

Department of Public Works

Oak Lane Engineering & Traffic Survey Report

Introduction

This report presents the Engineering and Traffic Survey for Oak Lane between Cypress Drive and Mandrell Drive in the Oak View area of the City south of Warner Avenue and west of Beach Boulevard. Oak Lane is a two-way, two lane residential street located adjacent to Oak View Elementary School and a public library along the west side, with multi-family residential units along the east side of the street. The Engineering and Traffic Survey study will examine the street conditions including the prevailing speeds, accident history, and roadway conditions not readily apparent to motorists in consideration of establishing a 15 miles per hour school zone speed limit on Oak Lane while children are going to or leaving the school, either during school hours or during the noon recess period. California Vehicle Code Section 22358.4 allows a local jurisdiction to declare a speed limit of 20 or 15 miles per hour by ordinance or resolution, if an Engineering and Traffic Survey determines that the speed limit of 25 miles per hour is more than reasonable or safe. Figure 1 shows the study location of Oak Lane from Cypress Drive and Mandrell Drive.

Methodology

In order to qualify for consideration of a 20 mph or 15 mph school zone, a street is required to meet 4 criteria. The street must be a residential district, have a speed limit outside of the school zone area that is no greater than 30 mph, and have no more than 2 travel lanes and be located within 500 feet of school grounds. Under California State guidelines Oak Lane satisfies these conditions allowing the City to consider declaring a 15 miles per hour speed limit either during school hours or during the noon recess period, when children are going to or leaving the school.

The methodology performed uses the required elements for conducting an Engineering and Traffic Survey and include the following:

- 1) Review accident history
- 2) Review the street segment to identify roadway characteristics and conditions that may not be readily apparent motorists and pedestrian and bicyclist safety
- 3) Sample existing travel speeds at representative locations within the roadway segment.

Accident History

Accident history can provide information of roadway conditions that may be justify reduced speed limits. Reported accidents in a five (5) year time range (July 20, 2016 to July 30, 2021) that occurred along Oak Lane from Cypress Drive to Mandrell Drive were examined. The results identify four (4) reported collisions with one (1) injury all occurring outside of school

hours. The number of incidents does not appear to be a significant factor in considering a school zone speed limit reduction. The accident information is shown on Attachment 1.

Roadway Characteristics and Conditions:

Roadway characteristics were the second element evaluated on Oak Lane from Cypress Drive to Mandrell Drive and the most significant in terms of assessing the potential need for lowered school zone speed limit. The street is located in a residential area with an elementary school and library on the west side, and residential use along the east side. The speed limit on Oak Lane is 25 miles per hour and has a pavement width of 40 feet. On-street parking along the east side and the north section of the west side of Oak Lane is allowed at all times. A bus and student loading/unloading zone exists on the west side in front of the school site. The east side of the street has significant parking demand throughout the day and related parking/unparking activity. On a typical school day, there are large numbers of students and parents walking to and from school with many crossing Oak Lane. This pedestrian activity is occurring at the same time as many parking maneuvers and heavy vehicle traffic on the street.

At the intersection of Oak Lane and Mandrell Drive, an all-way stop exists at the street bend and contains one diagonal crosswalk within the intersection. This crosswalk is a little unusual and could lead to some motorists misjudging the limit line and location to stop. The crosswalk is oriented diagonally across the intersection rather than in front of the limit line. At the north end of the school zone Oak Lane has two closely spaced offset intersections along Cypress Drive in the east-west direction. Two school zone crosswalks are marked at the southern portion of the offset intersection. However, the offset could lead to some unexpected attempts to cross the street at locations other than the marked crosswalks.

Existing Roadway Travel Speed:

Speed data was collected on Oak Lane between Cypress Drive and Mandrell Drive. In general, the overall speed profile for the street throughout the day is not a significant factor in developing a recommendation for a specific school zone speed limit, which is only applicable during school pick-up/drop-off times. The 85th percentile speed during the weekday and weekend was 28 miles per hour and 29 miles per hour, respectively. On both the weekday and weekend the majority of the vehicles were traveling between 20 to 30 miles per hour. The majority of the 85th percentile speeds are out of school hours. Many vehicles have been observed to travel at or below 15 miles per hour on weekdays during pickup and drop off hours. The level of activity and congestion effectively limit how fast most motorists can either comfortably or physically travel. The speed data collection data is shown in Attachment 2.

Analysis:

Accident records do not appear to be a supporting factor in recommending a reduction in the school zone speed limit. Roadway conditions, which may not be readily apparent include the heavy on-street parking demand with parking/unparking related maneuvers and a crosswalk marked diagonally within an intersection at a 90-degree street bend. Additionally, during school

drop off and pick up times the street is a high activity area with students and parents walking to and from school, bus loading/unloading activity, and on-street student drop off and pick up curb space in front of the school.

Recommendation:

Conditions on Oak Lane between Cypress Drive and Mandrell Drive meet all of the required conditions for consideration of a reduced school zone speed limit. Actual conditions on the roadway during the school pick-up and drop-off periods support reducing the speed limit to 15 miles per hour during those times to reflect how most prudent motorists drive the street based on the level of parking, pedestrian and cyclist activity and match the expectations of pedestrians and cyclists. The 15 mph school zone speed limit will help facilitate reasonable and safe conditions for all users in the area during school times.

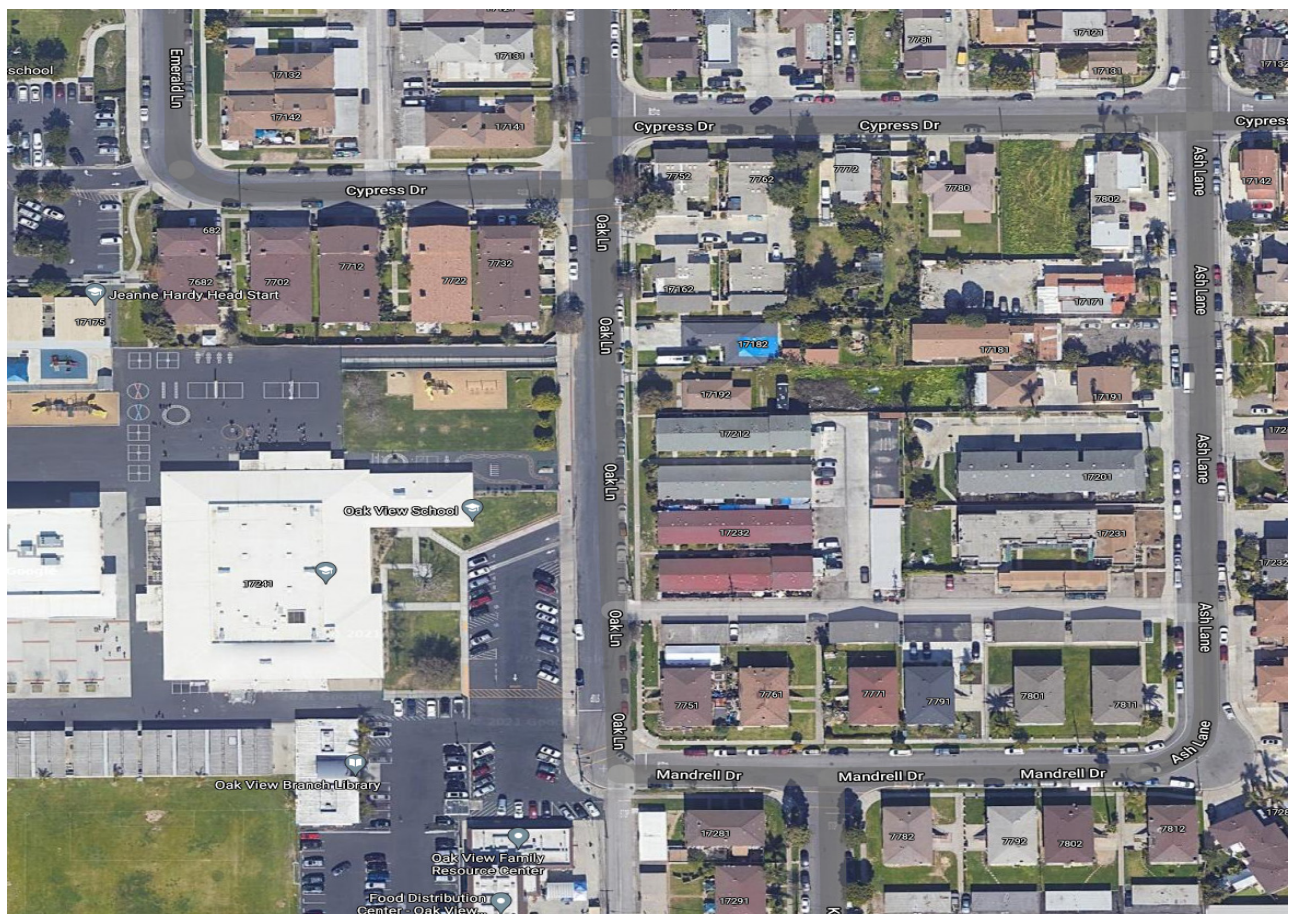


Figure 1. Oak Lane from (Cypress Avenue to Mandrell Drive)