

To: Traffic Study Files

From: Eric Bollich, P.E., Managing Engineer

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**Date:** August 20, 2019

Subject: Speed Modification Report

**Location:** East Stassney Lane – Teri Road to Burleson Road

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8/26/19

A speed modification report was conducted by the Austin Transportation Department (ATD) to determine the appropriate posted speed limit on East Stassney Lane from Teri Road to Burleson Road (the study segment) as shown in Figure 1.

# Methodology

When evaluating an appropriate speed limit for the study segment, ATD used a combination of the Texas Department of Transportation (TxDOT) *Procedures for Establishing Speed Zones* manual (whose primary metric is the 85<sup>th</sup>-percentile speed of motor vehicles) and additional roadway factors (pavement width, street curvature, driveway density, crash data, adjacent land use, traffic signals) for a more holistic approach.

#### **Location and Conditions**

The study segment is approximately 1.3 miles of a Level 3 arterial as identified in the *Austin Strategic Mobility Plan* (ASMP) adopted by City Council in April 2019, with four-lane median divided cross section.

Land along the study segment is mostly undeveloped except for an industrial area approximately 2,000 feet south of Burleson Road. Teri Road on the southern end of the study segment is a Level 2 (collector) road for a single-family residential subdivision. No homes have direct access to this segment of East Stassney Lane.

The only traffic signal located along the study segment is at the intersection with Burleson Road.

The through travel lanes are 12 feet in width. The study segment has curb and gutter on both sides, and no on-street parking is permitted. Few driveways exist along the study segment, and no other streets intersect in this area.

In the recently-developed industrial area on the north end of the study segment, the pavement is newer and in good condition. The pavement along the rest of the study segment is in poor condition, making driving very uncomfortable at the currently posted speed of 55 MPH. The study segment has no street illumination or spillover lights from adjacent development, giving it a rural feeling even though each end of the study segment is highly urbanized.

# **Traffic Data**

Speed and volume data were collected in summer 2019 during non-weekend, non-holiday dates to measure actual conditions along the study segment.

Location	Existing Speed Limit	85 <sup>th-</sup> Percentile Speed (MPH)		50 <sup>th</sup> Percentile Speed (MPH)		Traffic Volumes	
	(MPH)	NB	SB	NB	SB	NB	SB
6300 Block	55	53.2	50.2	46.8	45.1	7,484	7,962
6000 Block	55	51.4	58.5	45.2	52.4	6,949	7,824
5600 Block	55	48.1	45.4	43.2	40.4	6,226	3,297

The existing speed limit for East Stassney Lane and other major roads in the vicinity of the study segment are shown in Figure 2.

#### **Crash Data**

Based on the High Injury Networks identified in the ASMP, the study segment is included as a roadway with a higher number of serious injury and fatal crashes. The data shows that the study segment has elevated serious and fatal crashes regarding vehicles.

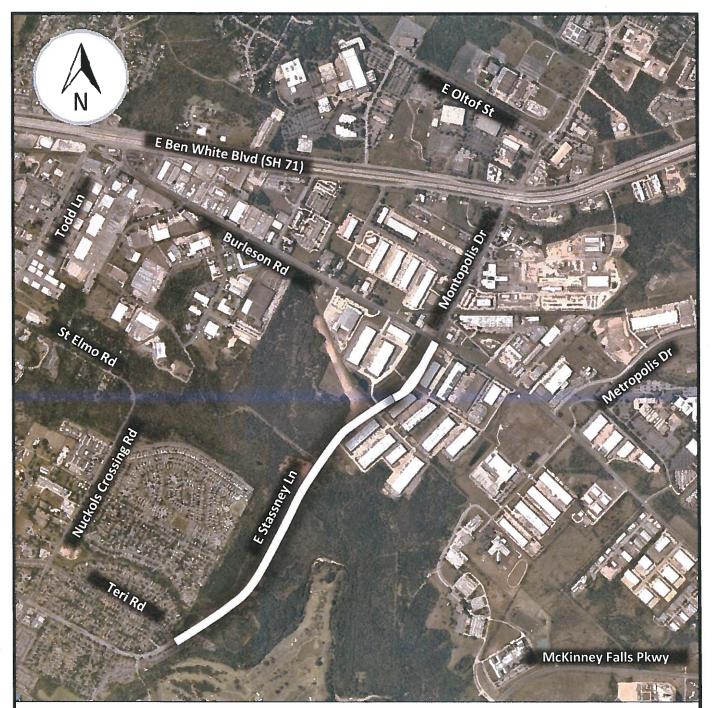
# **Pedestrian and Bicycle Activity**

The study segment has a low level of pedestrian and bicycle activity. Continuous sidewalks are present along both sides of East Stassney Lane and are typically six-feet wide. Bike lanes are not present.

# Recommendation

Based on the results of the speed zone investigation for East Stassney Lane between Teri Road and Burleson Road, the current speed limit should be changed to 50 MPH from Teri Road to 1,200 feet south of Burleson Road, and to 35 MPH from 1,200 feet south of Burleson Road to Burleson Road (see Figure 3) due to the following:

- Inclusion in ATD's group of speed modification reports to evaluate operating speeds and safety
  on the City's primary arterial streets to recommend appropriate speed limits based on factors
  affecting roadway safety.
- Current pavement conditions making driving very uncomfortable at the currently posted speed of 55 MPH.
- Increasing development and traffic in the general area, creating more conflicts and natural friction to lower traffic speed.
- The need to step down the posted speed limit from 50 MPH to 35 MPH to match the posted speeds on adjacent roadways.



# **Segment Limits:**

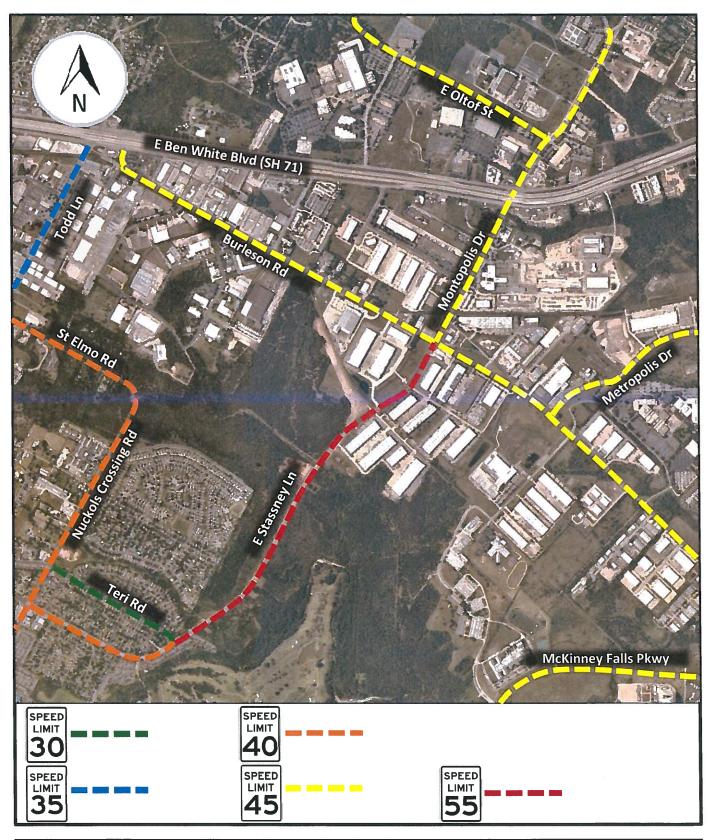
- Teri Road to 1,200 feet south of Burleson Rd
- 1,200 south of Burleson Rd to Burleson Rd



**FIGURE 1.** E Stassney Ln

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**Study Segments and Location** 

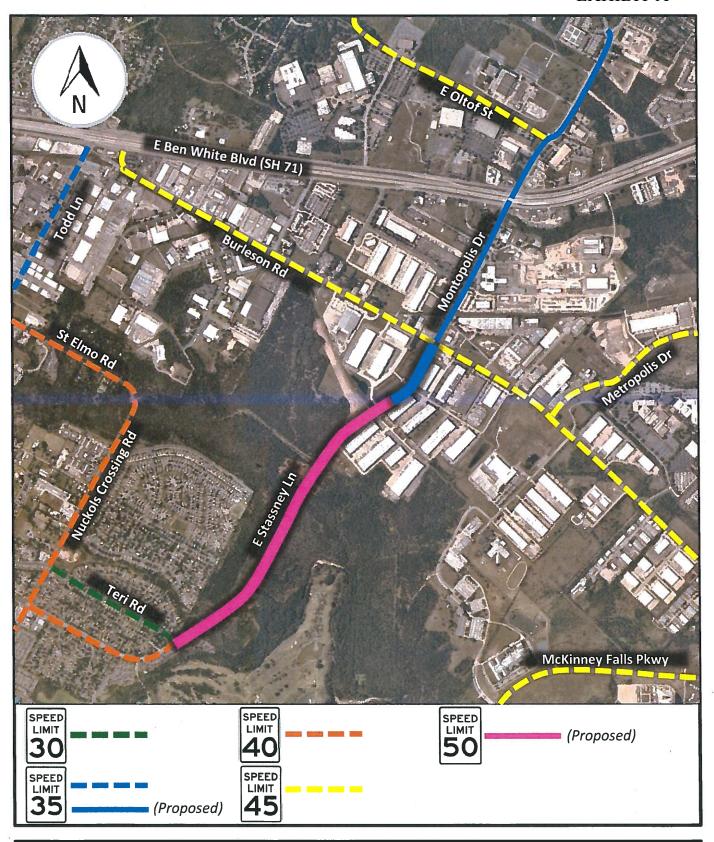




**FIGURE 2.** E Stassney Ln

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**Existing Posted Speed Limits** 





**FIGURE 3.** E Stassney Ln

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**Proposed Posted Speed Limits**