ORDINANCE NO. 20210729-108

AN ORDINANCE AMENDING CITY CODE SECTION 12-4-64(D) TO ESTABLISH A MAXIMUM SPEED LIMIT OF 40 MPH FOR A SEGMENT OF LOYOLA LANE FROM ED BLUESTEIN BOULEVARD TO JOHNNY MORRIS ROAD AND TO ESTABLISH A MAXIMUM SPEED LIMIT OF 35 MPH FOR A SEGMENT OF LOYOLA LANE FROM JOHNNY MORRIS ROAD TO SENDERO HILLS PARKWAY.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF AUSTIN:

PART 1. City Code Section 12-4-64(D) (*Table of Speed Limits)* is amended to delete the following street sections from the list of streets with the corresponding maximum speeds:

~~(A) Loyola Lane from Johnny Morris Road to 1,000 feet east of Sendero Hills Parkway. (35 MPH Speed Limit)~~

PART 2. City Code Section 12-4-64(D) (*Table of Speed Limits*) is amended to add the following street sections to the list of streets with the corresponding maximum speeds:

(A) Loyola Lane from Ed Bluestein Boulevard to 400 feet west of Johnny Morris Road. (40 MPH Speed Limit)

(B) Loyola Lane from 400 feet west of Johnny Morris Road to 1,000 feet east of Sendero Hills Parkway. (35 MPH Speed Limit)

PART 3. The amendments made in this ordinance are based on the results of a traffic engineering investigation, or "speed study," attached as Exhibit "A."

PART 4. The amendments made in this ordinance shall be incorporated in alphabetical order in the City Code Section 12-4-64(D) (*Table of Speed Limits*) and the existing entries reordered accordingly.

PART 5. The City Traffic Engineer shall have the obligation and authority to design, place, and prioritize appropriate signage to implement the changes contained in this ordinance.

PART 6. This ordinance takes effect on August 9, 2021.

PASSED AND APPROVED

July 29, 2021 §
§
§

Steve Adler
Mayor

APPROVED: Anne L. Morgan by NT
Anne L. Morgan
City Attorney

ATTEST:
Jannette S. Goodall
City Clerk

Exhibit A

MEMORANDUM

To: Traffic Study Files

From: Lee Austin, P.E.
Area Engineer
Austin Transportation Department

Date: June 30, 2021

Subject: Speed Zone Investigation

Location: Loyola Lane – Ed Bluestein Boulevard to Johnny Morris Road

Year(s) of Previous Investigation: 1978

A speed zone investigation has been conducted by the Austin Transportation Department to recommend an appropriate speed limit on Loyola Lane from Ed Bluestein Boulevard to Johnny Morris Road (the study segment). Figure 1 at the end of this document presents a map of the study area with existing and proposed speed limits along the study segment. In 1978, City Council established a speed limit of 45 mph on Loyola Lane between Ed Bluestein Boulevard and Johnny Morris Road based on staff's engineering evaluation, but it was not included in City Code Section 12-4-64 (D) Table of Speed Limits. Staff was unaware of this previous evaluation and initiated a speed zone investigation of the study segment as part of a recent evaluation of a nearby school zone. Only recently, in preparation of presenting a recommendation to City Council, did staff become aware of the previous evaluation.

Location Conditions

Loyola Lane is a four-lane divided arterial that runs in a general east/west direction for a length of approximately 4,045 feet along the study segment. The study segment has a 73-foot-wide cross section with protected bicycle lanes in both directions, and a 15-foot wide center median containing left turn bays. The study segment has sidewalks on both sides of the street with street lighting in the center median. Two city streets and 5 driveways intersect this segment of Loyola Lane. Adjacent land use on the north side of the study segment is residential. The south side of the study segment is relatively undeveloped apart from a church near Ed Bluestein Boulevard. A 40 mph speed limit sign had been posted for the eastbound direction but was recently removed due to construction near Ed Bluestein Boulevard. A 45 mph speed limit sign is currently posted for the westbound direction.

Traffic Data

Speed and volume data were collected in October 2020 to determine the appropriate posted speed limit for the study segment. While data collection occurred during pandemic conditions, the data was comparable to speed and volume data collected in 2013.

Block Number	Location	Posted Speed Limit	85th- Percentile Speed		Daily Traffic Volumes
			EB	WB	
5500	West of Millrace Drive	Not Posted	47.6	46.4	23,761
6100	East of Crystalbrook Drive	45	45.8	45.8	23, 954

Crash Data

Austin Police Department's crash database was reviewed to analyze documented crashes along the study segment within the past eighteen months. Eleven crashes were documented during this period; no discernible pattern from excessive speed is present.

Date / Time	Direction		Weather	Light	Road	Injury	Comments
	At Fault	Other					
6/1/2021 7:49 am	SB	WB	Clear	Daylight	Dry	Minor	Failed to yield right of way making a left turn
4/27/2021 7:28 pm	EB	WB	Clear	Daylight	Dry	Minor	Failed to yield right of way making a left turn
3/30/2021 8:08am	EB	WB	Cloudy	Daylight	Dry	None	Failed to yield right of way making a left turn
1/1/2021 5:30am	WB	-	Clear	Dark, not lighted	-	Minor	Lost control, struck utility pole
10/29/2020 6:07pm	WB	SB	Clear	Daylight	Dry	None	Ran red light, fled
08/04/2020 6:17pm	WB	WB	Clear	Daylight	Dry	Minor	Failed to maintain safe distance, rear end
05/05/2020 8:34am	EB	EB	Cloudy	Daylight	Dry	Minor	Failed to yield right of way while making a U-turn
4/19/2020 4:05pm	WB	WB	Clear	Daylight	Dry	None	Rear end caused by speeding/racing vehicle
2/18/2020 7:39am	WB	WB	Cloudy	Daylight	Dry	Minor	Failed to maintain safe distance, rear end
2/18/2020 7:01am	SB	WB	Cloudy	Daylight	Wet	Minor	Failed to yield right of way making a right turn
2/3/2020 11:09pm	EB	-	Cloudy	Dark,- Lighted	Wet	Minor	Failed to control speed during turn, struck pole

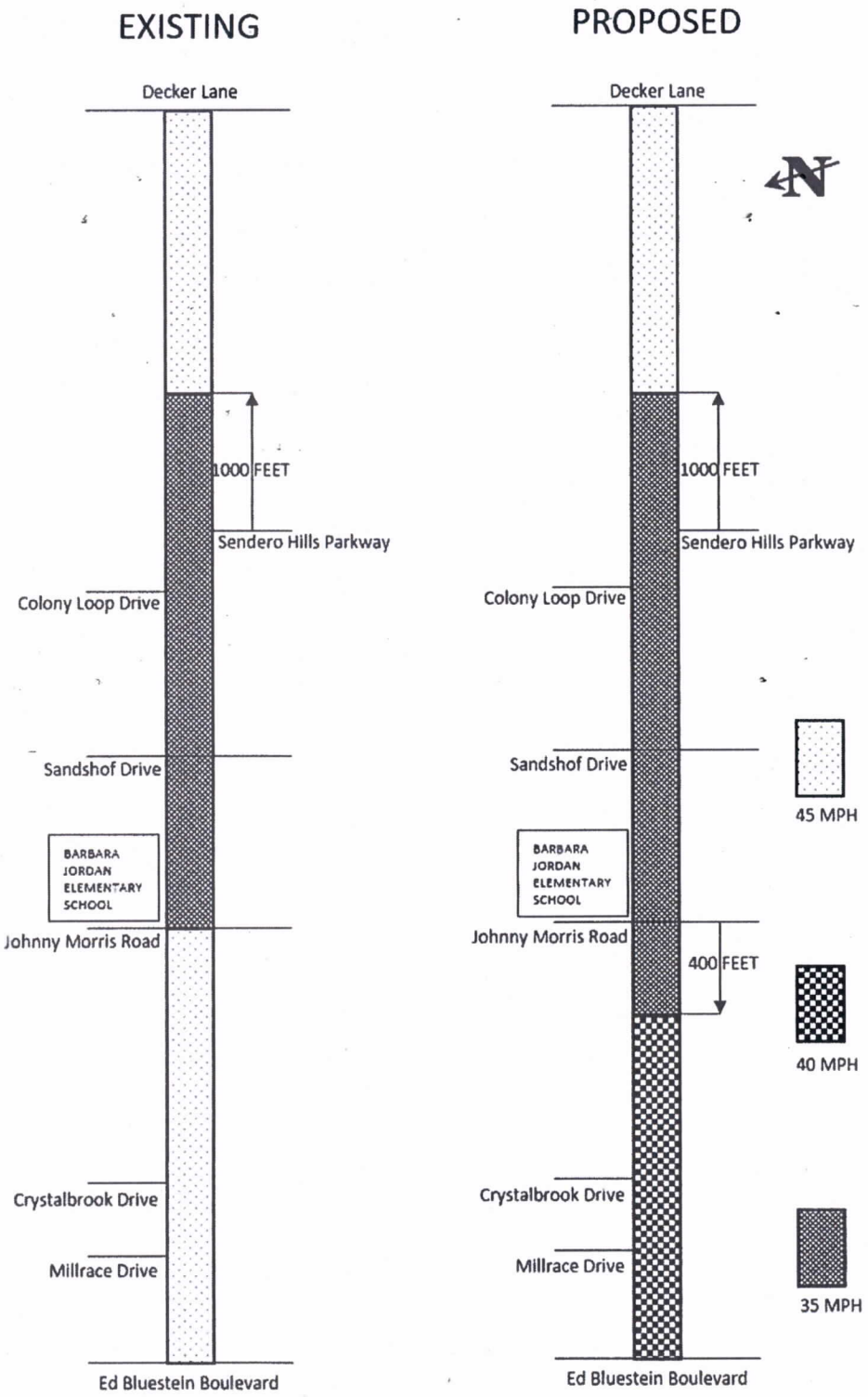
Analysis

The analysis of the speed data indicates that the 85th percentile speed along Loyola Lane is between 45.8 mph and 47.6 mph from Ed Bluestein Boulevard to Johnny Morris Road. Staff followed the procedures specified in the Texas Procedures for Establishing Speed Zones, 2006, which takes into consideration the 85th percentile speed. In this investigation, staff also employed USLIMITS2, a tool provided by the Federal Highway Administration designed to help practitioners set reasonable, safe, and consistent speed limits for specific segments of roads. USLIMITS2 takes into consideration the 85th percentile speed and other factors such as the 50th percentile speed, annual average daily traffic, roadway characteristics and geometric conditions, level of development in the area around the road, crash and injury rates, presence of on-street parking, and extent of ped/bike activity, as well as several others depending on the road type. A 40 mph speed limit was recommended by the USLIMITS2 tool utilizing data particular to the study segment. In addition, engineering best practices do not allow a speed limit differential greater 15 mph, so a 35 mph speed limit transition is recommended between the 40 mph speed limit recommendation and the 20 mph school zone to the east of the study segment. This treatment is consistent with the existing 35 mph speed limit transition on the other side of the school zone on Loyola Lane.

Recommendation

Based on the analysis of this information, it is my engineering judgement that the speed limit on Loyola Lane from Ed Bluestein Boulevard to 400 feet west of Johnny Morris Road should be established at **40 mph**. In addition, due to the presence of a 20 mph school zone speed limit to east of the study segment, it is recommended that the speed limit in advance of the school zone transition to **35 mph** since engineering practices for changes in speed limits are not to exceed a 15 mph differential.

Figure 1: Loyola Lane Study Area



USLIMITS2 Speed Zoning Report

Project Overview

Project Name: Loyola btw 183 and Johnny Morris

Analyst: Ravi

Date: 2021-06-29

Basic Project Information
Route Name: Loyola
From: 183
To: Johnny Morris
State: Texas
County: Travis County
City: Austin city
Route Type: Road Section in Developed Area
Route Status: Existing

Crash Data Information
Crash Data Years: 5.00
Crash AADT: 23954 veh/day
Total Number of Crashes: 394
Total Number of Injury Crashes: 7
Section Crash Rate: 1186 per 100 MVM
Section Injury Crash Rate: 21 per 100 MVM
Crash Rate Average for Similar Roads: 223
Injury Rate Average for Similar Roads: 72

Roadway Information
Section Length: .76 mile(s)
Statutory Speed Limit: 45 mph
Existing Speed Limit: 45 mph
Adverse Alignment: No
One-Way Street: No
Divided/Undivided: Divided
Number of Through Lanes: 4
Area Type: Residential-Collector/Arterial
Number of Driveways: 5
Number of Signals: 2

Traffic Information
85th Percentile Speed: 47 mph
50th Percentile Speed: 40 mph
AADT: 23954 veh/day
On Street Parking and Usage: Not High
Pedestrian / Bicyclist Activity: High

Recommended Speed Limit:

Note: The section crash rate of 1186 per 100 MVM is above the critical rate (267). A comprehensive crash study should be undertaken to identify engineering and traffic control deficiencies and appropriate corrective actions. The speed limit should only be reduced as a last measure after all other treatments have either been tried or ruled out.

Note: The road section is in an area with high pedestrian or bicycle activity. Consider implementing engineering measures to reduce speeds before lowering the recommended speed limit. See Engineering Countermeasures for Speed Management and PedSafe for more guidance.

Disclaimer: The U.S. Government assumes no liability for the use of the information contained in this report. This report does not constitute a standard, specification, or regulation.

Equations Used in the Crash Data Calculations

Exposure (M)
M = (Section AADT * 365 * Section Length * Duration of Crash Data) / (100000000)
M = (23954 * 365 * .76 * 5.00) / (100000000)
M = 0.3322

Crash Rate (Rc)
Rc = (Section Crash Average * 100000000) / (Section AADT * 365 * Section Length)
Rc = (78.80 * 100000000) / (23954 * 365 * .76)
Rc = 1185.88 crashes per 100 MVM

Injury Rate (Ri)
Ri = (Section Injury Crash Average * 100000000) / (Section AADT * 365 * Section Length)
Ri = (1.40 * 100000000) / (23954 * 365 * .76)
Ri = 21.07 injuries per 100 MVM

Critical Crash Rate (Cc)
Cc = Crash Average of Similar Sections + 1.645 * (Crash Average of Similar Sections / Exposure) ^ (1/2) + (1 /