

# Electronic Speed Feedback Signs as a Rural Community Traffic Calming Measure

Eric J. Fitzsimmons  
Center for Transportation Research and Education  
Iowa State University  
2711 S. Loop Drive, Suite 4700  
Ames, IA 50010  
efitz@iastate.edu

Jon Resler  
Center for Transportation Research and Education  
Iowa State University  
2711 S. Loop Drive, Suite 4700  
Ames, IA 50010  
jlresler@iastate.edu

Shauna Hallmark  
Center for Transportation Research and Education  
Iowa State University  
2711 S. Loop Drive, Suite 4700  
Ames, IA 50010  
shallmar@iastate.edu

David Plazak  
Center for Transportation Research and Education  
Iowa State University  
2711 S. Loop Drive, Suite 4700  
Ames, IA 50010  
dplazak@iastate.edu

Neal Hawkins  
Center for Transportation Research and Education  
Iowa State University  
2711 S. Loop Drive, Suite 4700  
Ames, IA 50010  
hawkins@iastate.edu

## ABSTRACT

Electronic feedback signs are a universal form of traffic calming, giving a visual cue to the driver that he or she is speeding in an area that could potentially be dangerous to the driver or to bystanders. Speed feedback signs have been used extensively in large urban areas. This paper presents research that evaluated speed feedback signs in two small communities in Iowa. The signs were used as part of research that evaluated different traffic calming treatments along the major road through a small community. One feedback sign was installed in Slater, Iowa, which has a population of just over 1,300 citizens. The speed sign in Slater is capable of digitally recording and reporting speeds to the driver and can be programmed to flash a variety of messages at various speed limits. The second location was Union, Iowa, which has a population of just over 500 citizens. Two speed feedback signs were installed in different locations. The speed feedback signs in Union display the driver speed up to 5 mph over the speed limit, at which time the message “SLOW DOWN” is displayed. The effectiveness of the feedback signs was evaluated using a before-and-after study. Data were collected before installation of the signs and one month after installation. Data were also collected at three- and six-month intervals so that the effect over time could be observed.

**Key words: driver reaction and adaptation—rural Iowa main streets—speed feedback signs—traffic calming**