

Wainwright, Scott

From: Golden, Keith [Keith.Golden@dot.state.ga.us]
Sent: Wednesday, September 28, 2005 12:33 PM
To: Wainwright, Scott
Subject: RE: Ramp Metering MUTCD compliance issue for dual signal indications

Scott:

We had a lengthy meeting and discussion on this issue this morning with the GA Division. Msh provided your e-mail to me and I would like to request a formal response to Georgia stating the intention as you offered. The other question I would ask is can these both be mounted over the individual lanes (totaling 4) mounted on a mast arm in your opinion? Our ITS Operations group is strongly desiring to have them overhead and we have several safety and behavior issues if we mix ground mounted and overhead .

Keith Golden, P.E.
State Traffic Safety and Design Engineer
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-----Original Message-----

From: Smith, Mshadoni [mailto:Mshadoni.Smith@fhwa.dot.gov]
Sent: Wednesday, September 28, 2005 12:21 PM
To: steve.henry@dot.state.ga.us
Cc: Shanine, Gus; Golden, Keith
Subject: FW: Ramp Metering MUTCD compliance issue for dual signal indications

Guys

Here is the email I recieved from FHWA HQ and will follow-up with a formal interpretation.

Msh

> -----Original Message-----

> **From:** Wainwright, Scott
> **Sent:** Thursday, August 25, 2005 1:46 PM
> **To:** Smith, Mshadoni
> **Cc:** Kalla, Hari; Robbins, Dana; Yung, Jessie
> **Subject:** RE: Ramp Metering MUTCD compliance issue for dual signal indications

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> Msh, let me clarify a bit.

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> Section 4H.02 of the MUTCD requires "a minimum of two signal faces per ramp", so, strictly speaking, the dual lane design with only 2 signal

faces could arguably be compliant with the actual words in the MUTCD. However, my recollection is that 2-lane operation with staggered release was not even thought about when the words for 4H.02 were written!

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> If I were asked to prepare a formal official interpretation on how to apply Section 4H.02 to a control scheme in which green is shown to one lane only at a time (staggered release) I would write it to say the INTENTION of 4H.02 is to have 2 signal faces for each separately-controlled movement. The reason is just as Jessie cited---backup in case of failure of one of the faces. In your 2-lane ramp situation with staggered release, if the red indication in the left lane signal fails, the green indication in the right lane signal face will be interpreted by drivers in the left lane as applying to them also.

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> Best engineering practice in the staggered release situation is to provide 2 faces per lane. Costs to add the 2nd faces (pole mount or overhead) are minimal and I would strongly recommend that design be used.

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> If you feel that a formal official MUTCD interpretation is needed as per Section 1A.10, let me know and I will have it prepared.

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[Smith, Mshadoni]