



MEMORANDUM

To: Traffic Study Files

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

Date: August 20, 2019

Subject: Speed Modification Report

Location: Airport Blvd – IH-35 to Glissman Rd

A Traffic Engineering Investigation was conducted by the Austin Transportation Department (ATD) to determine the posted speed limit on Airport Boulevard from IH-35 to Glissman RD. (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 Airport Blvd is 3.9 miles of a Level 3 arterial as identified in the *Austin Strategic Mobility Plan* (ASMP) adopted by City Council in April 2019, with multiple cross sections:

Segment	Cross Section
IH-35 NB Frontage Road to Manor Rd	6-lane median divided
Manor Rd to Springdale Rd	4-lane undivided with continuous two-way left turn lane
Springdale Rd to Shady Ln	4-lane undivided
Shady Ln to Glissman Rd	4-lane undivided with continuous two-way left turn lane

Development along Airport Blvd is commercial and residential; however, no homes directly front the roadway. Access to the residential areas from Airport Blvd is by several Level 2 (collector) roads along the entire length of the study segment. Traffic signals are located at the following intersections with Airport Blvd:

- | | |
|---|---|
| <ul style="list-style-type: none"> • IH-35 NB Frontage Rd • Wilshire Blvd/Aldrich St • Schieffer Ave/Zach Scott St • E 38 ½ St • Manor Rd • E MLK Jr Blvd | <ul style="list-style-type: none"> • E 12th St • Oak Springs Dr • Goodwin Ave • Springdale Rd • Bolm Rd • Shady Ln |
|---|---|

Portions of Airport Blvd have curb and gutter on both sides of the roadway, while significant sections have no curb/gutter on at least one side of the pavement. In the stretches will no edge treatment, open drainage ditches run adjacent to the road. No on-street parking is permitted along the entire study segment of Airport Blvd. On the southern portion of the study segment, there are numerous and frequent driveways with little compliance with basic access management principles.

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
E of Crestwood Rd	45	42.2	47.3	36.2	41.8	9,414	15,831
S of Aldrich St	50	42.3	46.4	33.8	40.4	16,844	4,637
N of 40 th St	45	46.4	46.4	40.5	40.3	10,119	16,700
S of Pannell St	45	38.9	43.5	33.2	37.4	9,886	9,975
N of 16 th St	45	39.2	38.6	33.8	32.6	12,736	12,505
S of Harvey St	45	34.7	39.7	29.8	34.6	6,631	3,403
N of Gunter St	45	43.7	38.9	37.5	32.0	9,664	13,299
S of Springdale Rd	45	44.1	37.2	36.7	29.4	9,840	9,577
N of Glissman Rd	45	45.5	40.0	40.2	34.5	10,704	8,714

The existing speed limit for Airport 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 Airport 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 22 fatalities.

Pedestrian and Bicycle Activity

For the most part, sidewalks are provided on both sides of the study segment. There are, however, sections where gaps in the sidewalk exists and much of the existing sidewalks are narrower than the current minimum standard of 5-feet in width. Pedestrian facilities, e.g., walk/don't walk signals and curb ramps, are provided at all signalized intersections

There are no bike lanes available on Airport Blvd. In the segments where no curb and gutter exist, there is a small amount of pavement beyond the edge line (approximately 2-3 feet) that some cyclists attempt to use as a bike lane. In other locations, bicycles are forced to use the narrow sidewalks in order to avoid the higher-speed traffic on Airport Blvd.

Recommendation

Based on the results of the speed zone investigation for Airport Blvd between IH-35 and Glissman Rd, the current speed limit should be lowered from 45 MPH and 50 MPH to a continuous segment posted at 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 lack of continuous and adequate pedestrian and bike facilities throughout the study segment creates an environment where non-automobile users are negatively impacted when placed adjacent to traffic lanes with higher speeds.



