



## MEMORANDUM

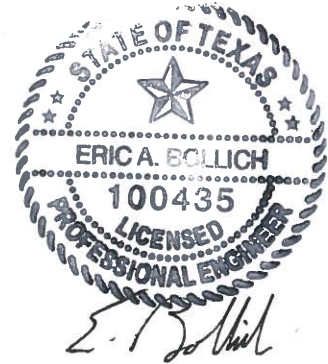
**To:** Traffic Study Files

**From:** Eric Bollich, P.E., Managing Engineer  
Transportation Engineering Division  
Austin Transportation Department

**Date:** August 20, 2019

**Subject:** Speed Modification Report

**Location:** East Riverside Drive – 250 feet east of Crossing Place to SH 71



8/26/19

A speed limit modification report was conducted by the Austin Transportation Department (ATD) to determine an appropriate speed limit on East Riverside Drive from 250 feet east of Crossing Place to SH 71 (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 1.7 miles of a Level 3 arterial as identified in the *Austin Strategic Mobility Plan* (ASMP) adopted by City Council in April 2019, with a six-lane, median-divided cross section.

Development along the study segment is a mix of commercial and residential properties (primarily multi-family). Most of the residential areas access East Riverside Drive by private driveways, Level 1 (local), and Level 2 (collector) streets. Very few houses directly front the study segment.

Traffic signals are located along the study segment at the intersections with Faro Drive, Grove Boulevard, and Montopolis Drive. Additional traffic signals and Pedestrian Hybrid Beacons (PHBs) are planned with the City's ongoing East Riverside Corridor Construction Program of the 2016 Mobility Bond.

The through travel lanes range between 10 and 12 feet in width. The study segment has curb and gutter on both sides of the roadway, and no on-street parking is permitted. Driveways along the study segment are appropriately spaced for the adjacent land use.

East Riverside Drive is a heavily traveled route by vehicles, transit, pedestrians, and cyclists connecting to Pleasant Valley Road, IH-35, SH 71, and US 183.

### 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 <sup>th</sup> Percentile Speed (MPH) |      | Daily Volume Sample Size * |        |
|-------------------------|----------------------------|---|------|----------------------------|--------|
|                         |                            | EB                                      | WB   | EB                         | WB     |
| W of Riverside Farms Rd | 40                         | 45.3                                    | 45.8 | 6,974                      | 8,390  |
| E of Penick Dr          | 40                         | 44.4                                    | 45.7 | 5,212                      | 11,615 |
| E of Clubview Ave       | 40                         | 42.2                                    | 34.1 | 3,473                      | 5,932  |
| E of Vargas Rd          | 45                         | 46.9                                    | 44.5 | 7,765                      | 4,048  |
| E of Yellow Jacket Ln   | 45                         | 37.1                                    | 48.6 | 7,942                      | 10,466 |

\* Note: The data collection method disregarded vehicles measured within four seconds of each other to reduce the effects of congestions and obtain a theoretical free-flow condition. Therefore, these numbers are not actual average daily traffic volumes.

The existing speed limit for East Riverside Drive 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 high average 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.

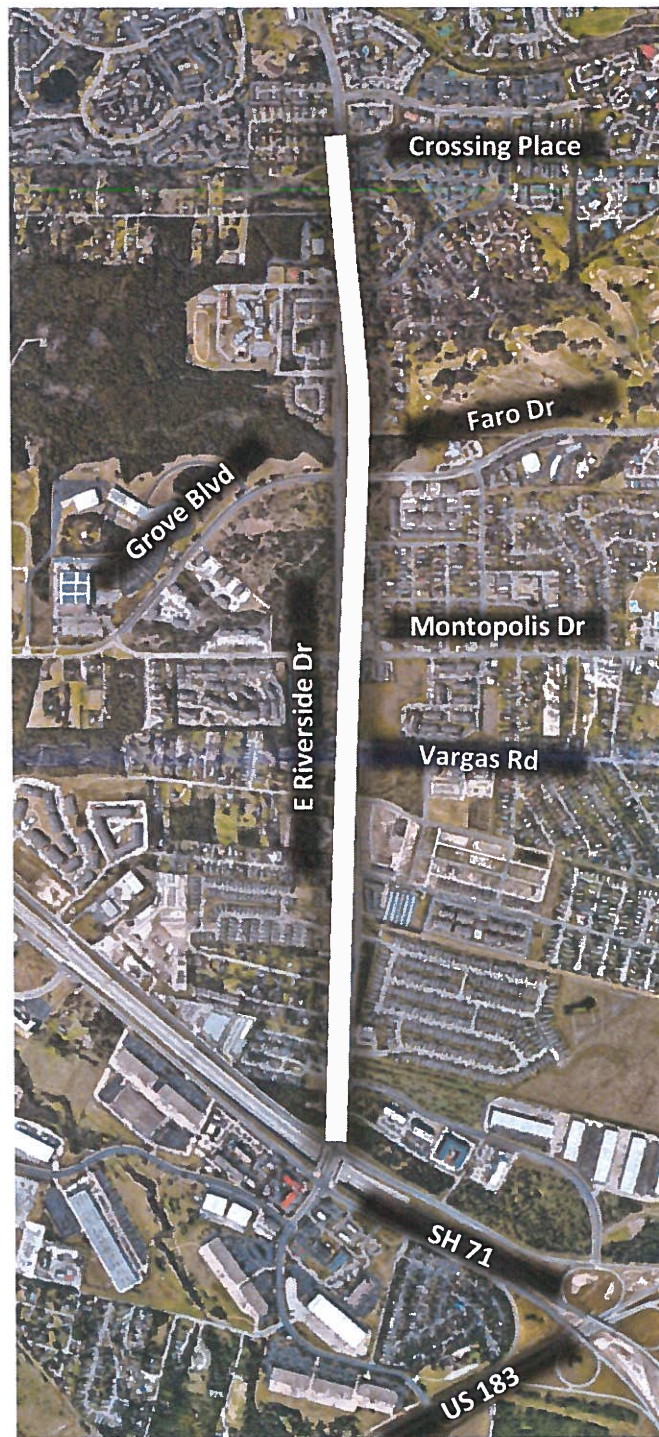
### Pedestrian and Bicycle Activity

The study segment has a high level of pedestrian activity, partly due to users accessing transit stops. Sidewalks are vary between four and seven feet wide. Bicycle lanes are not available, but demand exists as the study segment is the only continuous east-west corridor in the area. Cyclists generally choose to use the sidewalks along the study corridor rather than the general purpose vehicle lanes.

**Recommendation**

Based on the results of the speed modification report limit for East Riverside Drive, the existing speed limit should change to 35 mph from 250 feet east Crossing Place to 250 feet east of Vargas Drive and to 40 miles per hour from 250 feet east of Vargas Drive to SH 71 (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.
- The high levels of pedestrian and bicycle activity along and across East Riverside Drive.
- Transit activity with frequent routes requiring buses to stop in travel lanes for boarding/disembarking passengers.
- A consistent speed limit along the entire length of the study segment reduces driver uncertainty as to posted speed in a given section.



Segment Limits:

- 250 feet east of Crossing Place to SH 71



**FIGURE 1.**  
E Riverside Drive

08/20/2019

Study Segment and Location





SPEED  
LIMIT  
**35**



SPEED  
LIMIT  
**40**



SPEED  
LIMIT  
**45**

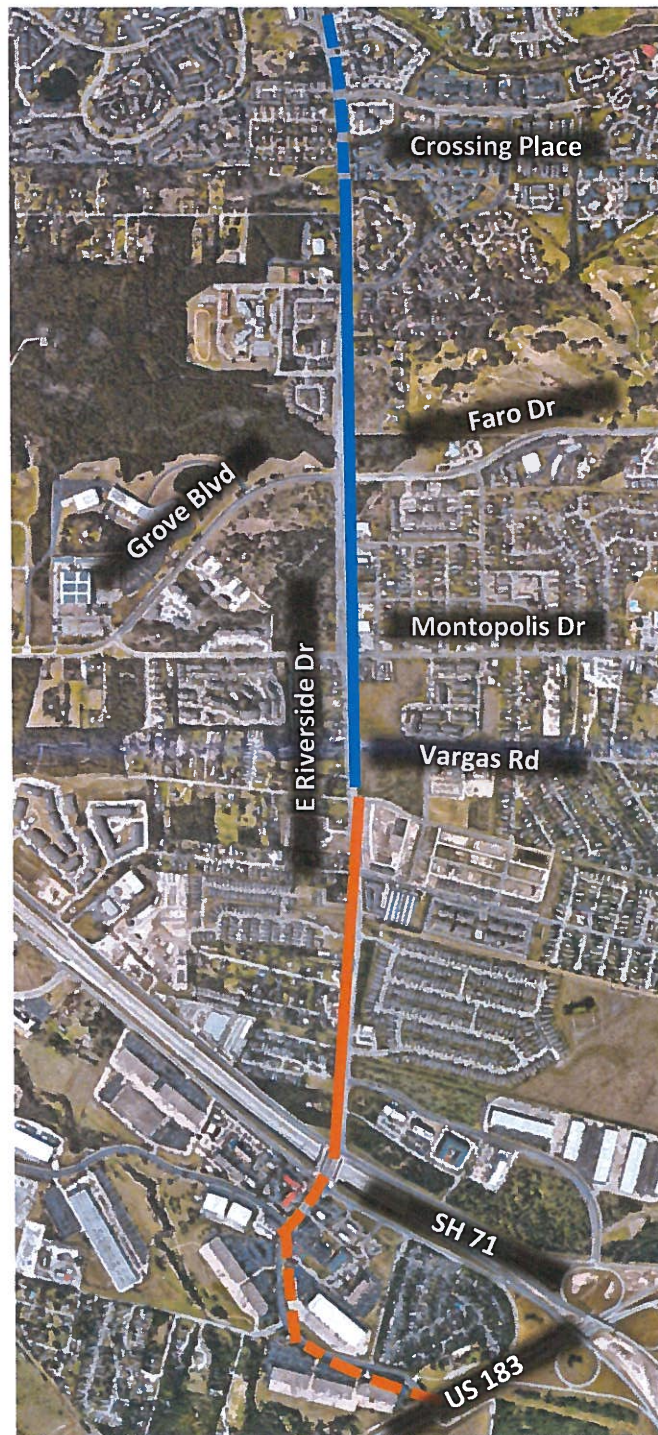
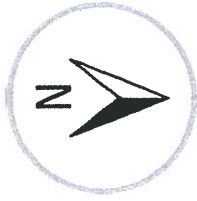


**FIGURE 2.**  
**E Riverside Drive**

08/20/2019

Existing Posted Speed Limits





**FIGURE 3.**  
E Riverside Drive

08 / 20 / 2019

Proposed Speed Limits