



U.S. Department
of Transportation
**Federal Highway
Administration**

1200 New Jersey Ave., SE
Washington, D.C. 20590

MAR 5 2020

In Reply Refer To:
HOTO-1

Peter Haag, P.E., PTOE
Chief Traffic Engineer
State of Delaware Department of Transportation
800 Bay Road
P.O. Box 778
Dover, Delaware 19903

Dear Mr. Haag:

Thank you for your December 5, 2019, request for experimentation under the provisions of the 2009 edition of the *Manual on Uniform Traffic Control Devices for Streets and Highways* (MUTCD) for the display of pictorial representations or pictograms on changeable message signs (CMS) that display to approaching drivers the speed at which they are traveling, commonly referred to as speed feedback signs. Specifically, your request is to display pictorial representations of smiling or frowning faces in conjunction with the "YOUR SPEED XX MPH" messages in the changeable portion of the sign. The pictogram displayed would vary depending on approaching vehicle speeds.

We regret to inform you that the Federal Highway Administration (FHWA) declines to approve this request as it is not the purpose of a traffic control device to provide positive or negative reinforcement of a road user's behavior. Rather, traffic control devices are intended to provide a clear and simple message conveying a regulation, warning, or guidance to the road user. In accordance with Paragraph 2 of Section 1A.02 of the MUTCD, to be effective, a traffic control device should meet five basic principles: fulfill a need; command attention; convey a clear, simple meaning; command respect from road users; and give adequate time for proper response. A radar speed feedback sign that displays the speed of a vehicle to the driver is only intended to convey the speed to provide the road user a clear indication of their speed of travel as compared to the speed limit or advisory speed associated with that segment of the roadway. A pictorial representation of a facial expression does not convey a traffic control related message; it is vague in nature and does not command respect for such a device.

The request for experimentation also indicated installations of similar displays that have been observed in use in other States. Please be aware that these have not been approved by the FHWA and do not comply with the provisions of the MUTCD.

The FHWA is aware that manufacturers of traffic control devices might include features or capabilities that are allowed for use outside the United States. Some manufacturers or vendors disable these features when their traffic control device products are sold in the United States.

Some of these features include the following, typically activating when an approaching vehicle exceeds the speed limit or the posted advisory speed:

- Flashing lights or strobes within the changeable display in varying colors such as white, or a combination of red and blue to simulate the light bar on a police vehicle;
- Flashing of the numerical speed display;
- A change in the color of the numeral display, such as to red; and
- Other unconventional messages or graphics alternately displayed with the numerals.

None of these features is allowed under the MUTCD. The MUTCD provides only for the display of the speed of the approaching vehicle. It is imperative that agencies not assume compliance of a traffic control device product with the MUTCD by virtue of its commercial availability in the United States. While this premise holds true for any traffic control device, it has become particularly prevalent in electronic traffic control devices such as changeable message signs. The FHWA does not certify compliance of traffic control devices that are available in the commercial market. Rather, certification of compliance with the MUTCD is the responsibility of the agency having authority for the placement of traffic control devices on its facilities.

For recordkeeping purposes, we have assigned your request the following Official Ruling number and title: "2(09)-166 (E) – Speed Feedback Signs with Pictograms (DENIED)."

Sincerely,

A handwritten signature in blue ink, appearing to read "Mark R. Kehrli". The signature is fluid and cursive, with a large initial "M" and "K".

Mark R. Kehrli
Director, Office of Transportation
Operations