## ORDINANCE NO. $\underline{20231130-068}$

## AN ORDINANCE AMENDING CITY CODE SECTION 12-4-64 (TABLE OF SPEED LIMITS) TO ESTABLISH A MAXIMUM SPEED LIMIT OF 50 MPH ON A SEGMENT OF EAST HOWARD LANE.

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

PART 1. City Code Section 12-4-64 (Table of Speed Limits) is amended to add:
Howard Lane (East) from 485 feet west of Kearns Drive to Baileyfield Drive. (50 MPH)

PART 2. The amendments made in this ordinance are based on the results of a traffic engineering investigation, or speed study, referenced in the Memorandum attached as Exhibit "A".

PART 3. The amendments made in this ordinance shall be incorporated in alphabetical order and the existing entries reordered accordingly.

PART 4. This ordinance takes effect on December 11, 2023.

## PASSED AND APPROVED

November 30 $\qquad$ , 2023

APPROVED:


## EXHIBIT A



MEMORANDUM

To: Traffic Study Files
From: Lee Austin, P.E. Area Engineer
Transportation and Public Works Department


## Date:

Subject: Speed Zone Investigation
Location: East Howard Lane - from 485 ft west of Kearns Drive to Baileyfield Drive

## Year(s) of Previous Investigation: None

A speed zone investigation has been conducted by the Transportation and Public Works Department to recommend an appropriate speed limit on East Howard Lane from 485 feet west of Kearns Drive to Baileyfield Drive (the study segment). A speed limit for this segment of East Howard Lane has not been established in City Code Section 12-4-64 (D) Table of Speed Limits as the segment was not previously within the Austin Full Purpose Jurisdiction. Figure 1 at the end of this document presents a map of the study area with existing nearby posted speed limits in the Austin Extraterritorial Jurisdiction and proposed speed limits along the study segment.

## Location Conditions

East Howard Lane is a four- lane arterial road that runs in a general east/west direction. The portion of Howard Lane from 485 ft west of Kearns Drive to Baileyfield Drive has a 72 -footwide cross section with a center left-turn lane and unprotected bicycle lanes in both directions. Sidewalks are present directly behind the curb along the study segment. Six city streets and 12 driveways intersect the study segment of East Howard Lane. Adjacent land use along the study segment is mostly residential with a gas station in the middle of the study segment. 50 mph speed limit signs are posted in the Austin Extraterritorial Jurisdiction area adjacent to the study segment. Figure 1 presents the study segment and the surrounding street network.

## Traffic Data

Speed and volume data were collected during the fall of 2019 to determine the appropriate posted speed limit for the study segment.

| Block Number | Location | Posted Speed Limit | $\begin{gathered} 85^{\text {th }-} \text { Percentile } \\ \text { Speed } \\ \hline \end{gathered}$ |  | Daily <br> Traffic <br> Volumes |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | EB | WB |  |
| 3300 | West of Cantarra Drive | None | 58.3 | 57.3 | 11,236 |

## Crash Data

Austin Police Department's crash database was reviewed to analyze documented crashes along the study segment within the past eighteen months. No crashes were documented during this period with a contributing factor involving excessive speed.

## Analysis

The analysis of the speed data indicates that the $85^{\text {th }}$ percentile speed along East Howard Lane is between 57.3 mph and 58.3 mph in the study segment. Staff followed the procedures specified in the Texas Procedures for Establishing Speed Zones, 2006, which takes into consideration the $85^{\text {th }}$ 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 $85^{\text {th }}$ percentile speed and other factors such as the $50^{\text {th }}$ 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. The study segment was split into two segments for this analysis. A 50 mph speed limit was recommended by the USLIMITS2 tool utilizing data particular to the segment between 485 feet west of Kearns Drive to Baileyfield Drive.

## Recommendation

Based on the analysis of this information, it is my engineering judgement that the speed limit on East Howard Lane from 485 feet west of Kearns Drive to Baileyfield Drive should be established at $\mathbf{5 0} \mathbf{~ m p h}$. Figure 1 presents the recommended speed limits in the study segment.


|  | Figure 1. <br> East Howard Lane | Proposed Speed Limit | Existing 45 mph Existing 50 mph Proposed 50 mph | $\mathrm{N}$ |
| :---: | :---: | :---: | :---: | :---: |

## USLIMITS2 Speed Zoning Report

## Project Overview

## Project Name: E Howard Ln from Baileyfield to Tavern

Analyst: Ravi D
Basic Project Information
Route Name: E Howard Ln from Balleyfield to Tavern
From: Tavern
To: Baileyfield
State: Texas
County: Travis County
City: Austin city
Route Type: Road Section in Developed Area
Route Status: Existing

## Roadway Information

Section Length: . 5 mile(s)
Statutory Speed Limit: 50 mph
Existing Speed Limit: 50 mph
Adverse Alignment: No
One-Way Street: No Divided/Undivided: TWLTL
Number of Through Lanes: 4 Area Type: Residential-Collector/Arterial
Number of Driveways: 12
Number of Signals: 0
Recommended Speed Limit:


Date: 2022-09-19
Crash Data Information
Crash Data Years: 5.00
Crash AADT: 11236 veh/day
Total Number of Crashes: 21
Total Number of Injury Crashes: 5
Section Crash Rate: $\mathbf{2 0 5}$ per 100 MVM
Section Injury Crash Rate: 49 per 100 MVM
Crash Rate Average for Similar Roads: 213
Injury Rate Average for Similar Roads: 67

## Traffic Information

85th Percentile Speed: 58 mph
50th Percentile Speed: 51 mph
AADT: 11236 veh/day
On Street Parking and Usage: Not High Pedestrian / Bicyclist Activity: High

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 fol 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. Th 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 = (11236*365*.5*5.00)/(100000000)
M = 0.1025
Crash Rate (Rc)
Rc=(Section Crash Average* 100000000) /. (S
Rc= = 404.82 crashes per 100 MVM
Injury Rate (Ri)
Ri = (Section Injury Crash Average * 100000000) / (Section AADT * 365 * Section Length)
Ri}=(1.00*100000000)/(11236*365*.5
Ri}=48.77\mathrm{ 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/
(2* Exposure))
Cc=292.59 crashes per 100 MVM
Critical Injury Rate (Ic)
Ic = Injury Crash Average of Similar Sections +1.645* (Injury Crash Average of Similar Sections / Exposure) ^
(1/2) + (1/ (2 * Exposure))
lc=67.19+1.645*(67.19/0.1025)^(1/2)+(1/(2* 0.1025))
Ic}=114.18\mathrm{ injuries per 100 MVM
```

