

Traffic Safety Facts

Traffic Tech – Technology Transfer Series

Number 356

January 2009



Innovative Seat Belt Demonstration Programs in Kentucky, Mississippi, North Dakota, and Wyoming

Seat belt use remains below the national average of 83 percent in many secondary seat belt law States, where police can issue a seat belt citation only after stopping a motorist for another traffic violation. In 2005, the National Highway Traffic Safety Administration began working with Kentucky, Mississippi, North Dakota, and Wyoming, all secondary law States at the time, to support programs that used innovative approaches to increase seat belt use.

States developed innovative countermeasures to augment their annual *Click It or Ticket* (CIOT) high-visibility seat belt mobilizations. They focused on high-risk driver populations such as pickup truck drivers whose belt use was unusually low or on novel enforcement or media techniques to promote compliance. NHTSA provided additional funding to the States for these activities. Project evaluations were embedded as an integral part of the program.

Before planning their innovative programs, each State undertook an Occupant Protection Program Assessment or similar initiative to examine the status of the State's seat belt use and program activities. Recommendations for program improvement from these assessments often became part of the demonstration program.

Kentucky, Mississippi, North Dakota, and Wyoming used their cooperative agreement funds to implement seat belt programs separate from their annual CIOT activities. All four States used enforcement, public education, and paid media as the core of their intervention, designing activities to adapt to the unique characteristics and conditions of their State.

Kentucky: Following the occupant protection assessment, which included a strong recommendation to adopt a primary seat belt law, Kentucky passed a primary law in June 2005. The new primary seat belt law became effective on July 12, 2006, and included a provision that police could only issue courtesy warning tickets for the first 6 months until January 1, 2007. As a result of becoming a primary law State, the focus of Kentucky's program shifted to a media and enforcement program to support the issuance of the warning tickets during the moratorium, and an evaluation of the effect of warnings versus citations after the moratorium was lifted.

Mississippi: In the spring of 2006, Mississippi had planned a demonstration program to increase seat belt use statewide by

supporting heavy enforcement with enforcement messaging. On May 27, 2006, Mississippi passed a primary seat belt law and shifted its goal to increasing seat belt usage in two counties with lower usage rates. Mississippi ran a special seat belt enforcement mobilization supported by targeted paid media in these two counties. One of the two radio advertisements used local Mississippi talent to target African-American drivers, whose belt use was very low. CIOT TV ads were aired in November. Seat belt use and public awareness were measured before and after the mobilization in the intervention and in matched control counties.

North Dakota: North Dakota had previously executed a successful demonstration program focused on increasing belt use by male pickup drivers, a group with historically low restraint use rates. In September 2005, the State entered into a second cooperative agreement with NHTSA to implement a demonstration program with a specific geographic focus. North Dakota identified four priority counties based on observed belt use and implemented strong community outreach and education efforts with an intensive targeted media campaign and high-visibility enforcement. The priority counties had the greatest potential to make an impact on the overall statewide seat belt usage rate.

Wyoming: Wyoming's cooperative agreement also began in September 2005 and followed the same model of priority and comparison counties used in North Dakota over the same time period. Wyoming selected six priority counties that had high crash and fatality rates, low seat belt use, and populations of sufficient size to potentially affect seat belt use statewide. This program focused on increasing seat belt use among male pickup truck occupants 18 to 34 years old, the group with the lowest belt use. Pickup trucks are prevalent in Wyoming, comprising up to 50% of the vehicle fleet.

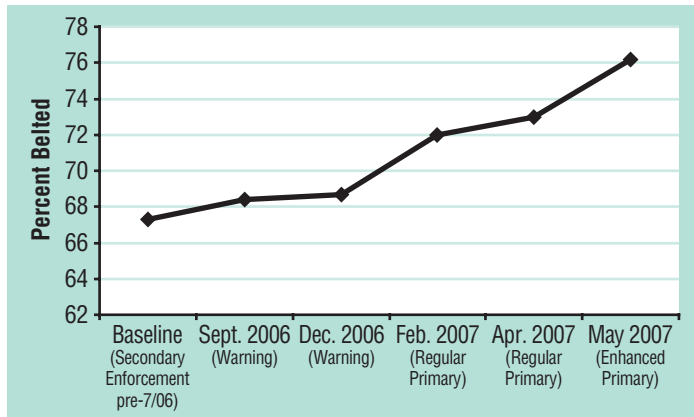
Findings

All States made excellent use of the evaluation process and benefited from embedding an evaluation as an integral part of their programs. In Mississippi, North Dakota, and Wyoming, adequate baseline data were collected before and after the interventions in both experimental and control sites. The programs used a range of evaluation approaches including direct observations, telephone and driver licensing office surveys, focus groups, and analysis of secondary source data such as

citations and warnings. All four States achieved significant statewide increases in belt use above baseline belt use rates.

In Kentucky, the courtesy warning period combined with visible enforcement and sustained media messaging enhanced the effectiveness of the passage of the primary law. Seat belt use increased from 67% under secondary enforcement to 76% as a primary law State. The warning period and intense publicity prepared both law enforcement and drivers for stricter belt enforcement by helping engage the former in seat belt efforts and making the latter more understanding of the new law.

Kentucky's Observed Seat Belt Use—Statewide



Mississippi's program focused on counties with the lowest seat belt use and achieved mixed results. Seat belt use increased from 35% to 46%, in Leflore County and decreased from 69% to 65% in Lee County. Belt use among non-Whites increased 28 percentage points, rising from 44% to 56%, an impressive improvement.

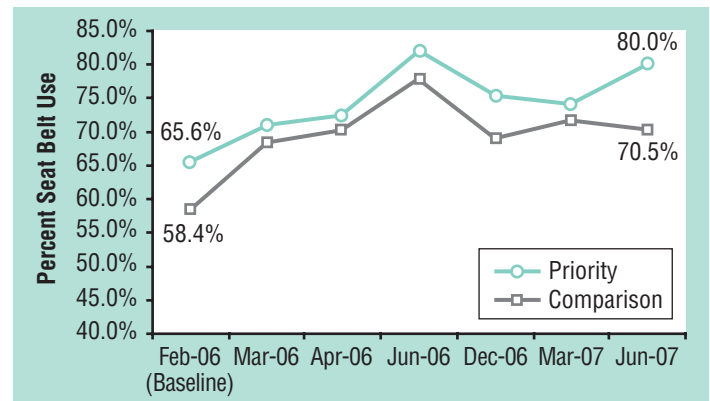
Mississippi Seat Belt Rates

- Non-White vehicle occupants (43.8% to 56.3%)
- Male vehicle occupants (51.0% to 59.2%)
- Non-White male vehicle occupants (38.5% to 52.8%)
- Leflore County vehicle occupants (35.4% to 46.4%)
- Lauderdale County vehicle occupants (58.2% to 72.9%)
- Leflore County passenger car occupants (37.3% to 51.3%)
- Lauderdale County passenger car occupants (59.8% to 75.8%)

Seat belt use in counties targeted by North Dakota's program increased from 66% to 80% and from 58% to 71% in comparison counties. Overall, North Dakota's seat belt use increased from 76% in 2005 to 82% in 2007. The greatest increases were in Burleigh County (up 21%), Ward County (up 21%), and Grand Forks County (up 19%). Females' belt use was

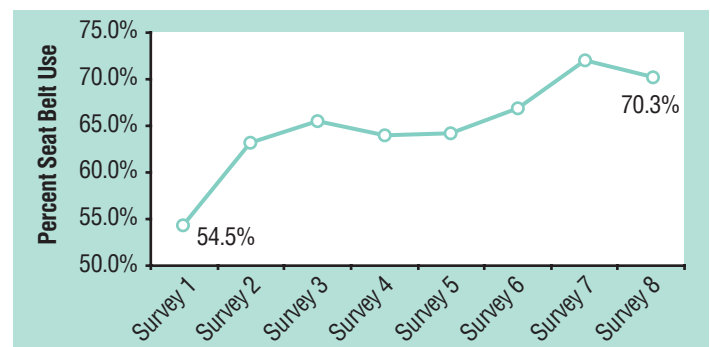
higher and increased 15 percentage points while males' use increased 11 percentage points. Belt use was higher among rural occupants before and after the mobilizations. In North Dakota, urban areas are defined as those with populations greater than 2,500, not typical of other States.

North Dakota's Observed Seat Belt Use in Priority Counties



In Wyoming, the seat belt use in targeted counties increased from 55% to 70%. This included an increase in seat belt use on rural roads, from 64% to 75%, and an increase from 55% to 70% on urban roads. Statewide, Wyoming's seat belt use increased from 61% in 2006 to 72% in 2007. Van and SUV occupants were most likely to be buckled up; pickup truck occupants were least likely. Pickups recorded a higher increase in usage than passenger vehicles and SUVs (up 16.5, 11.9, and 14.6 percentage points, respectively).

Wyoming's Observed Seat Belt Use in Priority Counties



How to Order

To order *Innovative Seat Belt Demonstration Programs in Kentucky, Mississippi, North Dakota, and Wyoming* (7 pages plus extensive appendices for each State), write to the Office of Behavioral Safety Research, NHTSA, NTI-130, 1200 New Jersey Avenue SE., Washington, DC 20590, fax 202-366-7394, or download from www.nhtsa.gov. John Siegler, Ph.D., was the project 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 Dr. Angela Eichelberger, Editor: fax 202-366-7394, or e-mail angela.eichelberger@dot.gov.