

EXHIBIT A



MEMORANDUM

To: Traffic Study Files

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

Date: December 14, 2021

Subject: SPEED ZONE INVESTIGATION

Location: Tech Ridge Boulevard – IH 35 Northbound Frontage Road to E. Parmer Lane



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 Tech Ridge Boulevard from IH 35 Northbound Frontage Road to E. 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 Tech Ridge Boulevard from Canyon Ridge Drive/E. Yager Lane to E. Parmer Lane is 45 mph. Tech Ridge Boulevard from IH 35 Northbound Frontage Road to Canyon Ridge Drive/E. Yager Lane has no posted speed limit.

General Conditions:

Tech Ridge Boulevard is a six-lane divided road from IH 35 Northbound Frontage Road to E. Parmer Lane with buffered bike lanes in each direction.

Development along Tech Ridge Boulevard is primarily commercial with some apartment complexes located on the south side. Additionally, the intersection of Tech Ridge Boulevard and Canyon Ridge Drive/E. Yager Lane is signalized.

Tech Ridge Boulevard is classified as a Level 4 (major arterial) as per the Austin Strategic Mobility Plan (ASMP). No speed limit is posted on Tech Ridge Boulevard from IH 35 Northbound Frontage Road to Canyon Ridge Drive/E. Yager Lane. As a result, Austin Transportation Department performed an engineering study along Tech Ridge Boulevard to review current traffic conditions to determine the posted speed limit.

Figure 1 presents the study segment and surrounding street network.



Segment Limits: Tech Ridge Boulevard from IH 35 Northbound Frontage Road to E. Parmer Lane

Posted Speed Limit: 45 MPH

No Posted Speed Limit



FIGURE 1.

Tech Ridge 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 October 2021 to measure conditions along the study segment.

Block Number	Street Segment	Existing Speed Limit	85% Percentile Speed		Traffic Volumes
			EB	WB	
12200	East of IH 35 Northbound Frontage Road	Not Posted	45.1	41.5	EB- 12,316 WB- 7,513
12400	East of Canyon Ridge Dr./E. Yager Ln.	45 MPH	53.2	56.9	EB- 8,098 WB- 6,650

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 IH 35 Northbound Frontage Road, Canyon Ridge Drive/E. Yager Lane, and E. Parmer Lane were not included. Three crashes which were attributed to various driver errors were documented during this period:

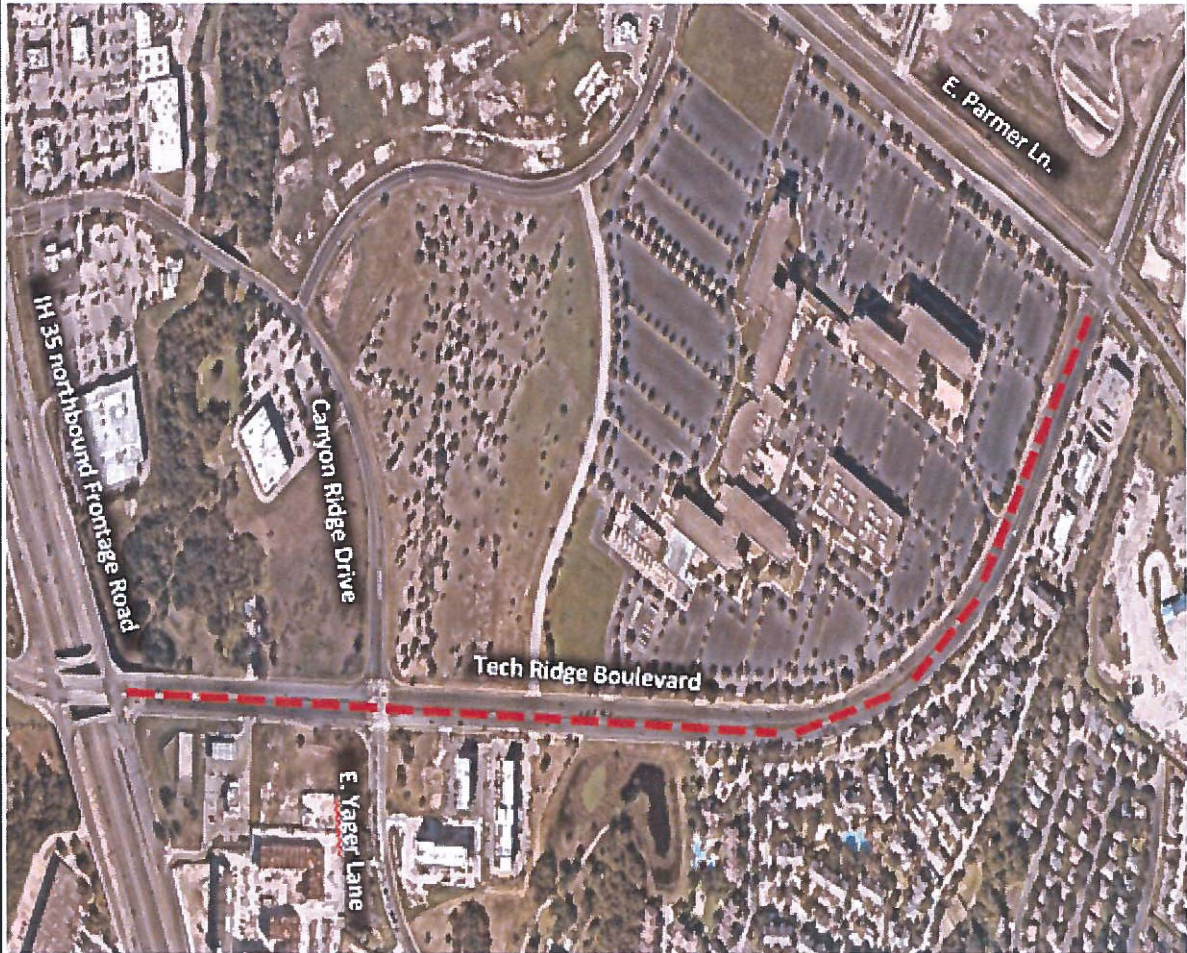
Date / Time	Direction		Weather	Light	Road	Injury	Comments
	At Fault	Other					
12/15/19 2:26 PM	EB	EB	Clear	Dark, Lighted	Dry	None	Leading EB vehicle was clipped on the rear passenger side causing the leading vehicle to leave the roadway – Driver inattention
05/31/19 10:49 PM	EB	None	Clear	Dark, Lighted	Dry	None	Single driver fell asleep and struck a barrier and hydrant – Under Influence of Alcohol
01/01/19 7:31 AM	EB	None	Clear	Dark, Lighted	Dry	None	Single driver left the roadway and struck a hydrant – Under Influence of Alcohol

Recommendation

The analysis of the speed data indicates that the 85th percentile speed along Tech Ridge Boulevard is between 41.5 and 56.9 mph in the section from IH 35 Northbound Frontage Road to E. Parmer Lane. The USLIMITS2 investigation recommended a speed limit of 50 mph.

Tech Ridge Boulevard is classified as a Level 4 (major arterial) as per the Austin Strategic Mobility Plan (ASMP). The posted speed limit on Tech Ridge Boulevard from Canyon Ridge Drive/E. Yager Lane to E. Parmer Lane is 45 mph. The 85th percentile speed along Tech Ridge Boulevard in the section with no posted speed limit is between 41.5 and 45.1. As a result, 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 Tech Ridge Boulevard from IH 35 Northbound Frontage Road to E. Parmer Lane should be 45 miles per hour as presented in Figure 2.



SPEED
LIMIT
45

----- (Proposed)



FIGURE 2.

Tech Ridge Boulevard

Proposed Speed Limits