

Traffic Safety Facts

Traffic Tech – Technology Transfer Series

Increasing Seat Belt Use in Rural Areas of the Great Lakes Region

In 2004, nearly 70% of total and unrestrained deaths in the Great Lakes Region (GLR) of the United States occurred in the rural areas of Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. In May 2005, for a two-week period just prior to the annual *Click It or Ticket* (CIOT) National Safety Belt Mobilization, the National Highway Traffic Safety Administration implemented a rural demonstration program (RDP) to increase rural seat belt use in these six States. A key component of this project was paid advertising and outreach, which targeted rural residents of the Great Lakes Region with a seat belt enforcement message. During this project, Illinois, Indiana, and Ohio also intensified their seat belt enforcement in targeted rural areas.

Immediately following the RDP, the States in the GLR also participated in the national CIOT mobilization, which included another two-week wave of paid media with an enforcement message, and a two-week intensified state-wide seat belt enforcement period. During the CIOT mobilization, the paid media began one week before the enforcement phase.

The RDP and CIOT efforts were evaluated using telephone surveys, surveys at State driver's licensing offices, and observational surveys, in order to measure public awareness and seat belt use, in targeted rural areas and statewide. Measurements were taken at three points during these projects: (a) Wave 1: baseline prior to the RDP; (b) Wave 2: at the end of the RDP; and (c) Wave 3: at the end of the CIOT mobilization.

Paid Media Messaging

Four States (IL, MI, MN, and WI) targeted their paid media to reasonably large, rural population segments, between 23% and 34%, while two States (IN and OH) targeted much smaller rural population segments, between 6% and 11%. Media expenditures averaged \$212,000 per State during the RDP phase and \$516,000 per State during CIOT, but per capita expenditures in targeted areas were highest during the RDP (0.12 cents per capita during the RDP, and 0.06 cents per capita during CIOT). States spent about two-thirds of their media funds on television, with much less spent on radio, newsprint, and outdoor advertising. Gross rating points (GRPs) far exceeded the objective of 300-400 GRPs per target market.

Enforcement Activities

During the RDP, Illinois, Indiana, and Ohio intensified their seat belt enforcement by conducting enforcement zones and devoting more officer hours to seat belt enforcement. During the CIOT mobilization, all the States increased enforcement. Overall, police issued about 130,000 citations for seat belt violations over the two program phases, averaging 25 citations per 10,000 residents.

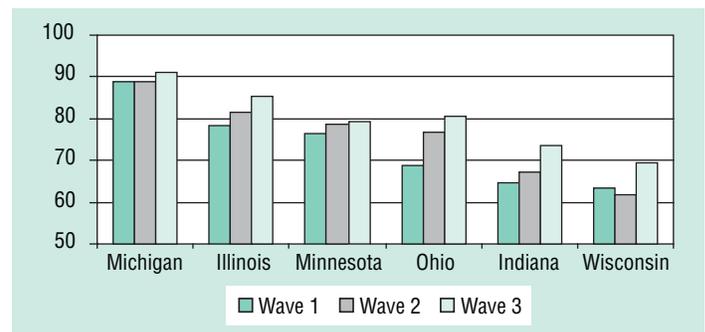
Public Awareness

In targeted rural areas, awareness of seat belt messages increased most during the RDP, while awareness of enforcement-related messages and activities increased most during CIOT. During the RDP, public awareness in targeted rural areas increased relative to statewide levels. However, by the end of the mobilization, rural and statewide awareness levels were similar on nearly every index.

Changes in Seat Belt Use

Figure 1 shows the changes in the observed seat belt use during the RDP and CIOT mobilization.

Figure 1. Observed Seat Belt Usage by Phase in Rural Targeted Areas



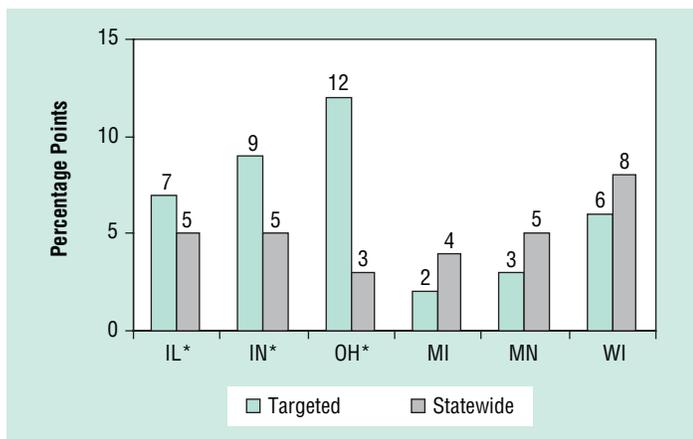
During the RDP, Illinois, Indiana, and Ohio, the States that had intensified enforcement in targeted rural areas, significantly increased their seat belt use in targeted rural areas. During the CIOT mobilization, when all States intensified their seat belt enforcement, every State in the Great Lakes Region except Minnesota significantly increased seat belt use in their targeted rural areas. While all States significantly increased seat belt use by the end of the mobilization, only the States

that intensified enforcement during the RDP experienced greater gains in belt use in their targeted rural areas than they did statewide.

There was a median 7-point increase in usage in *targeted rural areas*, compared with a median 5-point *statewide* increase (see Figure 2). There were substantial differences between States that intensified enforcement during the RDP and States that did not. Specifically, there was a 9-point median increase in the targeted areas of the three RDP-enforcement States (IL, IN, and OH) compared with a 3-point increase in the non-enforcement States (MI, MN, and WI). Thus, the rural estimates of change in the three enforcement States were considerably greater than the statewide estimates, indicating that two waves of enforcement (i.e., RDP + CIOT) yielded a greater impact on belt usage than one wave (i.e., CIOT only).

Figure 2. Overall Change in Seat Belt Usage Rural Targeted Areas vs. Statewide

(Entries represent absolute change, rounded to nearest whole percent)



*Intensified enforcement during RDP media period

Table 1 contains median usage rates and changes for multiple sub-groups included in the observational surveys. The far right column indicates how many States contributed data

relating to each sub-group. Overall, this table shows that there were substantial differences in the seat belt use rates of males versus females, younger versus older occupants, and occupants in pickups versus other vehicles. With regard to change, the largest changes occurred during CIOT.

Table 1. Changes in Seat Belt Use by Sub-Group

Sub-Group	Median Usage Rates (%)		Median Change (pts) w3-w1 Overall	# States (6 Total)
	Pre	Post		
Drivers	72	78	+7	6
Passengers	70	79	+7	6
Males	64	68	+5	5
Females	77	85	+7	5
Young (16-24)	64	71	+2	4
Adult (30-64)	72	79	+6	4
Senior (65+)	76	84	+6	4
Passenger Cars	76	84	+7	6
SUVs	74	79	+6	5
Vans	81	87	+3	5
Light Trucks	56	65	+6	6

In summary, the addition of enforcement to paid media during the RDP appears to have added to the impact of the overall mobilization in those areas. Generally, seat belt usage did not increase unless enforcement was present and two enforcement waves appeared to be more effective than one wave.

How to Order

For a copy of *Effectiveness of the May 2005 Rural Demonstration Program and the Click It or Ticket Mobilization in the Great Lakes Area: First Year Results* (38 pages plus appendices), prepared by the Preusser Research Group, write to the Office of Behavioral Safety Research, NHTSA, NTI-130, 1200 New Jersey Avenue, Washington DC 20590, send a fax to 202-366-7096, or download from <http://www.nhtsa.dot.gov>. John Siegler, Ph.D., was the task order manager.



U.S. Department of Transportation
National Highway Traffic Safety Administration

1200 New Jersey Avenue SE., NTI-130
 Washington, DC 20590

TRAFFIC TECH is a publication to disseminate information about traffic safety programs, including evaluations, innovative programs, and new publications. Feel free to copy it as you wish. If you would like to receive a copy, contact Patricia Ellison-Potter, Ph.D., Editor, fax 202-366-7096, e-mail: traffic.tech@dot.gov.