

Administration

TRAFFIC TECH

Technology Transfer Series

DOT HS 813 441 June 2023

Increasing Seat Belt Use Amongst Rural Populations

Background

This 12-month demonstration project focused on increasing seat belt use in rural areas was conducted in two locations: Bingham County, Idaho, and Rapides Parish, Louisiana. The project attempted to increase seat belt usage by invigorating local law enforcement agencies (LEAs) to recognize the consequences of lower usage in rural locations, motivating them to increase enforcement and public messaging efforts. One unusual feature of the project was that it focused exclusively on rural areas with low seat belt usage and relatively high rates of unrestrained fatalities. Another was that an evaluation team set out to assess whether messaging that uses seat belt use rates, combined with the reality of health care costs, lost wages, and overall financial impact of an unbelted crash, would resonate within a rural community and with local enforcement officers, causing an increase in usage.

Focus Groups

The project objective included a locally guided approach that assisted local law enforcement in sustaining engagement with the community on matters of seat belt safety and compliance. To that end, NHTSA directed an evaluation team to conduct focus groups with local, rural residents and include their thoughts and insights in the development of public messaging efforts (Table 1).

Support Assistance

The evaluation team developed a technical assistance guide (TAG) to help LEAs tailor their programs for their local community. The TAG was used to motivate and educate LEAs/officers who agreed to engage with rural community members on the usefulness of wearing seat belts. Members of the evaluation team met with members of LEA supervisory staff to review the TAG before program kick-off. TAG elements included observational survey training and how-to materials for publicizing efforts. The TAG also included steps for collecting data for evaluating programs.

Findings from focus groups, fatality crash data, observational seat belt usage data, and health and safety data,

including costs associated with crashes and injuries, were compiled by the evaluation team and shared with local LEAs/officers in an attempt to educate and motivate them to engage with the topic and act accordingly.

After program launch, the evaluation team gave the participating agencies routine monthly or bi-monthly summary reports showing results for their observational surveys as well as providing material to help them sustain program messaging. Infographics and pointers for reaching the rural community were always included in these reports while keeping in mind the insights from focus groups conducted in the area.

Table 1. Insights From Focus Groups

Motivators for Wearing Seat Belts

Rapides Parish

- · Fear of citations and inability to pay fine
- · High cost of insurance for violating the law
- Loss of workdays, if injured in a crash

Bingham County

- · Fear for personal health and safety, if in a crash
- · Hearing horror stories about severe crashes
- Technology (i.e., belt reminders)
- Workplace policies

Messaging Ideas

Rapides Parish

- Use local heroes/entertainers for messaging
- Hear personal testimonies from those with firsthand experience

Bingham County

- Use locals for messaging (not high-profile outsiders)
- Hear from police and EMTs who have direct experience

Messaging Channels

Rapides Parish

- · Use social media to reach younger drivers
- Police should meet face-to-face to explain importance of efforts

Bingham County

- · Use social media with traditional media
- Conduct in-person presentations in local churches, schools, and community settings

Law Enforcement Agency Programs

The participating LEAs agreed to 12-month programs consisting of contact with seat belt violators and sustained messaging (i.e., monthly) to keep the local population informed that seat belt use is important for the health and well-being of the community. Overtime/equipment funding was provided (up to \$30K per location) to each agency.

To prepare for implementation, both agencies created an action plan with goals for enforcement and messaging. In Rapides Parish, the Alexandria Police Department (APD) planned two days of overtime enforcement each week throughout the implementation phase, with 3 to 5 traffic enforcement officers working from 3 to 8 p.m. The Bingham County Sheriff's Office (BSCO) planned to coordinate with enforcement agencies from smaller towns to conduct monthly overtime seat belt enforcement in conjunction with BCSO. For messaging efforts, both agencies planned to use social media, earned media, and community outreach, but no paid media.

Results

Outreach and enforcement were immediately hindered by the COVID-19 outbreak. The pandemic resulted in staffing shortages and a reduced opportunity for face-to-face interactions and community partnerships. Severe storms and flooding in Louisiana created additional hurdles. As a result, participating agencies were unable to satisfy all targets in the action plan. Nevertheless, APD participated for 10 out of 12 months, and BCSO conducted enforcement efforts on its own, without the participation of smaller towns.

Program hurdles also prevented the agencies from conducting consistent seat belt observations using the same observers at the same times, weekdays, roadway locations, lanes, or traffic flow directions. Nevertheless, the agencies conducted non-scientific seat belt observations to provide descriptive evidence. The agencies also collected monthly citation, outreach, and publicity data.

To complement the agency data, evaluators conducted scientific seat belt observations at pre-, mid-, and post-waves. Evaluators maintained the validity of these observations by standardizing the observers, times, weekdays, roadway locations, lanes, and traffic flow directions, wherever possible. These observations were conducted in the two program sites and two control sites: Ouachita Parish, Louisiana, and Bonner County, Idaho. The control sites were chosen because they have the same State laws and similar demographics as the test sites, but are relatively distant from them.

Enforcement Agency Results

Citation data tracked by the LEAs indicated the program influenced officer engagement with noncompliance in both locations. It was less clear if overtime funding alone or something more added to the increased attention.

Monthly counts of seat belt citations rarely exceeded speeding citations prior to the start of the project in Rapides Parish. That changed during the program year, when a greater amount of officer attention focused on seat belt compliance relative to other violations such as speeding. This is the result of an increase in seat belt citations and a decrease in speeding citations. This was likely due, at least in part, to overtime funding and the effects of COVID-19 that diminished the number of staff available for traffic enforcement.

There was a fourfold increase in the number of violators cited for noncompliance in Bingham County. That increase continued by and large from start to end of the program period. It is interesting to note that in Idaho, the seat belt fine is a relatively low amount (\$10) and is often cited by law enforcement officers as a contributing factor for the low usage rate.

Publicity Results

The participating enforcement agencies publicized messages for improving seat belt usage at least monthly, mainly using their agency's social media pages. Messaging appeared reliant on routine communication with the evaluation team and the material the team provided on a monthly or bi-monthly basis. Agencies appeared willing to do more face-to-face community outreach to spread program messaging (per focus group suggestion), but that was thwarted from the start by the COVID-19 pandemic and then later hampered by staff reductions. Toward the latter half of the program period, there were more attempts to do in-person outreach, including school presentations, job fairs, and brochures in stores.

Observational Survey Results

Using the results from the scientific seat belt observations, analyses indicated statistically significant interactions in belt use between Rapides Parish and the control location (i.e., seat belt use rose more in the program area relative to the change in the control area). These results were strongest among women drivers, drivers in the 35-to-59 age group, and drivers on non-city roads.

The gains in seat belt use in Rapides Parish were sometimes small, but often paired with a decrease in the control site. Thus, the fact that seat belt use increased/stayed stable in the program location while decreasing in the control location was encouraging (Table 2).

Table 2. Observational Survey Results – Rapides Parish

	Baseline Sept. 2020	Mid Mar. 2021	Post Nov. 2021
Rapides Parish (%) (N observed)	84.3% (3,042)	86.7% (3,256)	85.8% (2,896)
Control Parish (%) (N observed)	88.2% (2,029)	_	85.6% (3,222)

Discussion and Conclusion

The full impact of the intended project was thwarted by challenges associated with the global pandemic. Still, during debriefing, local agency representatives were confident that the program would be successful if carried out in more normal circumstances and that it could, and should, be replicated. Usable insight was gathered from the focus groups, allowing for development of a message and approach targeted to the local culture and situation. The TAG was deemed useful and informative, although circumstances made it difficult to put in application.

How to Order

The final report *Increasing Seat Belt Use Amongst Rural Populations* (Report No. DOT HS 813 442) can be downloaded at https://rosap.ntl.bts.gov/view/dot/67250. Janice Hartwill-Miller was the task order manager for this project.

Suggested APA Citation for This Document:

National Highway Traffic Safety Administration. (2023, June). *Increasing seat belt use amongst rural populations* (Traffic Tech Technology Transfer Series. Report No. DOT HS 813 441).

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.



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

1200 New Jersey Avenue SE Washington, DC 20590

3 15906-062623-v4