



U.S. Department  
of Transportation  
Federal Highway  
Administration

# Memorandum

Subject: **INFORMATION:** MUTCD – Interim  
Approval for Optional Use of a Traffic  
Signal Photo Enforced Sign (IA-12)

Date: NOV 12 2010

From: Jeffrey A. Lindley  
Associate Administrator for Operations

In Reply Refer To:  
HOTO-1

To: Directors of Field Services  
Federal Lands Highway Division Engineers  
Director of Technical Services  
Division Administrators

**Purpose:** The purpose of this memorandum is to issue an Interim Approval for the optional use of a sign that informs road users on an approach to a signalized location that compliance with the red signal indication is being enforced through the use of a red-light-running camera system. Interim Approval allows interim use, pending official rulemaking, of a new traffic control device, a revision to the application or manner of use of an existing traffic control device, or a provision not specifically described in the Manual on Uniform Traffic Control Devices (MUTCD).

**Background:** The Missouri Department of Transportation has requested that the Federal Highway Administration (FHWA) issue an Interim Approval to allow the use of a Traffic Signal Photo Enforced sign that includes a traffic signal symbol (the same symbol that is used on the W3-3 warning sign) below which is the word message PHOTO ENFORCED in black letters. The border of the sign is black and the background color of the sign is white. This sign does not appear in the 2009 MUTCD, and Paragraph 8 of Section 2A.12 prohibits the use of a symbol used on a warning sign from being used on a regulatory sign unless it is specifically authorized in the MUTCD. According to the 2009 MUTCD, the manner in which road users may be warned of traffic signal photo enforcement is through the use of a Photo Enforced (W16-10P or W16-10aP) plaque (see Figure 2C-12) mounted below a Signal Ahead (W3-3) warning sign (see Figure 2C-6). However, there are many signalized locations where photo enforcement is present where the engineer has determined that a Signal Ahead warning sign is not needed. Using a Signal Ahead (W3-3) sign to notify road users about the photo enforcement on an approach where the advance warning of the traffic control signal itself is not needed diminishes the effect of the Signal Ahead (W3-3) sign at locations where the advance warning of the traffic control signal is needed.



**Research on the Traffic Signal Photo Enforced Sign:** The effectiveness of a Traffic Signal Photo Enforced sign design consisting of a traffic signal symbol (the same symbol that is used on the W3-3 Signal Ahead warning sign) in combination with the word legend of PHOTO ENFORCED in black letters, with a black border on a white background, was successfully evaluated by researchers at the University of Missouri-Kansas City and the University of Iceland on behalf of the Missouri Department of Transportation in approved Official Experiment 2-595. The results included in the Final Report for this experiment showed that the correct meaning of the experimental sign was identified by a sufficient percentage of the survey participants for this application.

The issue of the appropriate color (white or yellow) for the background of the Traffic Signal Photo Enforced sign was considered by the Regulatory and Warning Signs Technical Committee (RWSTC) of the National Committee on Uniform Traffic Control Devices at its 2010 summer meeting. The RWSTC voted in favor of a white background, which conforms to the color of the TRAFFIC LAWS PHOTO ENFORCED (R10-18) sign (see Figure 2B-3) that also gives notice to road users of the photo enforcement of traffic laws.

**FHWA Evaluation of Results:** The Office of Transportation Operations has reviewed the available data and considers the experimental Traffic Signal Photo Enforced sign to be satisfactorily successful for the application tested (an approach to a signalized location where red-light cameras are present). The experimental Traffic Signal Photo Enforced sign provides agencies with a means of notifying road users of the presence of red-light cameras without the use of an unnecessary Signal Ahead warning sign, thus avoiding the overuse of this important warning sign. The safety effects of making road users aware that the jurisdiction is using photo enforcement of red-light compliance will likely be realized at other intersections in the geographic area in addition to the location where the red-light-running cameras are installed.

The design of the experimental Traffic Signal Photo Enforced sign is not proprietary and can be used by any jurisdiction that requests and obtains interim approval from the FHWA to use the sign. The FHWA believes that the experimental Traffic Signal Photo Enforced sign has a low risk of safety or operational concerns.

The experimental Traffic Signal Photo Enforced sign is a non-controversial sign whose design and use has been endorsed by the National Committee on Uniform Traffic Control Devices. The granting of an Interim Approval for this sign will provide practitioners with a uniform sign that can be used nationally to notify road users about this specific type of photo enforcement.

This Interim Approval does not create a new mandate compelling the use of this new sign, but will allow agencies to install this sign, pending official MUTCD rulemaking, to provide notice to road users that photo enforcement of red-light running is present on a particular approach to a signalized location. Agencies may also continue to use a Photo Enforced (W16-10P or W16-10aP) plaque mounted below a Signal Ahead (W3-3) sign for this application.

**Conditions of Interim Approval:** The FHWA will grant Interim Approval for the optional use of a Traffic Signal Photo Enforced sign, designated as R10-18a, to any jurisdiction that submits a written request to the Office of Transportation Operations. A State may request Interim Approval for all jurisdictions in that State. Jurisdictions using the Traffic Signal Photo Enforced sign under this Interim Approval must agree to comply with the technical conditions detailed below, to maintain an inventory list of all locations where the signs are installed, and to comply with Item D in Paragraph 18 of Section 1A.10 of the 2009 MUTCD, which requires:

“An agreement to restore the site(s) of the Interim Approval to a condition that complies with the provisions in this Manual within 3 months following the issuance of a Final Rule on this traffic control device; and terminate use of the device or application installed under the interim approval at any time that it determines significant safety concerns are directly or indirectly attributable to the device or application. The FHWA’s Office of Transportation Operations has the right to terminate the interim approval at any time if there is an indication of safety concerns.”

1. General Conditions:

The use of the Traffic Signal Photo Enforced (R10-18a) sign is optional. However, if an agency opts to use a Traffic Signal Photo Enforced sign under this Interim Approval, the following design and installation requirements shall apply, and shall take precedence over any conflicting provisions of the MUTCD for the approach on which the Traffic Signal Photo Enforced sign is used.

2. Allowable Uses:

- a. A Traffic Signal Photo Enforced (R10-18a) sign may be installed on an approach to a signalized location where red-light cameras are present on any approach to the signalized location. The Traffic Signal Photo Enforced sign shall not be installed on approaches to signalized locations where red-light cameras are not present on any of the approaches to the signalized location.
- b. If used, the Traffic Signal Photo Enforced (R10-18a) sign shall be individually installed on a separate post or mounting. A Traffic Signal Photo Enforced sign shall not be installed on the same support in combination with a Signal Ahead (W3-3) sign. A Signal Ahead sign and a Traffic Signal Photo Enforced sign may be used on the same approach provided that they are on separate supports.
- c. If used, the Traffic Signal Photo Enforced (R10-18a) sign should be located on the right-hand side of the roadway far enough in advance of the stop line to provide adequate notice to approaching road users. On one-way streets or where a median of sufficient width is present, an additional Traffic Signal Photo Enforced sign may be placed on the left-hand side of the roadway in accordance with Paragraph 11 of Section 2A.16.
- d. If used, the Traffic Signal Photo Enforced (R10-18a) sign should be located such that it does not block or obscure the road user’s view of other signs or traffic control devices.

3. Sign Design and Size:

- a. The design of the Traffic Signal Photo Enforced (R10-18a) sign shall be as shown in the attached sign detail.
- b. The minimum size of the Traffic Signal Photo Enforced (R10-18a) sign shall be 30 inches in width by 42 inches in height.

4. Other:

Except as otherwise provided above, all other provisions of the MUTCD applicable to signs shall apply to Traffic Signal Photo Enforced (R10-18a) signs.

Any questions concerning this Interim Approval should be directed to Mr. Bruce Friedman at [bruce.friedman@dot.gov](mailto:bruce.friedman@dot.gov).

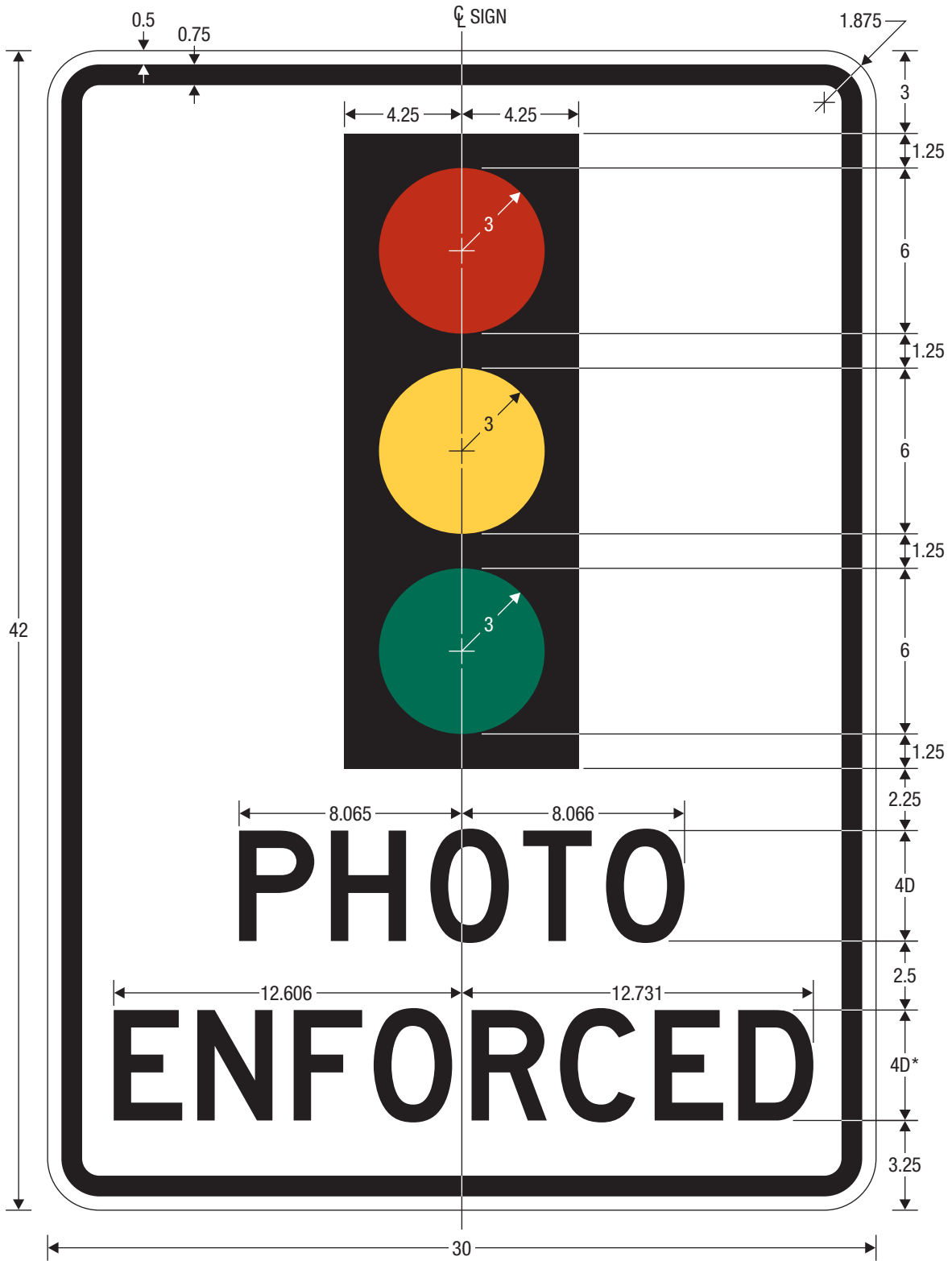
Attachment

cc:

Associate Administrators

Chief Counsel

Chief Financial Officer



R10-18a

\* Reduce character spacing 20%

[Traffic Signal] PHOTO ENFORCED

- |         |                   |                            |
|---------|-------------------|----------------------------|
| COLORS: | LEGEND & BORDER   | — BLACK                    |
|         | BACKGROUND        | — WHITE (RETROREFLECTIVE)  |
|         | SYMBOL BACKGROUND | — BLACK                    |
|         | TOP CIRCLE        | — RED (RETROREFLECTIVE)    |
|         | CENTER CIRCLE     | — YELLOW (RETROREFLECTIVE) |
|         | BOTTOM CIRCLE     | — GREEN (RETROREFLECTIVE)  |

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