



## MEMORANDUM

**To:** Traffic Study Files

**From:** Eric Bollich, P.E., PTOE  
South Austin Supervisor  
Traffic Engineering Division  
Austin Transportation Department

**Date:** July 12, 2012

**Subject:** Speed Zone Investigation

**Location:** Convict Hill Road – U.S. 290 to Brodie Lane

*E. Bollich*

7/12/12



**Date(s) of Previous Investigation:** April 1996 and November 1987

A speed zone investigation has been conducted by the Austin Transportation Department to determine appropriate speed limits on Convict Hill Road between U.S. 290 and Brodie Lane. Figure 1 presents a map of the study area.

### Location Conditions

Convict Hill Road is a two-lane collector that runs in a general west-east direction between U.S. 290 and Brodie Lane for a total length of approximately 3.25 miles. Over the entirety of Convict Hill Road, pertinent roadway features are inconsistent. The following table summarizes roadway features on selected segments.

Block Number	Street Segment	Street Width	Features	Existing Speed Limit
6900	U.S. 290 to Shadowridge Run	44 ft	Intermittent on-street parking and fronting houses on north curb; bike lanes and sidewalks; curbs	30
6600	Shadowridge Run to Escarpment Blvd	44 ft	Intermittent on-street parking and fronting houses on north curb; bike lanes and sidewalks; curbs	30
5800	Escarpment Blvd to Wagon Train Rd	44 ft – 50 ft	Bike lanes and sidewalks; curbs	40

5600	Wagon Train Rd to Woodcreek Rd	44 ft	Bike lanes and sidewalks; curbs	40
4800	Woodcreek Rd to Brush Country Rd	22 ft	No curbs or sidewalks; horizontal curves	30
4700	Brush Country Rd to Vermillion Dr	35 ft – 70 ft	Sidewalks; full north curb; intermittent south curb	40
4400	Vermillion Dr to Saffron St	22 ft	No curbs; sidewalk on north side	40
3900	Saffron St to Brodie Ln	22 ft – 50 ft	No curbs; sidewalk on north side; 20 mph school zone, sidewalks, and curbs near Covington Middle School	35

### Speed and Volume Data

The following speed and volume data were collected in April 2012 to determine appropriate posted speed limits for Convict Hill Road.

Block Number	Street Segment	Existing Speed Limit	85% Speed		Traffic Volumes
			EB	WB	
6900	U.S. 290 to Shadowridge Run	30	38	40	8007
6600	Shadowridge Run to Escarpment Blvd	30	39	39	7851
5800	Escarpment Blvd to Wagon Train Rd	40	44	45	5387
5600	Wagon Train Rd to Woodcreek Rd	40	41	39	5109
4800	Woodcreek Rd to Brush Country Rd	30	37	38	5367
4700	Brush Country Rd to Vermillion Dr	40	35	36	5740
4400	Vermillion Dr to Saffron St	40	42	43	5491
3900	Saffron St to Brodie Ln	35	41	43	5553

Figure 2 presents a speed zone map summarizing the collected data.

### Recommendation

Based on an analysis of the location information and traffic data, it is my engineering judgment that the following speed limits should be established on Convict Hill Road.

- U.S. 290 to Escarpment Boulevard: 35 mph
- Escarpment Boulevard to Woodcreek Road: 40 mph
- Woodcreek Road to Brodie Lane: 35 mph
  - The 20 mph school zone should remain between Reaburn Street and Lochinvar Street



Comments	Residential		Residential with side adjacent to roadway	
Roadside Development	Apartment			
Crashes (attach summary if >5)	②	① ① ①		
Advisory Speeds (see attached ball bank form)				
Recommended Speed Zones	35 MPH	40 MPH	35 MPH	35 MPH
<div style="text-align: center;"> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Toward U.S. 290 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Convict Hill Rd. </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Roadway Brodie Ln. </div> <div style="text-align: right;"> Toward </div> </div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> 40 65-70 3654 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> 38 65-70 4353 </div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> 39 65-70 3586 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> 39 65-70 4265 </div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> 45 65-70 2740 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> 44 55-60 2647 </div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> 39 60-65 2429 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> 41 60-65 2680 </div>
Recommended Speed Zones	35 MPH	40 MPH	40 MPH	35 MPH
Advisory Speeds (see attached ball bank form)				
Crashes (attach summary if >5)	① ①	20 MPH		
Roadside Development	Undeveloped	Residential with no front access		Church Apartments
Comments				

85th Percentile Speed

Mid Block Accident

Top Speed Measured

Intersection Accident

Number of Vehicles Checked

Match Line

Speed Zone Investigation

Convict Hill Rd.

Scale = Not to scale

(revised by JFG 2-18-03)

FIGURE 2: SPEED ZONE MAP (Sheet 1 of 2)