



CITY OF SANTA CRUZ
TRANSPORTATION AND PUBLIC WORKS
COMMISSION
AGENDA REPORT

DATE: November 18, 2013

AGENDA OF: November 18, 2013
DEPARTMENT: Public Works
SUBJECT: Crosswalk Request at Jewell Street

RECOMMENDATION: Review and discuss concepts for pedestrian crossing improvements at Jewell Street intersection with Ocean Street.

BACKGROUND: Discussion of a marked crosswalk on Ocean Street at Jewell was raised with the Planning Commission approval of the Memory Care facility on Jewell Street at the Elks property, and subsequently a request was made by resident(s) in the adjacent neighborhood.

DISCUSSION: When considering marking a crosswalk, staff reviews the following information for the location to help guide the decision: number of lanes, presence of a median, collisions, traffic volumes, pedestrian volumes and delays, traffic speeds, lighting, and sight distance. In addition staff reviews the Manual on Uniform Traffic Control Devices (MUTCD) which is the standard to be met and determines appropriate traffic related signs and markings. Other transportation studies and manuals may be referred to as appropriate.

The following summarizes the information:

Ocean Street at Jewell is a two lane road with bike lanes and no parking and no median, it has 12-15,000 vehicles per day and the 85th percentile speed is 35 miles per hour. It is a primary arterial route serving the San Lorenzo Valley and Santa Cruz. It connects to Highway 1 and 17, with the nearest on-ramps 600 feet from Jewell Street. Jewell Street is a minor residential street with a public meeting facility (Elks). There are five (5) recorded collisions at the intersection over a 10 year period (2003-2013) of which two (2) are broadsides, (one) 1 is a fixed object, (one) 1 is a rear-end and (one) 1 is a sideswipe. There are no recorded pedestrian or bike collisions during that period.

Sight constraints include utility poles and street lights. There is one intersection safety light (street light) on the northeast corner of the intersection. Several visits to the site by staff to observe pedestrian/auto behavior resulted in zero pedestrian sightings. Staff attempted street crossings during AM peak hour traffic and found there to be multiple sufficient gaps to make the crossing and little delay as a pedestrian.

Following review of the information, staff does not recommend marking the crosswalk on Ocean Street at Jewell. Speeds on the street are on the upper end of what is recommended for an uncontrolled marked crosswalk The MUTCD recommends not marking crosswalks at

SUBJECT: Crosswalk Request at Jewell Street

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PAGE: 2

uncontrolled locations where speeds exceed 40 mph. Comparatively with other similar city intersections, the collision history is low, and below the criteria required to apply for safety grants.

If markings are approved for this location they should be installed with a median refuge, at a minimum. Markings alone do not correspond to a collision reduction factor, however a pedestrian median refuge corresponds to a 45% collision reduction. Although there are no reported pedestrian collisions at this location, the collision reduction factors are indicative of the type of enhancement that staff considers during the evaluation process.

Other concepts for consideration include installing radar speed-feedback signs in each direction to help slow traffic (some studies suggest improved speed limit compliance) and Rectangular Rapid-flash Beacon (RRFB) warning signs that are pedestrian activated, which corresponds to a 35% collision reduction factor.

Unfortunately, there are limited funds for these types of improvements and the City prioritizes these funds based on collision history, pedestrian volumes, and proximity to schools (and or major school routes). Staff is not aware of any grant at this time that would fund these improvements, therefore local monies for the following infrastructure would have to be budgeted:

1. Pedestrian Refuge Median and Access Ramps, \$30,000 - \$40,000.
2. Radar speed feedback sign upstream of the crossing, \$6,000 – \$15,000 per direction.
3. Pedestrian activated RRFB flasher, \$35,000-\$50,000.

Based on the MUTCD review, staff will install advance Pedestrian Warning signs, 100 feet upstream of each direction of the unmarked crosswalks, “Yield Here to Pedestrian” signs 30-feet in advance of the crossings and Pedestrian crossing signs with supplemental arrows (pointing to the crossing) at the intersection to alert motorists of the potential for pedestrians in this legal crossing location. A work order has been initiated and will be funded from the fiscal year 2014 traffic maintenance operations budget.

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Attachments:

Ocean – Jewell Area