



MEMORANDUM

To: Traffic Study Files

From: Curtis P. Beaty, P.E., Supervising Engineer
Transportation Engineering Division
Austin Transportation Department

Date: August 20, 2019

Subject: Speed Modification Report

Location: S Lamar Blvd – Barton Skyway to Ben White Blvd (SH 71)

A Traffic Engineering Investigation was conducted by the Austin Transportation Department (ATD) to determine the posted speed limit on S Lamar Boulevard from Barton Skyway to Ben White Blvd. (See 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 85th-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 of S Lamar Blvd is approximately one mile of a Level 3 arterial as identified in the *Austin Strategic Mobility Plan* (ASMP) adopted by City Council in April 2019, with two typical cross sections:

Segment	Cross Section
Barton Skyway to south of Panther Trail	4-lane undivided with continuous two-way left turn lane
South of Panther Trail to Ben White Blvd (SH 71)	6-lane divided

Development along S Lamar Blvd is commercial and multi-family residential. Single-family residential areas are accessible from S Lamar Blvd by several Level 2 (collector) roads along the length of the study segment. Traffic signals are located on S Lamar Blvd at the following intersections within the study segment:

- Barton Skyway
- Westland Dr
- Panther Trl
- Brodie Oaks
- Ben White Blvd (SH 71)

In the 4-lane undivided section with continuous two-way left turn lane, the through travel lanes are typically 10 feet in width. The two-way left turn lane is approximately 11 feet wide. S Lamar Blvd has curb and gutter on both sides of the roadway along the study segment. No on-street parking is permitted on S Lamar Blvd. In areas that have most recently been redeveloped, driveways are limited in accordance to access management best practices. For properties where older development exists, driveways are more frequent, wider, and negatively impact traffic at intersections.

Traffic Data

Speed and volume data were collected in December 2018 and January 2019 during non-weekend, non-holiday dates to measure actual conditions along the study segment.

Location	Existing Speed Limit (MPH)	85 th Percentile Speed (MPH)		50 th Percentile Speed (MPH)		Traffic Volumes	
		NB	SB	NB	SB	NB	SB
N of Westoak Dr	45	37.6	39.3	31.9	33.2	8,224	7,326
S of Panther Trl	45	37.2	34.4	31.7	29.2	6,649	7,636

The existing speed limit for S Lamar Blvd 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 along S Lamar Blvd is included as a roadway with a higher number of serious injury and fatal crashes. In fact, the data shows that the study segment has elevated serious and fatal crashes in multiple categories: pedestrian, bicycle, motorcycle, and vehicle. From 2015 through 2017, serious traffic-related crashes resulted in 20 fatalities.

Pedestrian and Bicycle Activity

As with all of S Lamar Blvd from Riverside Dr to Ben White Blvd (SH 71), the study segment has a high level of pedestrian and bicycle activity. Sidewalks are provided on both sides of the study segment. In the segments where redevelopment has occurred, sidewalks measure the minimum standard of 5-ft in width. Where older developments exist, sidewalks are commonly 4-foot wide. Pedestrian facilities, e.g., walk/don't walk signals and curb ramps, are provided at all signalized intersections.

On-street bike lanes are available on S Lamar Blvd in both directions. These lanes are 5-feet wide with 2-feet wide painted buffers adjacent to the travel lanes.

Recommendation

Based on the results of the speed zone investigation for S Lamar Blvd between Barton Skyway and Ben White Blvd (SH 71), the current speed limit should be lowered from 45 MPH to 40 MPH (see Figure 3) due to:

- 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 actual traffic speeds indicate that the 85th percentile speed supports posting a speed limit of 40 MPH.
- The high levels of pedestrian and bicycle activity along and across S Lamar Blvd.
- Transit activity with frequent routes requiring buses to stop in travel lanes for boarding/disembarking passengers.

