## The Alarm Was Sounded Long Ago





#### The Research and News Knows

CCI

Sneed kills state's motorists

Effective Deployment of Radar
Speed Signs

Risk and expertise in to speed limit enforcement debate: Challenges, adaptations and response

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Conversely, here are the 10 safest

10. Minnesota, 20 percent

9. Georgia, 19 percent

8. Ohio, 19 percent

7. Kentucky, 18 percent

6. Arkansas, 17 percent

5. Iowa, 15 percent

4. Nebraska, 15 percent

3. Virginia, 14 percent

2. Mississippi, 14 percent

1. Florida, 11 percent

#### **Evaluation of Dynamic Speed Display Signs**

Gerald L. Ullman and Elisabeth R. Rose

This paper describes an analysis of the effectiveness of dynamic speed display signs (DSDSs) installed in several permanent locations. Sites evaluated included a school speed zone, two transition speed zones in advance of a school speed zone, two sharp horizontal curves, and two approaches to signalized intersections on high-speed roadways. Data were collected before the DSDSs were installed, about one week after installation to determine initial effects of the signs upon vehicle speeds, and again about four months after installation to determine how well the initial speed reductions were maintained. Researchers analyzed average speeds,

85th percentile speeds, an speed limit. In addition, I speed of a vehicle upstream again at the DSDS were affected higher-speed vehi cles. Overall, average spee zone. Elsewhere, the effect speeds reduced by 5 mph

expected, those motorists traveling faster than the posted speed limit did appear to reduce their speed more significantly in response to the DSDS than did motorists traveling at or below the posted speed limit. The results of this project suggest that DSDSs can be effective at reducing speeds in permanent applications if appropriate site conditions apply.

reducing vehicle speeds is dynamic speed display signs (DSDSs). These devices are also known as driver feedback signs or simply as speed display signs. DSDSs detect and indicate to approaching drivers their current travel speed. DSDSs have proven to be very effective at temporary installations in reducing the speed of vehicles entering work zones. However, most tests have been limited to a few weeks' duration. It is not known whether DSDSs installed permanently can achieve similar speed-reducing effects, can achieve them under different types of roadway and hazard conditions (i.e., school zones, sharp

signs upon vehicle speeds, and again about to determine how well the initial speed.

Researchers analyzed average speeds, than did motorists traveling at or below the posted speed limit. The results of this project suggest that DSDSs can be effective at reducing

In recent years, changeable message sign (CMS) and speed radar detection technologies have been combined in a dynamic feedback process in an attempt to present messages targeted specifically at motorists exceeding a speed threshold at a location. Tests conducted at work zones in Virginia suggested that this type of system can generate

speeds in permanent applications if appropriate site conditions apply.

cording to the Minnesota crash facts, Office of Traffic loss of life during that threefolks, they think that the

#### g the Speed Limit to 65 MPH on tates

PhD, AND JOANN K. WELLS, BA

bed limits in 1987 were conservatively estimated to be 15 percent her than they would have been if the states had retained the 55 h limit (95% CI = 6, 24). Among states that retained the 55 mph it, fatalities on rural interstates were 6 percent lower than bected (95% CI = -23, 13). (Am J Public Health 1989; 79:1392-195.)

percent immediately before the change to 54 percent and the percentage exceeding 70 mph went

ighway Safety Administration (NHTSA) anuary 1989 on the effects of the higher A noted that it was too early to assess the the new speed limit on highway safety. sophisticated of the report's analyses (a at controlled for fatalities on other roads, ral interstate mileage, for each year since rural interstate fatalities were 16 percent

An American Automobile Association (AAA) sponsored alysis of the effect of the 65 mph limits in Indiana showed effect on fatalities. However, individual state analyses n often be misleading because the number of crashes on al interstates are few and the statistical variation associd with these counts can be quite large. In Indiana, for ample, there are about 90 fatalities annually on rural erstates. By chance, this count would vary by as much as 20 percent (the standard error of a Poisson distribution with



## **Speed: Changing Behavior**

#### **Benefits:**

- Constant Education
- Continual Behavior Modification
- Unintended Response



"These signs are fact finding" MSP

"It puts the drivers on notice" MSP



# The Signs



### **Next Steps**

- What is happening across the United States?
- What else do you have left to try?
- Start the conversation.

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