



CITY OF SANTA BARBARA
Transportation & Circulation Committee
Staff Report

DATE: September 25, 2008
TO: Transportation & Circulation Committee
FROM: Browning Allen, Transportation Manager
SUBJECT: **CARRILLO/ANACAPA TRAFFIC SAFETY IMPROVEMENTS**

RECOMMENDATION:

The Transportation and Circulation Committee find the proposed traffic safety improvements at the intersection of Carrillo and Anacapa Streets to be consistent with the Circulation Element.

BACKGROUND:

The Carrillo/Anacapa intersection has been identified as having among the highest number of motor vehicle involved collisions in the City. According to the Police Department Traffic Collision Records, sixty two (62) collisions were reported at the Carrillo/Anacapa intersection between the period of December 31, 2003 and December 31, 2007. Forty-nine (49) were reported as occurring within 75 feet of the intersection with 33 of the collisions being right angle collisions involving through or left turning vehicles.

70 percent of the collisions were Broadside and 11 percent rear-end. The movement preceding collision for 33 of the collisions was both parties proceeding straight. In 26 of these collisions, a red light violation occurred. Probable cause for collisions of this nature where signal timing is adequate, as it is at this location, is poor visibility of signals.

The distribution of fault assignment for this location is as follows: 44% WESTBOUND Carrillo drivers, 28% Southbound Anacapa; and 22% EASTBOUND Carrillo drivers. The primary collision factor in 64% of the crashes was running the red. Unsafe left turn accounted for 7% of the violations.

INTERSECTION ANALYSIS:

Traffic Operations contracted with Penfield and Smith (P&S) to evaluate existing conditions and develop recommendations for the Anacapa/Carrillo Intersection with the primary goal of improving signal visibility and safety for all modes. P&S collected traffic counts at the study intersection, observed the intersection operations and determined the existing intersection levels of service.

Intersection turning movement counts, pedestrian counts and driveway counts were collected on May 20, 2008 and May 22, 2008 during the AM, Noon and PM peak hour. Based on the counts collected, P&S determined the intersection level of service using the Intersection Capacity Utilization (ICU) methodology, as well as conducted operational analyses using Synchro software.

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The intersection is operating at a Level of Service B or higher during all peak hours, which is well within the City's acceptable vehicular level of service standard. However, based on Penfield and Smith's observations the following operating conditions were noted:

- In general, a significant number of conflicts and "near misses" through the intersection were observed, primarily as a result of the following:
 - There is insufficient guidance (poor signage, lack of pedestrian signal heads, etc.) at the intersection and the traffic signals are not very visible until vehicles have reached the intersection. During their observations, one vehicle attempted to drive up (northbound) on Anacapa Street in the wrong direction.
 - Conflicts were observed between turning vehicles and pedestrians crossing the street. Approximately 290 pedestrians traveled through the intersection during the AM peak hour, 650 during the noon peak hour and 500 during the PM peak hour. The south and the west legs consistently have the heavier pedestrian activity.
 - Vehicles turning into the Santa Barbara Bank and Trust driveway (southwest corner) obstructed through traffic on Anacapa Street. Vehicles were observed blocking Anacapa Street while waiting for pedestrians to cross the driveway or for cars in the bank driveway that were waiting for a parking space.
 - The eastbound right turn pocket is +/- 1 vehicle length and does not appear to serve any function. The outer eastbound through lane is wide enough to accommodate the separate eastbound right turn movement.
 - Vehicles were observed speeding up at a yellow light and occasionally running the red light. This occurred at all of the approaches.

PROPOSED IMPROVMENTS:

Given the collision history data and field observations, P&S proposed the following improvements:

- New signal poles with mast arms over Carrillo Street (2 sets) to improve signal visibilities along Carrillo Street;
- Curb extensions and directional ramps on the northeast and southeast side of Carrillo. Because this intersection is a main transit route and used by large delivery trucks, curb extensions were not recommended for the northwest and southwest sides of the intersection due to turning radius requirements for those vehicles;
- New pedestrian signal indicators with countdown heads for all directions;
- Relocation of the traffic control equipment cabinet from the southeast side of Carrillo to its northeast side. This cabinet has had to be frequently replaced as a result of the traffic collisions at this intersection; and
- Landscaping embellishments, which are consistent with the City's water wise landscaping requirements and the El Pueblo Viejo Landscaping Guidelines.

cc: Dru van Hengel, Transportation Operations Supervisor
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