Trajectory Analysis of Vehicles Approaching Speed Feedback Signs

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ABSTRACT

Speed feedback signs (SFSs) are being increasingly used as a speed control strategy. Several studies have been performed to evaluate the effect of SFSs on reducing the speeds of drivers. However, all of the previous studies determined the effect of the SFS on point speeds (speeds measured at a point). None of the studies have examined the driver response to SFS and their effects on safety, particularly the possibility of rear-end crashes. The Wisconsin Department of Transportation (WisDOT) has installed four SFSs on a stretch of State Trunk Highway (STH) 164 in Washington County in Wisconsin to reduce the speeds of drivers. The research team used radar devices to collect the trajectory data of individual vehicles as they approached and passed the SFS. This paper will present the results of “Trajectory Analysis of Vehicles Approaching Speed Feedback Signs.”

Key words: speed feedback signs—trajectory—Wisconsin

Proceedings of the 2009 Mid-Continent Transportation Research Symposium, Ames, Iowa, August 2009. © 2009 by Iowa State University. The contents of this paper reflect the views of the author(s), who are responsible for the facts and accuracy of the information presented herein.