EXHIBIT A

MEMORANDUM

5/9/2022

To: Traffic Study Files

From: Alison Mills, P.E., South Austin Engineer
Transportation Engineering Division
Austin Transportation Department

Date: May 9, 2022

Subject: SPEED ZONE INVESTIGATION

Location: Matthews Lane – Menchaca Road to Cooper Lane

Date(s) of Previous Investigation: None

A Traffic Engineering Investigation has been conducted by the Transportation Engineering Division to determine the appropriate speed limit on Matthews Lane from Menchaca Road to Cooper Lane. The existing speed limit between Menchaca Road and Forest Wood Road is 30 mph, and the existing speed limit between Forest Wood Road and Cooper Lane is 35 mph. Figure 1 represents a map of the study area.

Location Conditions:

City Code Section 12-4-1 defines a neighborhood street as "40 feet or less in width" and "having primarily front-facing residential land uses." Matthews Lane from Menchaca Road to Cooper Lane is an undivided, two-way, two-lane, residential roadway with primarily front-facing homes. This segment has particularly narrow pavement width with an unmarked shoulder. Pavement widths are as low as 20 feet for significant portions of the roadway. Matthews Lane therefore meets the City Code Section 12-4-1 criteria for a neighborhood street. See Table 1 for more information on the segment studied.

Table 1: Location Information

Street Segment:	Segment Length (Miles)	Number of Unsignalized Access Points	Number of Signalized Intersections	Width (ft)
From Menchaca Road to Cooper Lane	0.9	56	1	20ft –32ft

Figure 1: Study Area Aerial View

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 December 2021 to determine the appropriate posted speed limit for Matthews Lane. In December 2021, 3,726 vehicles per day were recorded on Matthews Lane from Menchaca Road to Cooper Lane.

As summarized in Table 2, the 85th percentile speed on the eastbound and westbound lanes was recorded in the range of 34 mph to 36 mph. The average 85th percentile speed on Matthews Lane was recorded at 35 mph for the eastbound and westbound lanes of traffic.

Table 2: Speed and Volume Data

Block Numbers	Street Segment	Existing Speed Limit	85% Speed		50% Speed		Traffic Volumes (AADT)
			EB	WB	EB	WB	
2000-2400	Menchaca Road to Cooper Lane	35/30	34	36	30	32	3726

Crash Data:

Crash data was obtained from the City of Austin's Vision Zero database. This database obtains crash data from the Texas Department of Transportation (TxDOT) Crash Record Information System (CRIS) database. Total number of crashes and total number of fatal or injury crashes from November 30, 2016 to November 30, 2021, were obtained for the extents of this project limits. A crash was determined to be within the study area if the primary address was between 2000 Matthews Lane and 2400 Matthews Lane.

There was a total of 48 crashes, including 13 injury or fatal crashes within the study area between November 30, 2016 and November 30, 2021. Per a USLIMITS2 study it was

determined that this section of Matthews Lane had a significantly higher than the statewide crash rate of similar roadways. Table 3 summarizes the crash totals for the street segment of the study area.

Table 3: Crash Data

Block Range	Street Segment	Crashes	
		Total	Inj/Fatal
2000 - 2400	From Menchaca Road to Cooper Lane	48	13

General Comments:

Texas' Procedures for Establishing Speed Zones provides the information and procedures necessary for establishing speed zones and advisory speeds on the state highway system. Per these procedures speed limits can be reduced to 12 mph below the 85th percentile speed if the crash rate in the section of the roadway is greater than the statewide average crash rate for similar roadways. Additional factors listed below are also to be considered to determine the total speed reduction up to 12 mph:

A. Narrow roadway pavement
B. Horizontal and vertical curves
C. High driveway density
D. Lack of striped, improved shoulders
E. High crash history within the speed zone.

It is the conclusion of the engineer that this roadway meets the characteristics of features 'A', 'C', 'D', and 'E' above and should therefor receive a speed limit within 12 mph below the 85th percentile speed.

City Code Section 12-4-66 establishes a speed limit of 25 mph on all neighborhood streets unless otherwise determined by a city traffic engineer. Given that Matthews Lane from Menchaca Road to Cooper Lane meets the City Code Section 12-4-1 criteria for a neighborhood street a speed limit of 25 mph is appropriate for this street segments. The recommendations for speed limits along this segment are shown in Table 4 and Figure 5.

Table 4: Speed Zoning Report Results

Street Segment Matthews Lane	Existing Speed Limit (NB & SB)	**Recommended Speed Limit (NB & SB)**
Menchaca Road to Forrest Wood Drive	30 MPH	**25 MPH**

Forrest Wood Drive to Cooper Lane	35 MPH	**25 MPH**

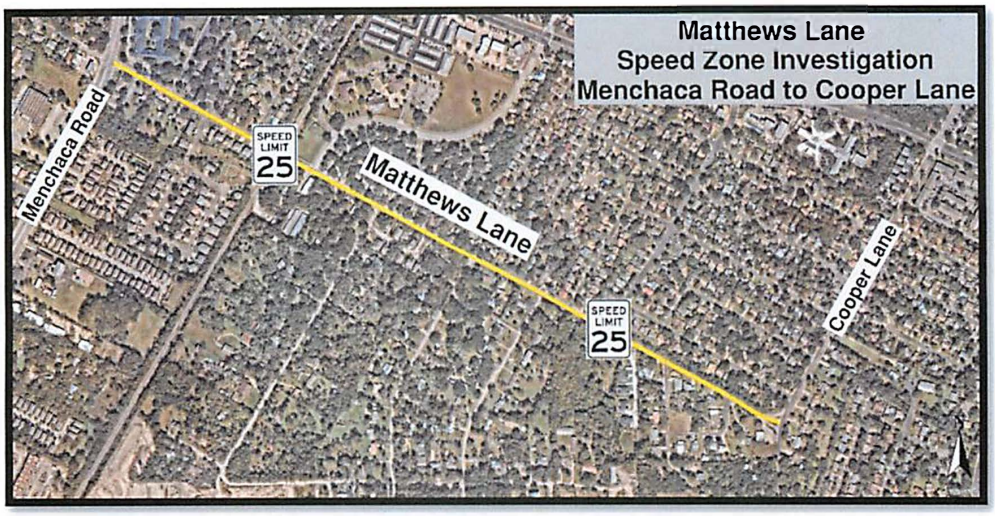

Figure 5: Proposed Speed Limits Along Matthews Lane

Based on the analysis of this information, it is my engineering judgement that Matthews Lane from Menchaca Road to Cooper Lane should be considered neighborhood street and have a speed limit of 25 miles per hour across the entire segment in both directions of travel.