



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

JAN 25 2013

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

In Reply Refer To:
HOTO-1

Mr. Bo Ling, Ph.D.
President and CEO
Migma Systems, Inc.
1600 Providence Highway
Walpole, MA 02081

Dear Dr. Ling:

Thank you for your letter of November 26, 2012, requesting an official interpretation regarding whether Chapter 4E of the 2009 MUTCD would permit the pushbutton locator tone at an accessible pedestrian signal to default to a silent mode if passive pedestrian detection is provided to turn on the locator tone only when pedestrians are present.

As you mentioned in your letter, Paragraph 6 of Section 4E.12 of the 2009 MUTCD requires that the locator tone be intensity responsive to ambient sound such that the tone is only audible within 12 feet from the pushbutton. This restriction on the sound level is in recognition of the fact that the constantly repeating tone can be psychologically annoying, especially late at night in residential areas.

Paragraph 2 of Section 4E.12 requires a locator tone for accessible pedestrian pushbuttons to enable a pedestrian with visual disabilities to be aware that a pushbutton exists and to find the pushbutton. Paragraph 5 of Section 4E.12 provides some exceptions for when the locator tone shall be deactivated; these exceptions include times when the traffic control signal or pedestrian hybrid beacon is operating in a flashing mode or is in a dark mode, unless the activation of the pedestrian pushbutton is designed to place the traffic control signal or pedestrian hybrid beacon back into the stop-and-go mode. Paragraph 25 of Section 4E.11 says that after the audible walk interval has terminated, the accessible pedestrian signal shall revert to the locator tone, which implies that the locator tone is deactivated during the audible walk interval.

Other than the exceptions mentioned in the previous paragraph, the current provisions of the MUTCD require the locator tone at an accessible pedestrian signal to be activated 24 hours per day, 7 days per week, and 365 days per year.

The system that you describe in your letter of having a passive pedestrian detector turn on the locator tone only when a pedestrian is present within 12 feet of the pushbutton location, which is the distance from which a constantly activated locator tone can be heard, would resolve the problem of this repeating sound being an annoyance to nearby residents, especially during late night hours when very few pedestrians are present. If the passive pedestrian detector is reliable enough to not miss the presence of pedestrians who are closer than 12 feet from the pushbutton

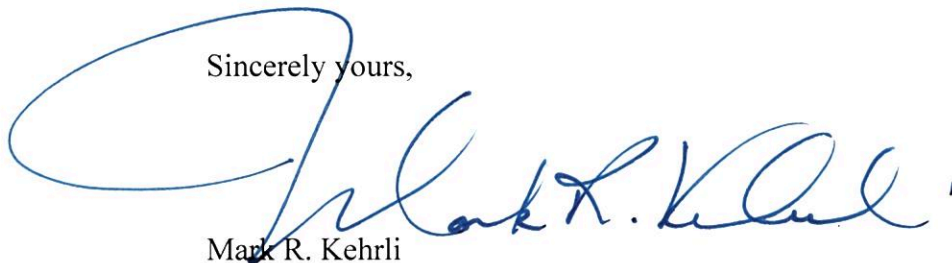
location, there would be no harmful effects upon pedestrians with visual disabilities who rely upon the locator tone to safely cross the intersection.

Based on the factors described in the previous paragraphs of this letter, it is the FHWA's official interpretation that it shall be permissible for an agency to allow the locator tone to default to a deactivated mode provided that a passive pedestrian detection system is implemented that activates the locator tone at all times that a pedestrian is present within a 12-foot radius from the pushbutton location. If pedestrian facilities (such as sidewalks) are present, the passive detection requirement would only apply to pedestrians who are on the pedestrian facilities within the 12-foot radius from the pushbutton location.

For recordkeeping purposes, we have assigned the following official ruling number and title: "4(09)-26 (I) – Passive Activation of Locator Tones at Accessible Pedestrian Signals." Please refer to this number in any future correspondence regarding this topic.

Thank you for your interest in improving the operation and safety of accessible pedestrian signals.

Sincerely yours,



Mark R. Kehrli
Director, Office of Transportation
Operations