

MEMORANDUM

To:

Traffic Study Files

From:

Austin Transportation Department

Date:

April 9, 2013

Subject:

Reduced Speed School Zone Investigation

Location:

Airport Boulevard

Date(s) of Previous Investigation: None

A traffic engineering investigation has been conducted to determine if reduced speed school zones are appropriate on Airport Boulevard near the Ridgemont Elementary School for its students.

The following information was collected and analyzed for this determination.

Proximity of the School Crossing to the School

The school is located on the southwest corner of the intersection of Clarkson Avenue and East 51st Street. The intersection of Airport Boulevard and East 51st Street is located approximately 90 feet east of of this intersection and is signalized.

Pedestrian Count

Pedestrians were counted in December 2012.

| Location | Elementary Child | Bicylist (child) | Adult | TOTAL | |
|--|---------------------|------------------|-------|-------|--|
| Crossing Airport Boulevard at E. 51st Street | 18 | 1 | 8 | 27 | |
| Crossing E. 51 st Street at Airport Boulevard | 14 | 1 | 6 | 21 | |
| TOTAL | 32 | 2 | 14 | 48 | |



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Existing Roadway Conditions

| Location | Number of Lanes | ADT: Two-Way | Posted Speed Limit | Street Width |
|----------------------------|-----------------|-----------------|-----------------------|--------------|
| Airport Boulevard | 5 | 21,230 | 40 MPH | 55 feet |
| E. 51 st Street | 4 | 8,270 | 30 MPH | 40 feet |

Presence of Adult Crossing Guard or Student Safety Patrol

An adult crossing guard is stationed at this intersection to assist students with crossing Airport Boulevard.

Crash History

Austin Police Department's crash database was reviewed for crashes occurring between January 2012 and March 2013 within the proposed school zone. Six crashes were documented during this period.

Airport Boulevard

| Date / | Dire | ction | | | | | | |
|---------------------|---|--------|----------|-----|-----|-------|--|--|
| Time | At Fault Other Weather Light Road Injur | Injury | Comments | | | | | |
| 1/3/12 8:04 AM | SB | NB | Clear | Day | Dry | Minor | Unit 1 struck Unit 2 while turning left from the center turn lane. | |
| 1/24/12 4:36 PM | SB | SB | Rain | Day | Wet | None | Unit 1 rear ended Unit 2. | |
| 8/2/12 8:39 AM | NB | SB | Clear | Day | Dry | None | Unit 1 ran a red light and struck Unit 2 which was turning left on a protected turn signal. | |
| 11/12/12 8:49 AM | SB | EB | Clear | Day | Dry | None | Unit 1 ran a red light and struck Unit 2 which was travelling EB on a green signal. | |
| 1/21/13 8:03 AM | SB | NB | Clear | Day | Dry | None | Unit 1 failed to yield right- of-way to Unit 2 while turning left. | |
| 2/12/13 8:24 AM | NB | WB | Rain | Day | Wet | Minor | Unit 1 failed to yield right- of-way to Unit 2 while turning from a private driveway. | |

Sight Distance

Sight distance exceeds the lengths of the proposed school zones on Airport Boulevard.

Sidewalks and Ramps

There is a marked pedestrian crosswalk across Airport Boulevard on the south side of the intersection of Airport Boulevard and East 51st Street which connects to a sidewalk on East 51st Street.

Recommendation

The intersection of Airport Boulevard and East 51st Street is signalized. While traffic signals provide a higher degree of pedestrian crossing protection, there is an expectation of drivers to make a reasonable decision of stopping on red and children to not cross against the signal. Unfortunately, there is a possibility that this might not happen at all times.

Based on the analysis of the information provided in the above sections, reduced speed school zones of 20 miles per hour (mph) should be installed on Airport Boulevard from 55 feet south of East 52nd Street to 258 feet south of East 51st Street.

Recommended engineering practice for changes in speed limits is not to exceed 15 mph differentials. Therefore, to accommodate the 20 mph reduced speed school zone on Airport Boulevard, the posted speed limit should be reduced to 35 mph in advance of the school zone. The 35 mph zone should extend from 162 feet south of East 53rd Street to 185 feet south of East 50th Street.

Figure 1 presents the study area and limits of proposed speed zones.