

MEMORANDUM

To:

Traffic Study Files

From:

Anna Martin, P.E., PTOE

South Area Engineer

Traffic Engineering Division

Austin Transportation Department

Date:

May 10, 2017

Subject:

SPEED ZONE INVESTIGATION

Location:

East Slaughter Lane - from 1,500 feet east of I.H. 35 (South) East Frontage Road

to Brandt Road (the study area).

Date(s) of Previous Investigation: 2003

A Traffic Engineering Investigation has been conducted by the Traffic Engineering Division to determine the appropriate speed limit on E. Slaughter Lane from 1,500 feet east of I.H. 35 East Frontage Road to Brandt Road/City Limit. A speed limit of 55 miles per hour (MPH) was previously established in 2003.

Location Conditions:

E. Slaughter Lane is a six-lane major arterial roadway with turn bays and a center median that generally runs in an east-west direction but turns north-south near the study area. Adjacent land use has changed extensively in the past several years with the construction of single family neighborhoods, apartment complexes and retail development.

Figure 1 represents a map of the study area. Currently, the section of E. Slaughter Lane from I.H.35 to Brandt Road is under the jurisdiction of the City of Austin. E. Slaughter Lane, east of Brandt Road, is the under jurisdiction of Travis County.

Figure 1. Study Area



Speed and Volume Data:

A speed study was conducted in accordance with the Texas Procedures for Establishing Speed Zones. Speed and volume data were collected in January 2017 to determine the appropriate posted speed limit for E. Slaughter Lane from 1,500 feet east of I-35 to Brandt Road. An average of over 20,000 vehicles per day was recorded on E. Slaughter Lane from I.H. 35 East Frontage Road to Brandt Road/City Limit. As summarized in Table 1, the 85th percentile speed on the eastbound and westbound lanes was recorded in the range of 50 mph to 52 mph.

Table 1: 2017 Speed and Volume Data for E. Slaughter Lane

Block		Existing	85% Speed		Traffic
Number	Street Segment	Speed	EB	WB	Volumes
Nulliber		Limit			(veh/day)
300	From I.H. 35 EFR to Narrow Glen Pkwy.	55 MPH	52	52	22,361
700	Just east of Narrow Glen Pkwy.	55 MPH	52	52	21,677
800	From Narrow Glen Pkwy. to Brandt Rd.	55 MPH	51	52	24,007

Crash Data:

Austin Police Department's crash database was reviewed to analyze all documented crashes on the study segment within the previous two years. Seven crashes were documented during this period; no discernible pattern from excessive speed is present.

Table 2: Crash Data for E. Slaughter Lane (2015-present)

Date /	Direction		iona euse I	Light	Road	Injury	D coverybe a deor	
Time	At Fault Other		Weather				Type of Crash	
01/09/16 1:32 AM	WB	WB	Clear	Dark-lighted	Dry	C	Side-swipe	
4/12/16 8:18 AM	ЕВ	WB	Clear	Day	Dry	None	Left-turn	
05/27/16 11:11PM	ЕВ	WB	Clear	Dark-lighted	Dry	Minor	Left-turn	
08/04/16 5:48 AM	SB	WB	Clear	Dark-lighted	Dry	None	Right-angle	
10/29/16 10:12PM	SB	EB	Clear	Dark-lighted	Dry	None	Jone Bicyclist right- angle	
11/10/16 6:43 PM	WB	EB	Clear	Dark not lighted	Dry	С	C Left-turn	
12/30/16 12:26PM	SB	WB	Cloudy	Day	Dry	С	Right-angle	

Figure 2 presents a map of the study area and the existing speed limits. Currently the speed limit is 45 mph for eastbound traffic from IH-35 to approximately 1,500 feet east of IH-35. From 1,500 feet east of IH-35 to Brandt Road the speed limit increases to 55 mph. At Brandt Road where E. Slaughter Lane enters Travis County jurisdiction, the speed limit decreases to 50 mph. In the westbound direction, the speed limit is set at 55 mph from Brandt Road to 1,500 feet east of the IH-35 East Frontage Road where it decreases to 45 mph.

Figure 3 presents a map of the proposed speed limit based on the collected data and analysis. The Austin Transportation Department recommends adjusting the speed limit of approximately 3,000 feet of E. Slaughter Lane to 45 mph based on the recent speed data. This will also set a consistent speed limit for the segment of E. Slaughter Lane under the City of Austin jurisdiction.

Figure 2. Existing Speed Zone Map

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Existing Speed Zone Map

East Slaughter Lane

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Figure 3. Proposed Speed Zone Map

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Proposed Speed Zone Map

East Slaughter Lane

General Comments:

A Traffic Engineering Investigation has been conducted by the Traffic Engineering Division to determine the appropriate speed limit on E. Slaughter Lane from 1,500 feet east of I.H. 35 East Frontage Road to Brandt Road/City Limit. A speed limit of 55 miles per hour (MPH) was previously established in 2003.

Based on the change in adjacent land use with multiple access points for residential and retail development along this section of E. Slaughter Lane, it is recommended to change the speed limit to 45 mph for approximate one half mile section from 1,500 feet east of IH-35 East Frontage Road to Brandt Road. This will also allow for a consistent speed limit of 45 mph for the section of E. Slaughter Lane east of IH-35 under the jurisdiction of the City of Austin.

Based on the analysis of this information, it is my engineering judgement that the speed limit on East Slaughter Lane should be <u>45 miles per hour from 1500 feet east of I.H. 35 East Frontage</u> Road to Brandt Road/City limits.

Respectfully submitted,

Anna Martin, P.E., PTOE

South Austin Engineer

Traffic Engineering Division

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