

OFFICE OF TRAFFIC SAFETY

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*Action: Ernie Huskaby
1) Linda Brown
2) Fred Rusk*

September 10, 2002

Shelley Row, Director
Office of Transportation Operations
Federal Highway Administration
400 Seventh Street, S.W.
Washington, DC 20590

Dear Ms. Row:

Enclosed are the proposals from the cities of Whittier and Garden Grove to the California Traffic Control Device Committee for "Radar Speed Signs" as experimental use of a non-standard traffic control device. Ken Kochevar of the Sacramento Federal Highway Administration office suggested we submit these to you for your review.

If you have any questions, please call Jeff Hammond, Regional Coordinator, at (916) 262-0882.

Sincerely,

A handwritten signature in cursive script that reads "Teresa Becher".

TERESA BECHER
Interim Director

JH:kn

Enclosures

cc: Ken Kochevar



City of Whittier

13230 Penn Street, Whittier, California 90602-1772
(562) 464-3510 Fax (562) 464-3572

August 21, 2002

PROPOSAL FOR EXPERIMENTAL USE OF A NON-STANDARD TRAFFIC CONTROL DEVICE – RADAR SPEED SIGNS

The City of Whittier requests permission to conduct an experiment using active radar speed signs as a non-standard traffic control device to determine its effectiveness in reducing speeds around school zones.

1. PROBLEM STATEMENT

Traffic safety conditions in the City of Whittier are increasingly demanding for children, calling for greater awareness than ever before. Sight distance is obstructed, approach speed is relatively high, and traffic volume is heavy at critical crossing locations where many children are present. School-age children are especially vulnerable to pedestrian crashes. They are often small in stature and difficult for drivers to see. Children can also lack good judgment when crossing streets.

Existing Conditions

All of the proposed locations are for schools that have frontage on arterial streets with multi-lanes, secondary or collector streets. The attached maps show locations of the schools along with average daily trips (ADT) and posted speed limits. The City's current speed survey posted speed limits for 25-40 MPH on these roadways. It is very difficult for drivers to slow down to a school zone speed of 25 MPH when the posted speed limit for the street is 30 to 40 MPH. These conditions create a hazardous traffic environment for schoolchildren.

Statistical Data

A total of 153 traffic collisions have occurred during normal school arrival and departure times between the hours of 7:00 A.M. and 4:00 P.M. over the past eight years within the school zones that are situated contiguously along arterial highways.

2. PROPOSED SOLUTION

The City of Whittier wishes to participate in the experimentation of the Active Radar Speed Signs at least (9) high-volume, high speed school crossings. These permanent signs will offer state-of-the-art solutions to improve sign visibility, alert drivers, and protect children at school crossings. The Driver Feedback Speed Sign gives the motorist passing through a school zone real-time feedback as to their vehicle's speed. If the driver's speed exceeds the posted speed limit by more than 5 mph, LEDs will flash to further alert the driver.

The proposed locations are Laurel Elementary, East Whittier Intermediate, Whittier High, Lydia Jackson Elementary, Longfellow Elementary, West Whittier Elementary, Lincoln Elementary, La Serna High and Leffingwell Elementary. One (1) sign will be posted in each direction in front of each school. One of the main reasons of seeking CTCDC's permission is to receive funding approval from the Office of Traffic Safety and Hazard Elimination Safety in experimenting with the active radar speed signs.

3. OBJECTIVE

The objective of the test will be to determine the usage and effectiveness of the radar speed signs in reducing speeds and thereby improving pedestrian safety.

4. EXPERIMENT SCHEDULE

- Pre-installation Evaluation.....August to December 2002
- Installation..... January to March 2003
- Experimental Period.....April to September 2003
- Evaluation of Results.....September to November 2003

We appreciate your consideration of this request. The City of Whittier is looking forward to receiving a positive response from the Committee. Please feel free to call me at (562) 464-3510 if you have any questions or comments.

Sincerely,

Joe C. Dyer
City Traffic Engineer

JCD:jlk
(CTCradar-Whittier)

Enclosure

**PROPOSAL TO THE CALIFORNIA TRAFFIC CONTROL DEVICES COMMITTEE
FOR EXPERIMENTATION OF A NEW TRAFFIC CONTROL DEVICE:
ACTIVE RADAR SPEED SIGNS**

SCOPE

The City of Whittier proposes to experiment Active Radar Speed Signs to improve pedestrian safety. Radar signs have already been installed in such cities as San Jose and have shown positive results. Speeds dropped as much as 17 percent and one out of every five cars passing the sign slowed down.

The City has tentatively selected the following 9 school locations for the experiment of radar speed signs:

Table 1: Schools located along Arterial Highways

School	Arterial Highway	Posted Speed Limit	Critical Speed
Laurel Elementary	Lambert Road	35	43
East Whittier Intermediate	Whittier Blvd. (State R. 72)	40	44
Whittier High School	Hadley Street	35	44
La Serna High School	Youngwood Drive	25	40
Lydia Jackson Elementary	Painter Avenue	30	39
Longfellow Elementary	Magnolia Avenue	25	35
West Whittier Elementary	Norwalk Boulevard	40	43
Lincoln Elementary	Pickering Avenue	25	35
Leffingwell School	Santa Gertrudes Avenue	30	44

WORKPLAN

Installation

The active radar speed signs will be installed at the approach entrances to the school zones. There will be no adjustments to existing traffic control devices in the proposed area.

Evaluation

Effectiveness and acceptance will be measured in accordance with the time period and evaluation procedures shown below.

Time Period

The schedule for testing is as follows:

- Pre-installation Evaluation.....August to December 2002
- Installation..... January to March 2003
- Experimental Period.....April to September 2003
- Evaluation of Results.....September to November 2003

EVALUATION PROCEDURES

The City of Whittier requests that the Committee approve the preliminary evaluation plan outlined below. Other criteria and procedures may evolve during the evaluation period. These additional ways of evaluating the use of radar signs and any changes in procedures added to the assessment criteria will be discussed in the scheduled reports submitted to the project sponsor and the Committee.

- a. Installation Documentation – to be prepared by the City of Whittier personnel.
- b. Maintenance Recording – to be performed throughout the life of the experimentation period. A separate maintenance log sheet will be created for each site. Periodic inspections will be performed and logged by City of Whittier personnel.
- c. Accident data will be monitored and analyzed by the City of Whittier personnel.
- d. Observation will be conducted to determine the effectiveness of the operation. Public input from the school district as well as the PTAs will be used to help document the progress of the program as well as for reporting to the Committee, Caltrans, and other interested agencies.

Measures of effectiveness and acceptance during the before and after the testing period may include, but are not limited to, the following actions:

- i. Compare the total number of pedestrian accidents or the pedestrian accident rates
- ii. Conduct speed surveys

ADMINISTRATION

Sponsoring Agency: City of Whittier

Contact Information: Joe C. Dyer, P.E.
City Traffic Engineer, City of Whittier
Tel: (562) 4643510
Fax: (562) 464-3572
E-mail jdyer@whittierch.org

Manufactures: Vendors to be determined by September 2002

Installations: To be installed by the City of Whittier Electrical Division personnel