boulevard at North Bolton Street	C	C
US 175/Alexander Boulevard at US 69	B	B
FM 347/Bolton Street at East Pine Street	C	F
North Jackson Street/US 69 at East Pine Street/SH 135	C	E
South Bolton Street at Rusk Street/US 79	C	C
Rusk Street/US 79 at US 69	D	E
SH 204 at US 79	B	D
SL 456 at SH 204	B	C
SL 456 at US 69	D	D
FM 347 at SL 456	B	C

Source: *US 69 Jacksonville Relief Route Study Feasibility Study Summary Report* (TxDOT 2018)

Note: Acceptable levels of service include LOS A through LOS D. Unacceptable levels of service are LOS E and LOS F, which means that traffic delays are excessive at study intersections and mitigation measures are required.

**Table 3. Weekday PM Peak Period Intersection Level of Service (LOS)**

Intersection	Existing 2017 LOS	No-Build 2040 LOS
FM 347 at US 69	C	E
US 175/Alexander Boulevard at North Bolton Street	C	D
US 175/Alexander Boulevard at US 69	B	B
FM 347/Bolton Street at East Pine Street	D	F
North Jackson Street/US 69 at East Pine Street/SH 135	D	E
South Bolton Street at Rusk Street/US 79	C	C
Rusk Street/US 79 at US 69	D	D

SH 204 at US 79	C	C
SL 456 at SH 204	B	E
SL 456 at US 69	D	D
FM 347 at SL 456	B	B

Source: US 69 Jacksonville Relief Route Study Feasibility Study Summary Report (TxDOT 2018)

Note: Acceptable levels of service include LOS A through LOS D. Unacceptable levels of service are LOS E and LOS F, which means that traffic delays are excessive at study intersections and mitigation measures are required.

(b) Crash rates expressed as the number of crashes per 100 million vehicle miles (MVM) traveled were calculated for the five-year period from 2013 to 2017 using data from the TxDOT Crash Records Information System (CRIS). The crash rates along the US 69 corridor through the center of the city exceed the statewide average (Table 4).

**Table 4. TxDOT Crash Record Data for US 69 near Jacksonville**

Segment	From	To	2016 Volume (ADT)	# of Crashes (5 yrs)	Crash Rate C/Mvmi	Statewide Avg Crash Rate	% Diff
1	Bolton Street	Sims Avenue	15,369	34	60.61	377.59	-84%
2	Sims Avenue	SH 135	14,107	66	301.60	377.59	-20%
3	SH 135	US 79	20,460	67	618.76	377.59	65%
4	US 79	Tena Street	16,958	159	529.66	377.59	40%
5	Tena Street	Beaumont Street	19,477	31	198.21	377.59	-48%
6	Beaumont Street	SL 456	10,573	55	271.46	193.14	41%

Source: TxDOT CRIS 2013-2017

(c) The increased congestion from the Beaumont or Houston area during emergency evacuations further decreases mobility along US 69 through Jacksonville. The 2009 relief route study noted poor LOS during evacuation during both Hurricane Rita (2005) and Hurricane Ike (2008), including travel time through an eight-mile stretch of Jacksonville taking 1 hour and 10 minutes. It was also observed that the majority of traffic continued north on US 69 towards Tyler instead of utilizing US 175 towards Dallas, further indicating the importance of the facility during hurricane evacuation.

## 2.2 Purpose of the Proposed Project

The purpose of the project is to improve the overall LOS, improve safety, and facilitate efficient hurricane evacuation along US 69 through the City of Jacksonville.



### **3.0 Planning Process**

Agency and public involvement will be conducted as described in the US 69 Public Involvement Plan and the US 69 Coordination Plan and will follow the federal process required for EISs, beginning with a Notice of Intent (NOI). Planned public involvement includes two public meetings and a public hearing. The first public meeting is anticipated in August 2019.

## 4.0 References

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