

CITY OF LOS ANGELES
DEPARTMENT OF TRANSPORTATION

July 14, 2014

TRAFFIC
CONTROL
REPORT

11- Western #22239
Pacific Av & Sunset Av
(N. I/S)

RECTANGULAR RAPID FLASH L.E.D. BEACONS

DETERMINATIONS

1. That Rectangular Rapid Flash LED Beacons (RRFBs) facing both northbound and southbound traffic on Pacific Avenue be authorized to supplement the "Pedestrian Crossing" (W11-2) and "45 degrees Down Arrow" (W16-7p) signs installed at both ends of the marked crosswalk for the north leg of Pacific Avenue at the north intersection of Sunset Avenue (south of Paloma Court). (LAMC Section 80.07)
2. That "Yield Here to Pedestrians" (R1-5a) signs and sharktooth markings be authorized for northbound and southbound Pacific Avenue in advance of the marked crosswalk. (LAMC 80.21.1)
3. That the traffic signal modifications recommended by the Department of Transportation be funded by HSIP grant funding awarded to the City for Cycle 6.

DISCUSSION

The Department of Transportation initiated a traffic engineering study at the north intersection of Pacific Avenue and Sunset Avenue in order to determine if the existing marked crosswalk could be made safer. A recent FHWA study "Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations" recommends that marked crosswalks alone are insufficient for the combination of traffic volumes, number of traffic lanes, and speed of traffic on Pacific Avenue that this crosswalk is traversing, and should be supplemented with traffic signals or other treatments. The City was awarded with an HSIP grant to install RRFBs at this intersection, so the study looked at whether the crosswalk was justified for retention, whether a traffic signal was warranted, and if RRFB could be justified.

In the Community Plan of City's General Plan, Pacific Avenue is designated as a "Secondary Highway" with almost 23,000 vehicles per day. Sunset Avenue is designated as a "Local Street" with over 700 vehicles per day. This intersection is a "T" intersection, with stop sign control for westbound Sunset Avenue; although if it were signalized, it would likely be treated as a jogged intersection and eastbound Paloma Court would be included. There is a marked crosswalk crossing Pacific Avenue on the north leg. The marked crosswalk at this intersection helps to consolidate pedestrians into a single crossing point, across a complex intersection, for better visibility.

The Department of Transportation has conducted an engineering study of this location to determine the feasibility of either a traffic signal or a marked crosswalk. The study included a review of the Police Department's records of reported traffic collisions, a spot speed study, a 6-hour manual traffic count, and field investigations of the existing traffic control devices, geometric and visibility conditions, and traffic flow patterns. During the most recent three years that traffic collision data was available, from May 31, 2009 to May 31, 2012, there were no correctable collisions. None of the MUTCD warrants for traffic signal control are met at this time.

It has been determined that due to a speed limit of 30 miles per hour, traffic volumes on Pacific Avenue of almost 23,000 vehicles per day, and at least 4 lanes to cross without a median, a marked crosswalk alone at this uncontrolled intersection no longer provides the desired level of safety, and that to retain the marked crosswalk, it should be supplemented with pedestrian/equestrian actuated Rectangular Rapid Flash LED Beacons (RRFB). The RRFB are provided as components of the marked crosswalk in order to better alert drivers of a crossing pedestrian, and to help reduce the speeds of oncoming traffic. The FHWA "Enhancement

Installation Criteria for the installation of an Intelligent Transportation System at a Crosswalk at an Uncontrolled Intersection"; which includes RRFBs, are met, based on pedestrians crossing more than four lanes of through traffic, a daytime ADT of almost 14,000 vehicles, and a mode speed of 31 miles per hour.

In view of this analysis and engineering study, the installation of pedestrian actuated RRFBs, "Yield to Pedestrian" signs and sharkstooth pavement markings, with all other appropriate signs and markings is recommended. Although traffic signal operation could not be justified at this time, the installation of a marked crosswalk, RRFBs, "Yield to Pedestrian" signs and sharkstooth markings, and all other complimentary signs, as described in the Determination, are justified, and are expected to provide a safer and more orderly movement of pedestrian and vehicular traffic at this intersection than the existing operation.

Recommended by:



RUDY GUEVARA
Transportation Engineer
Western District

Approved by:



BRIAN R. GALLAGHER
Senior Transportation Engineer
District Operations West Division

BRG:brg
for RRFB PacificSunsetNIS14

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