

New Safety Improvement Devices – Review of Information

Public Works Department

Transportation Committee
October 11, 2018

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BACKGROUND

1. On May 10, 2018, the Transportation Committee (Committee) reviewed potential topics for future review and discussion.
2. The topic of new safety improvement devices was identified by the Committee as a subject of interest.



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INNOVATION AND TECHNOLOGY

1. Advancements in innovation and technology continually lead to the development and availability of new and improved traffic safety enhancement devices.
2. The Public Works Department strives to persistently examine and identify new and improved traffic safety devices and measures.



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IMPORTANCE OF EXPLORING NEW DEVICES

1. Exploring and gaining knowledge of the latest innovation and technologies and available traffic safety improvement devices allows Public Works to:
 - a. Shape strategies for future projects;
 - b. Engage in pilot projects trials to assess overall benefits and impacts; and
 - c. Continually endeavor to achieve notable improvements in traffic safety on our local roadways.



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NEW DEVICES RECENTLY IMPLEMENTED

1. Accessible Pedestrian Signals:

- a. Offer upgrades to standard pedestrian push button features including audible cues of when to safely enter a crosswalk making them particularly beneficial to visually impaired pedestrians;
- b. Devices create a safer walking environment and promote mobility;
- c. Public Works has begun use where new equipment is required and at new and modified traffic signals and pedestrian crossings; and
- d. Upcoming ATP Cycle I grant project will include upgrade to Accessible Pedestrian Signals at 5 intersections.



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ACCESSIBLE PEDESTRIAN SIGNAL IMAGE



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NEW DEVICES RECENTLY IMPLEMENTED (CONTINUED)

2. Blank-Out Signs:

- a. Effectively convey critical information to motorists;
- b. Utilizes LED lighting for enhanced visibility and recognition;
- c. Offer versatility of power source, settings to engage during specific times, and remote control or vehicle activation;
- d. Are cost effective and energy efficient;
- e. Public Works has installed 3 turn restriction devices with initial observations showing positive effects; and
- f. Future test project for No Left-turn / Active RRX signs being considered at select RRX locations.



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BLANK-OUT SIGN SAMPLES



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NEW DEVICES RECENTLY IMPLEMENTED (CONTINUED)

3. LED Lit Signs:

- a. LED signs aid in increasing driver awareness and compliance;
- b. LED's can outline the edge, words or symbols of a sign and can be set to flash, operate in sequential, or steady mode;
- c. Can function as pedestrian or vehicle activated;
- d. Prior studies showed significant benefits of LED stop signs;
- e. Public Works recently installed our first solar powered LED edge lit stop sign on California Ave. at Bolton Ave.; and
- f. Additional LED devices including our first LED lit chevrons are under consideration.



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LED LIT SIGN SAMPLES



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NEW DEVICES UPCOMING

1. High Friction Surface Treatments (HFST):

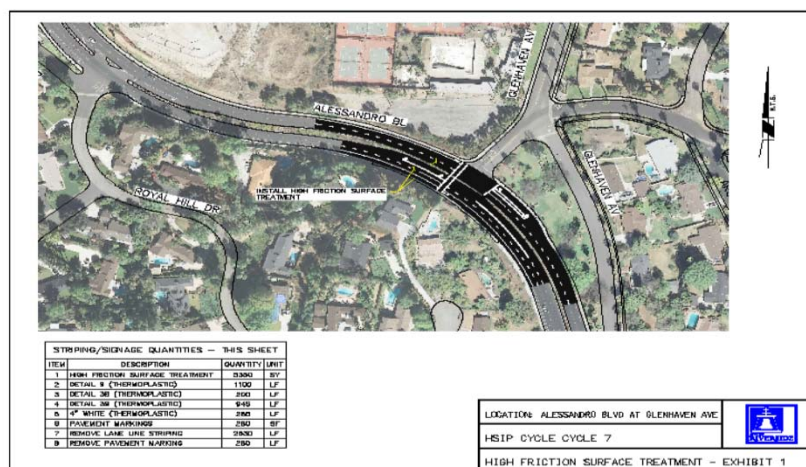
- Spot application pavement treatments to restore and/or maintain pavement friction;
- Aid drivers in sustaining control in both wet/dry conditions;
- Particularly effective where sharp horizontal curves and/or excessive braking result in premature polishing of pavement surfaces;
- FHWA has identified horizontal curves at the locations which would realize the greatest benefits from HFST; and
- Public Works will be installing its initial HFST's as part of an HSIP Cycle VII grant project at 7 locations with horizontal curves.



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HIGH FRICTION SURFACE TREATMENT (HFST) SAMPLE DESIGN



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RECOMMENDATION

That the Transportation Committee receive the information regarding new safety enhancing traffic devices and current and potential future applications.

