ABSTRACT

The present report is an evaluation of the Mobile/Stationary Speed Boards (You/Me Boards), a portable system measuring the speed of the maintenance vehicle on which the device is mounted and the speed of a vehicle approaching the maintenance vehicle. These speeds are displayed in large-format digital displays, visible to approaching drivers from a distance of over 640 feet. Approaching drivers are expected to reduce their speed, once they are informed about the speed differential between the two vehicles.

A maintenance vehicle equipped with the display was parked on the right shoulder of a two-lane highway with a speed limit of 55 mph. Approaching vehicle speeds were monitored at a distance of approximately 330 feet from the display. Average approaching passenger car speed was 53.64 mph, and the 85th percentile speed was 58.00 mph when the display was visible, 3 mph and 4 mph lower than the respective speeds when the display was not visible to approaching drivers.

Displayed speeds were found to be accurate, compared to the speeds measured by laser gun. A special brace was easily constructed to mount the device on a maintenance vehicle. The device performed reliably throughout the evaluation period.

An experienced painting crew member felt that drivers were driving slower, more carefully and that traffic was calmer in the presence of the display during centerline painting operations.