

The purpose of this message is to share the latest development and current status of the Commercial Electronic Variable Message Signs (CEVMS) research study initiated by the Federal Highway Administration, Office of Real Estate Services. Several States, cities, and local jurisdictions will be provided with this information based upon inquiries.

Commercial Electronic Variable Message Signs (CEVMS)
and Driver Attention – June 7, 2010

The study's primary focus is the effect of CEVMS on driver visual behavior and the evaluation of their potential risk to safety.

Phase I (complete)

The initial phase began in January 2008, and was completed by the Human Centered Systems Team at the Federal Highway Administration's (FHWA) Turner-Fairbank Highway Research Center. This updated an earlier published literature review regarding the distraction potential of CEVMS and reviewed and recommended appropriate research methods and techniques for the second phase. The final report is posted to the FHWA home page at http://www.fhwa.dot.gov/realestate/out_ad.htm

Phase II (in process)

The FHWA Office of Real Estate Services continues to meet with the contractors to review current status to ensure the study proceeds in a timely fashion. Two field locations were selected for the on-road study and the FHWA Division offices as well as state and city officials were notified of the selection. However the two locations were not disclosed to the public until the field data collections were completed in order to protect the integrity of study.

The field data collection has been completed in both locations. Data collection in the first location, Reading, Pennsylvania, was completed in the fall and the contractors have been analyzing the data. Data collection in the second location, Richmond, Virginia, recently concluded and the contractors are now beginning to analyze that data. Analysis of eye-tracking data is a time consuming process, however a draft report should be completed in the next three months. The final report is scheduled to be released sometime later in 2010.

The two chosen sites have a number of CEVMS displays, together with standard vinyl billboards and other objects of visual interest, along two driving routes each approximately 30 minutes in duration. The research participants drove an FHWA instrument equipped test vehicle. The instrumentation in the test vehicle measured eye-glances of the participant drivers, which will permit the researchers to determine the frequency of glances away from the roadway, the percentage of time that the participant drivers looked at the roadway ahead, and the time that the drivers looked at the CEVMS advertising displays, at standard vinyl billboards, and other selected objects.

Perspective

FHWA will analyze the results of this study to identify subsequent guidance, regulatory changes, or suggested legislative proposals.

If you have questions on the CEVMS Research, please contact Catherine O'Hara at Catherine.O'Hara@dot.gov or 785-271-2448, extension 216.