



MEMORANDUM

To: Traffic Study Files

From: Dipti Borkar-Desai, P.E., North Area Engineer
Transportation Engineering Division
Austin Transportation Department

Date: October 18, 2021

Subject: SPEED ZONE INVESTIGATION

Location: Lakeline Boulevard – N. Lake Creek Parkway. to W. Parmer Lane



Handwritten signature and date:
10-18-2021

Date(s) of Previous Investigation: N/A

A Traffic Engineering Investigation has been conducted by the Transportation Engineering Division of the Austin Transportation Department to determine the posted speed limit on Lakeline Boulevard from N. Lake Creek Parkway to W. Parmer Lane in accordance with Texas Department of Transportation's Texas Procedures for Establishing Speed Zones, 2006 and the Federal Highway Administration's USLIMITS2 tool. The posted speed limit on Lakeline Boulevard from Riviera Circle (west) to N. Lake Creek Parkway is 45 mph.

General Conditions

Lakeline Boulevard is a two-lane divided road from N. Lake Creek Parkway to approximately 400 feet east of Staked Plains Drive/Lyndhurst Street. It is a two-lane undivided road from approximately 400 feet east of Staked Plains Drive/Lyndhurst Street to approximately 1,165 feet west of W. Parmer Lane and transitions to a two-lane divided road for the remaining section to W. Parmer Lane.

Development along Lakeline Boulevard is a mix of commercial and residential from N. Lake Creek Parkway to Staked Plains Drive/Lyndhurst Street. It is undeveloped for the remaining section except for a mix of commercial and residential development immediately west of W. Parmer Lane. Additionally, the Capital Metro Metrorail Lakeline Station and Lakeline Park & Ride facility is located in the southeast corner of the intersection of Lakeline Boulevard and Staked Plains Drive/Lyndhurst Street.

Lakeline Boulevard is classified as a Level 3 (minor arterial) street as per the Austin Strategic Mobility Plan (ASMP). No speed limit is posted on Lakeline Boulevard from N. Lake Creek Parkway to W. Parmer Lane. As a result, Austin Transportation Department performed an engineering study along Lakeline Boulevard to review current traffic conditions to determine the posted speed limit.

Figure 1 presents the study segment and surrounding street network.



Segment Limits: Lakeline Boulevard from N. Lake Creek Parkway to W. Parmer Lane



No Posted Speed Limit



FIGURE 1.

Lakeline Boulevard

Study Segment and Location

Traffic Investigation

This investigation was conducted in accordance with the Texas Department of Transportation's Texas Procedures for Establishing Speed Zones, 2006 and the Federal Highway Administration's USLIMITS2 tool to evaluate speed limits from a safe systems approach, which includes the 85th and 50th percentile speeds; length and alignment of the road; number of lanes; road treatments and traffic control devices; land use; driveways; traffic volume; and crash rates as inputs to consider in setting reasonable, safe, and consistent speed limits based on the context and operating characteristics on the study segment.

Speed/Volume Data Collected

The following speed and volume data were collected in August 2021 to measure conditions along the study segment.

Block Number	Street Segment	Existing Speed Limit	85% Percentile Speed		24-Hour Traffic Volumes
			EB	WB	
10000	1,500 feet west of W. Parmer Lane	Not Posted	50.7	51.5	EB- 4,527 WB- 4,287
10200	Between W. Parmer Lane and Staked Plains Drive/Lyndhurst Street	Not Posted	51.4	49.7	EB- 4,571 WB- 4,255

Crash Data

Austin Police Department's crash database was reviewed to analyze documented crashes along the study segment within the past three years. Crashes at the intersections with W. Parmer Lane, Staked Plains Drive/Lyndhurst Street, and N. Lake Creek Parkway were not included. Three crashes which were attributed to various driver errors were documented during this period.

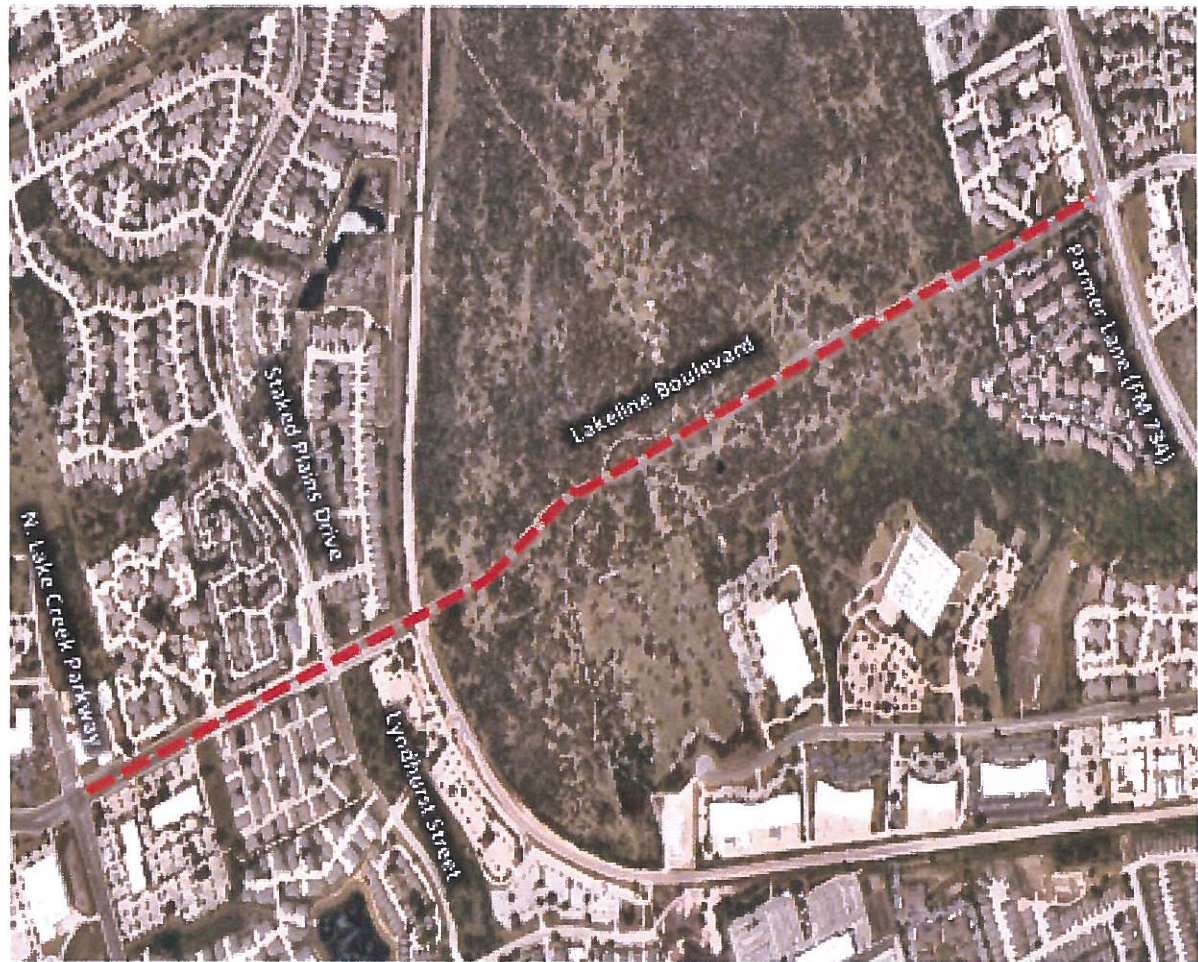
Date / Time	Direction		Weather	Light	Road	Injury	Comments
	At Fault	Other					
03/06/21 12:42 PM	WB	WB	Clear	Daylight	Dry	None	Illegal U-turn, 2 nd vehicle failed to maintain safe distance
08/21/19 2:12 AM	EB	None	Clear	Dark	Dry	Possible Injury	Single vehicle crash. Distraction in vehicle & failed to control speed
07/10/19 8:07 AM	WB	WB	Clear	Daylight	Dry	Possible Injury	Vehicle stopped at railroad crossing and was rear-ended. Driver inattention

Recommendation

The analysis of the speed data indicates that the 85th percentile speed along Lakeline Boulevard is between 49.7 and 51.5 mph in the section from N. Lake Creek Parkway to W. Parmer Lane. The USLIMITS2 investigation recommended a speed limit of 50 mph.

The posted speed limit on Lakeline Boulevard from Riviera Circle (west) to Lake Creek Parkway is 45 mph. Due to the development along Lakeline Boulevard comprising of a mix of commercial and residential along with Capital Metrorail Lakeline Station and Lakeline Park & Ride facility, a speed limit greater than 45 mph is not recommended.

Based on the analysis of this information, it is my engineering judgment that the speed limit on Lakeline Boulevard from N. Lake Creek Parkway to W. Parmer Lane should be 45 miles per hour as presented in Figure 2.



----- (Proposed)



FIGURE 2.

Lakeline Boulevard

Proposed Speed Limits

