



## 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:** Pleasant Valley Road – Webberville Road to East Riverside Drive



8/26/19

A speed limit modification report was conducted by the Austin Transportation Department (ATD) to determine an appropriate speed limit on Pleasant Valley Road from Webberville Road to East Riverside Drive (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 2.4 miles 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
Webberville Road to Elmont Drive	4-lane undivided
Elmont Drive to East Riverside Drive	4-lane undivided with continuous two-way left turn lane

Development along Pleasant Valley Road is mixed. On the northern portion from Webberville Road to Lady Bird Lake, the study segment consists of single-family residential neighborhoods and commercial tracts. Most of the residential areas access to Pleasant Valley Road by several Level 1 (local) and Level 2 (collector) roads; very few houses directly front Pleasant Valley Road.

Immediately south of Lady Bird Lake, large parks and a recreation complex are adjacent to the study segment. Further south toward East Riverside Drive, the development along Pleasant Valley Road is

dominated by large multi-family residential complexes with substantial retail centers on both sides of the road.

Traffic signals are located along the study segment at the following intersections:

- |                               |                               |                         |
|-------------------------------|-------------------------------|-------------------------|
| • Webberville Road            | • East 2 <sup>nd</sup> Street | • S Lakeshore Boulevard |
| • East 7 <sup>th</sup> Street | • E Cesar Chavez Street       | • Elmont Drive          |
| • East 5 <sup>th</sup> Street | • Krieg Softball Complex      | • East Riverside Drive  |

In addition, a Pedestrian Hybrid Beacon (PHB) is approximately 700 feet north of the intersection with East Riverside Drive. Two more PHBs are to be constructed on Pleasant Valley Road in the near future: north of Longhorn Dam near Canterbury Street, and south of Longhorn Dam near the north entrance to the park.

The through travel lanes range between 10-11 feet in width. The two-way left turn lane is approximately 10 feet wide. The study segment has curb and gutter on both sides of the roadway, and no on-street parking is permitted. In both the northern and southern portions of the study segment, driveways onto Pleasant Valley Road are appropriately spaced for the adjacent land use.

Pleasant Valley Road is a heavily traveled route by vehicles, transit, pedestrians, and cyclists going between north and south Austin as it is the only river crossing between IH-35 and US 183 in east Austin.

#### 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)		50 <sup>th</sup> Percentile Speed (MPH)		Traffic Volumes	
		NB	SB	NB	SB	NB	SB
S of Canterbury Street	45	36.9	39.8	26.7	33.4	11,820	12,486
N of S Lakeshore Boulevard	45	40.1	49.0	35.0	40.6	12,769	13,562
S of S Lakeshore Boulevard	45	36.8	44.1	27.6	35.6	10,172	11,287
S of Elmont Drive	45	38.1	42.9	32.3	33.8	10,020	8,854

The existing speed limit for Pleasant Valley Rd 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. From 2015 through 2017, serious traffic-related crashes resulted in 14 fatalities.

**Pedestrian and Bicycle Activity**

The study segment has a high level of pedestrian and bicycle activity. Bike and pedestrian facilities along Pleasant Valley Road to the north of Lady Bird Lake are different than those provided south of Lady Bird Lake.

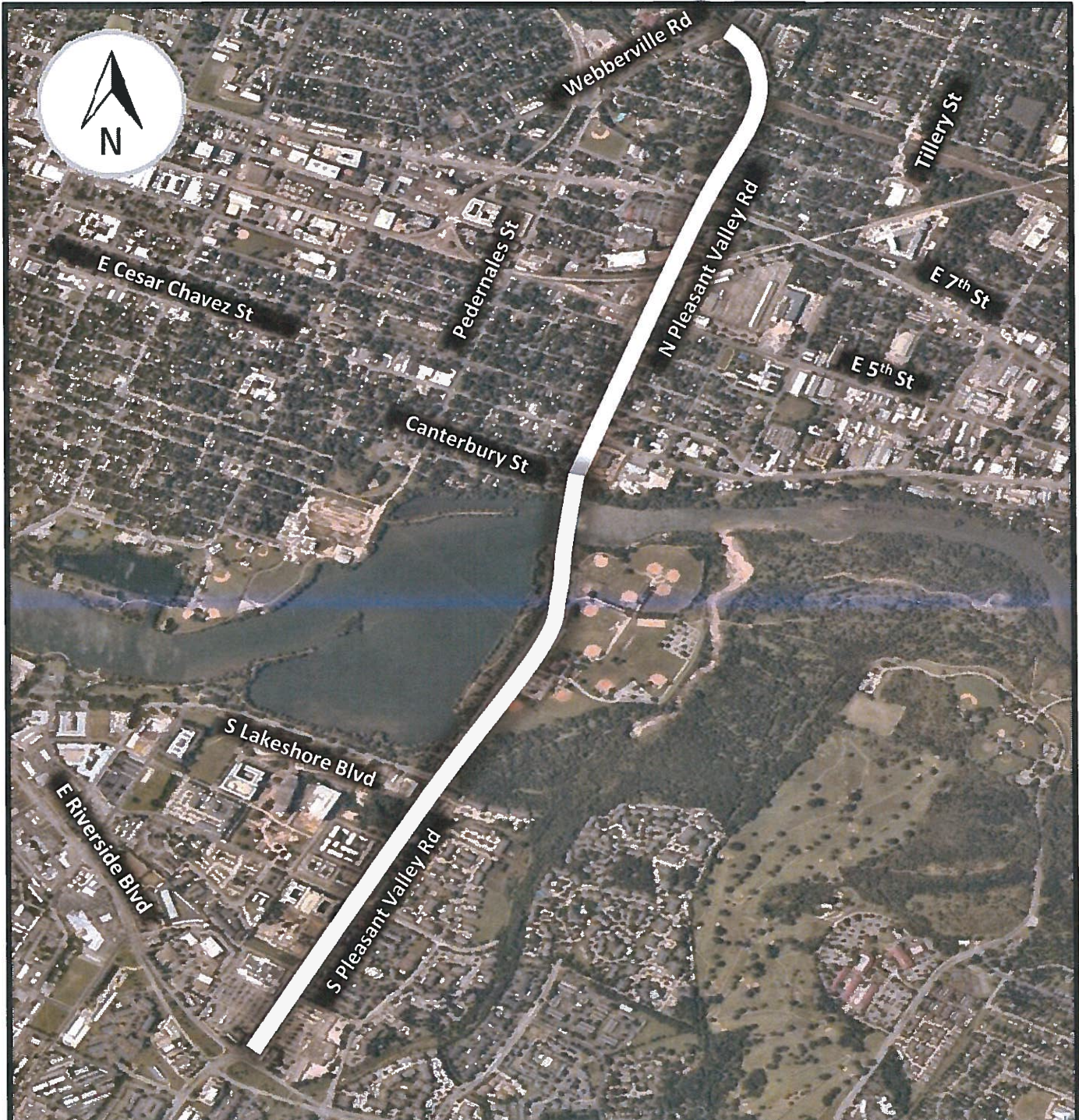
From Webberville Road to the north end of Longhorn Dam, continuous sidewalks are provided along both sides of Pleasant Valley Road. Sidewalks in this part of the study segment are mostly four-feet wide. Pedestrian facilities (e.g., walk/don't walk signals and curb ramps) are provided at all signalized intersections. Bicycle lanes are not available, and cyclists generally choose to use the sidewalks in this area.

Between Lady Bird Lake and East Riverside Drive, a mix of sidewalks, off-street shared-use paths, park trails, and on-street bike lanes are present. Recent infrastructure improvements created shared-use paths allowing bicycles to be moved away from the main travel lanes in sections of the southern portion of the study segment, in part due to documented high-crash locations. In the sections where redevelopment has occurred, sidewalks measure a minimum of five feet in width. The shared use paths and park trails range between eight and 10 feet in width. Pedestrian facilities (e.g., walk/don't walk signals and curb ramps) are provided at all signalized intersections.

**Recommendation**

Based on the results of the speed zone investigation for Pleasant Valley Road between Webberville Road and East Riverside Drive, the current speed limit should be changed to 35 MPH (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 Pleasant Valley Road.
- 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:

- Webberville Rd to E Riverside Blvd



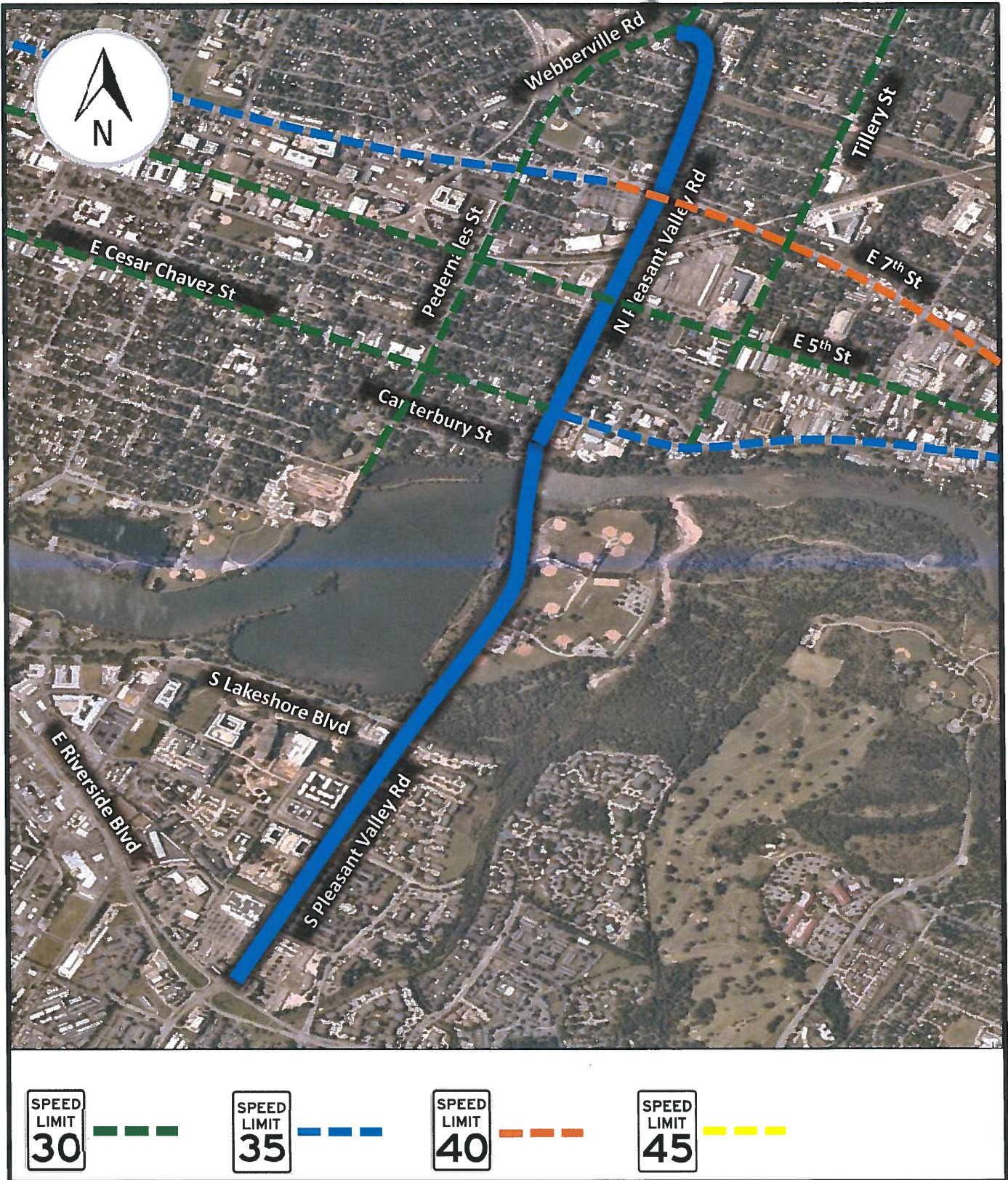
**FIGURE 1.**  
N/S Pleasant  
Valley Rd  
08 /20 /2019

Study Segment and Location



**FIGURE 2.**  
N/S Pleasant  
Valley Rd  
08/20/2019

Existing Posted Speed Limits



**FIGURE 3.**  
N/S Pleasant  
Valley Rd  
08/20/2019

Proposed Posted Speed Limits