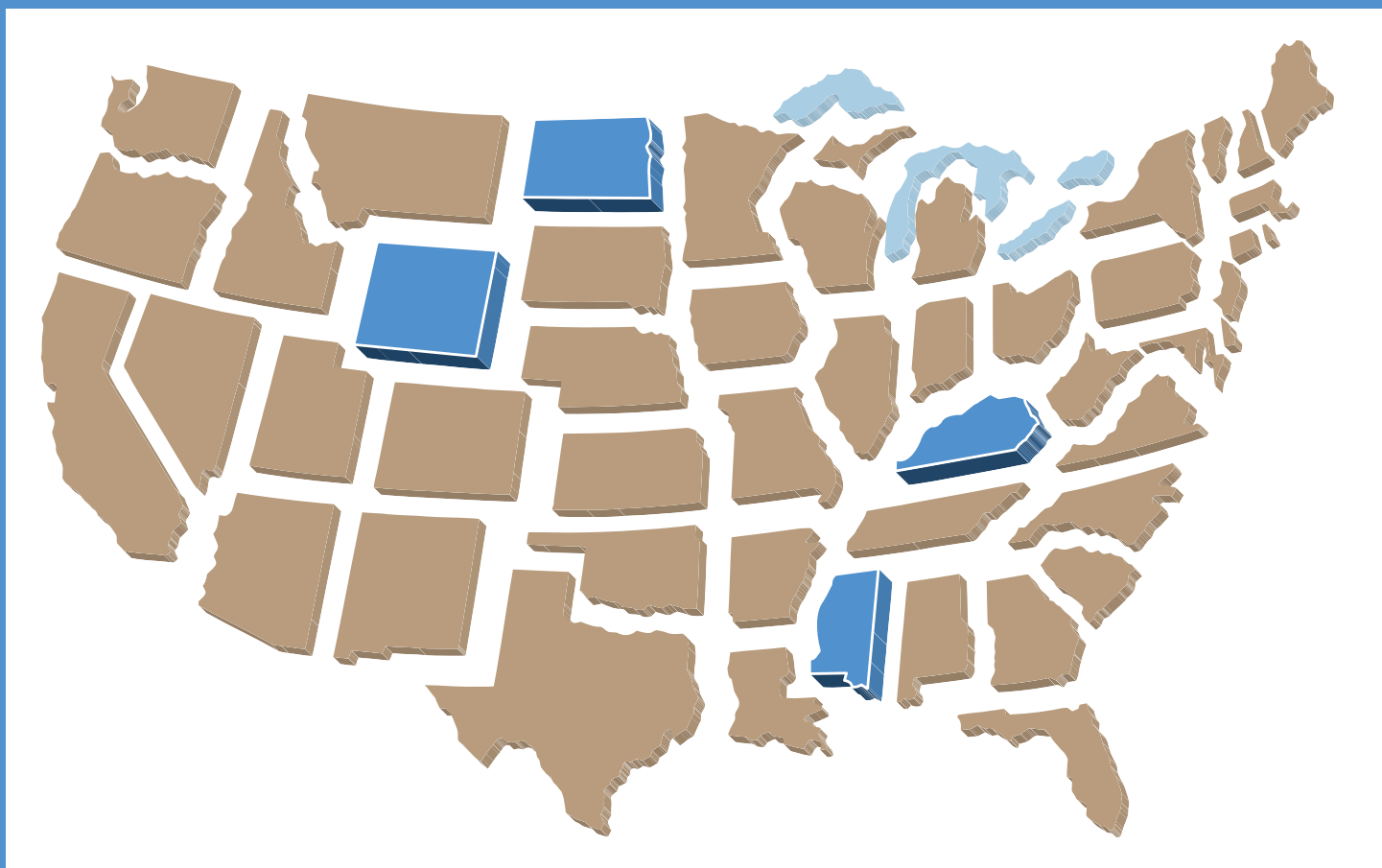


# Innovative Seat Belt Demonstration Programs in Kentucky, Mississippi, North Dakota, and Wyoming



This publication is distributed by the U.S. Department of Transportation, National Highway Traffic Safety Administration, in the interest of information exchange. The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the Department of Transportation or the National Highway Traffic Safety Administration. The United States Government assumes no liability for its contents or use thereof. If trade or manufacturers' names or products are mentioned, it is because they are considered essential to the object of the publication and should not be construed as an endorsement. The United States Government does not endorse products or manufacturers.

## Technical Report Documentation Page

1. Report No. DOT HS 811 080	2. Government Accession No.	3. Recipient's Catalog No.	
4. Title and Subject  Innovative Seat Belt Demonstration Programs in Kentucky, Mississippi, North Dakota, and Wyoming		5. Report Date March 2009	
		6. Performing Organization Code  211.2	
7. Author(s)  Richard D. Blomberg, F. Dennis Thomas, III and Arlene M. Clevan		8. Performing Organization Report No.	
9. Performing Organization Name and Address  Dunlap and Associates, Inc. 110 Lenox Avenue Stamford, CT 06906		10. Work Unit No. (TRAIS)	
		11. Contract or Grant No.  DTNH22-05-C-35043, Task Order 2	
12. Sponsoring Agency Name and Address  U.S. Department of Transportation National Highway Traffic Safety Administration 1200 New Jersey Avenue SE. Washington, DC 20590		13. Type of Report and Period Covered Final Report 9/14/05– 12/28/07	
		14. Sponsoring Agency Code	
15. Supplementary Notes  John Siegler was the NHTSA Task Order Manager			
16. Abstract <p>This report summarizes the activities and results of State-level demonstration projects supported by cooperative agreements from the National Highway Traffic Safety Administration (NHTSA). The demonstration projects were intended to increase seat belt use statewide in low belt use States through innovative approaches. The States covered by this report are Kentucky, Mississippi, North Dakota, and Wyoming. Their efforts and outcomes were compiled to provide lessons learned. The States took different approaches, and two of the States transitioned from secondary to primary seat belt laws during the term of the demonstration project. 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.</p> <p>All four States achieved significant statewide increases in belt use above baseline belt use rates. Kentucky passed a primary belt law during this period, and implemented a 6-month period where only warnings could be issued. In Kentucky, the courtesy warning period combined with highly 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. Mississippi also became a primary law State during this time. 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 12 percentage points, rising from 44% to 56%. 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. In Wyoming, the seat belt use in targeted counties increased from 55% to 70%. Pickups recorded a higher increase in usage than passenger vehicles and SUVs (16.5, 11.9, and 14.6 percentage points, respectively).</p> <p>The multiple successes in these States support the conclusion that the demonstration projects in secondary law and low belt use States is productive and supports NHTSA's occupant protection goals.</p>			
17. Key Words  Seat belt                      Click It or Ticket Demonstration project      Secondary law Intervention                  Primary law		18. Distribution Statement  This document is available to the public from the National Technical Information Service, Springfield, Virginia 22161.	
19. Security Classif. (of this report)  Unclassified	20. Security Classif. (of this page)  Unclassified	21. No. of Pages  68	22. Price

**Form DOT F 1700.7 (8-72)**

**This Page Intentionally Left Blank**

## Table of Contents

INTRODUCTION .....	1
NHTSA Seat Belt Demonstration Projects .....	1
State Approaches Under the Cooperative Agreements .....	2
OBSERVATIONS ACROSS THE FOUR PROGRAMS .....	3
Process Benefits .....	3
Outcomes .....	4
Evaluation Processes .....	4
Conclusion .....	5
Appendix A: Kentucky .....	A-1
Appendix B: Mississippi .....	B-1
Appendix C: North Dakota .....	C-1
Appendix D: Wyoming .....	D-1

**This Page Intentionally Left Blank**

## INTRODUCTION

The National Highway Traffic Safety Administration's (NHTSA's) goal is to increase seat belt use in order to reduce fatalities and serious injuries in crashes. This report summarizes the activities and results of State-level demonstration projects intended to increase seat belt use in States with secondary seat belt laws and low belt use rates. The States and time periods covered are Kentucky (September 17, 2004-September 14, 2007), Mississippi (March 20, 2006-July 30, 2007), North Dakota (September 16, 2005-August 31, 2007), and Wyoming (September 16, 2005-August 31, 2007). Individual appendices present cases studies that describe the processes used and outcomes achieved in each State. As appropriate, each appendix describes how the specific State problem was identified, how the demonstration project related to the State's *Click It or Ticket* (CIOT) program, the countermeasures selected for the program, the methods used to evaluate the program, and the evaluation results obtained. Each State also produced a detailed report of its activities, which can be obtained directly from the State. Together with the information obtained from a set of earlier demonstration projects, which are detailed in the NHTSA report "Increasing Seat Belt Use through State-Level Demonstration Projects: A Compendium of Initial Findings" (DOT HS 811 014), the findings from the current demonstrations constitute a significant information resource for other States that want to increase their seat belt use rates.

### NHTSA Seat Belt Demonstration Projects

In 1993, North Carolina demonstrated the first American high-visibility enforcement program aimed at increasing seat belt use. NHTSA adopted CIOT as its primary slogan for programs of this type in 2000. The CIOT enforcement mobilization is conducted at least annually, typically for two weeks in late May and early June around the Memorial Day holiday. Police activity is supported by intensive paid and earned publicity that focuses primarily on enforcement of occupant restraint laws. The typical CIOT program includes: 1) data collection before, during, and immediately after media and enforcement phases; 2) earned and paid publicity announcing strict enforcement; 3) highly visible enforcement each day of the two-week enforcement period; and 4) a media event announcing program results and thanking all the participants in the community.

Even after repeated annual CIOT activities, seat belt use in some States, particularly those with secondary seat belt laws, has continued to be below the national average. NHTSA entered into cooperative agreements, which were funded by Section 403 under 23 U.S.C., in order to support demonstration projects that used innovative countermeasures to increase belt use in States with secondary seat belt laws and low belt use rates. To augment the broader CIOT activities, States developed innovative programs that focused on special driver populations (e.g., pickup truck drivers), specific areas of a State in which belt use was unusually low, or on novel enforcement or media techniques for promoting compliance.

As part of the cooperative agreements, each of the four States first used an occupant protection assessment or similar initiative to identify its particular concerns and problems. These assessments brought together experts on occupant protection to examine the status of the State's belt use and seat belt promotion activities. These experts produced recommendations for program improvement that could become part of the demonstration project. The idea was to

utilize the demonstration project to focus attention and resources in a manner that could overcome the factors that were identified as suppressing higher seat belt use.

### **State Approaches Under the Cooperative Agreements**

Kentucky, Mississippi, North Dakota, and Wyoming shared a common goal to use the funds from their cooperative agreement to increase their seat belt use. Although the demonstration project efforts were separate from each State's CIOT activities, all four States used enforcement and public education as the core of their interventions. These traditional efforts were supplemented by innovative and individualized approaches that often built upon strategies proven by CIOT operations. Brief summaries of each program's approach follow:

- **Kentucky:** The Kentucky demonstration project began in September 2004. One of the first activities was an occupant protection program assessment to provide guidance for the program. This assessment made a strong recommendation that the State adopt a primary seat belt law, which was sufficiently persuasive to pass a primary law in June 2005. Kentucky's new, primary seat belt law became effective on July 12, 2006. However, the legislature included a provision in the law that only courtesy warning tickets could be given until January 1, 2006. During the 6-month moratorium on ticket writing, the offender could be pulled over for not wearing a belt and issued a warning, but citations for seat belt offenses were not permitted. The Kentucky project shifted its focus to a media and enforcement program to support the issuance of the warning tickets. The courtesy warning period, combined with highly visible enforcement and sustained media messaging, enhanced the effectiveness of the passage of the primary law and produced an increase in belt use. Observation surveys of seat belt use ranged from a secondary law baseline of 67.3% to a primary law measure of 76.2%. Analysis of warnings and citations in Kentucky revealed that the rate of issuance of warnings was highly predictive of the rate of citation issuance after the warning period was over.
- **Mississippi:** The initial intent of the Mississippi demonstration project when it began in the spring of 2006 was to determine whether seat belt usage could be increased in a southern, secondary law State using a combined heavy enforcement and media program. When a primary law was passed on May 27, 2006, shortly after the initiation of the cooperative agreement, the goal was changed to increasing seat belt usage in the lowest usage counties of the State using the basic CIOT model. Test counties were identified from the State's usage data, and a special mobilization was run to test whether seat belt use changed as a result of geographically focused enforcement and media. Seat belt usage increased in one targeted county, while a reduction in belt use was observed in the other targeted county.
- **North Dakota:** North Dakota had previously executed a successful demonstration project focused on increasing belt use by pickup drivers, a group with a historically low seat belt use. In September 2005, the State received a second demonstration project cooperative agreement from NHTSA. For this demonstration effort, North Dakota implemented a strong community outreach and education effort with an intensive targeted media campaign combined with high-visibility enforcement in four "priority" counties. The priority counties were identified as having the greatest potential to make an impact on the overall statewide seat belt usage rate. The final observation survey



showed a sizable increase in belt use in the priority counties and comparison counties, but the increase was the greatest in the priority counties.

- **Wyoming:** The cooperative agreement in Wyoming also began in September 2005 and followed the same model (with priority and comparison counties) as that used in North Dakota. Six priority counties were selected that had high crash and fatality rates, low seat belt use, and populations of sufficient size to potentially impact seat belt use statewide. Male pickup truck occupants between the ages of 18 and 34 were targeted. Seat belt usage gains were made in all targeted groups as well as statewide.

Thus, one State (Kentucky) focused its demonstration program on the use and value of warnings when transitioning from a secondary to a primary seat belt law. The other three States (Mississippi, North Dakota, and Wyoming) focused their demonstration programs on increasing belt use in low-usage counties. Although high-visibility enforcement not unlike CIOT was the basic approach utilized, each of the States added one or more variations, such as applying the enforcement and media to specific groups of people, specific geographic areas, and/or to the transition period from a secondary to a primary law. It was these extensions of and departures from CIOT that were covered by the demonstration project evaluations and are the focus of this report.

## **OBSERVATIONS ACROSS THE FOUR PROGRAMS**

### **Process Benefits**

The activities and results in the four States highlighted the benefits of the demonstration project approach. In Kentucky, the occupant protection assessment can be credited with accelerating legislation to introduce a primary seat belt law. The Kentucky experience was relatively unique because of the lengthy warning period and moratorium on all seat belt citations. The warning period served as an excellent learning experience for both drivers and law enforcement officers. The police appreciated the intense publicity campaign because it reduced their need to explain the reason for a seat belt stop and made people more understanding. It is also likely that the publicity coupled with repeated requests from the State officials involved in the demonstration project to issue as many warnings as possible created an atmosphere in which law enforcement officers elevated the importance of seat belt stops among their numerous tasks. The net result is that seat belt enforcement gained a higher priority than it had before the new law. Inserting a warning period when a secondary law transitions to a primary law not only encouraged legislators to pass the law, but it also helped prepare both law enforcement and drivers for stricter seat belt enforcement. After seeing the effects of the 6-month warning period, many believed it was a positive experience that benefited highway safety in Kentucky.

The process in the other three States was more conventional with the cooperative agreement providing funds for additional seat belt enforcement and media. Focusing seat belt encouragement programs geographically or at specific target groups is fairly common. In these States, the particular benefits of the demonstration project were the additional resources provided to broaden the interventions and the extent of evaluation required. Both the States themselves and NHTSA gained additional confirmation of the basic approach as well as some insights into the factors that are successful in promoting seat belt use from the focused interventions.

## **Outcomes**

All four States achieved statewide increases in belt use above pre-program belt use rates. Although there were clear differences in the approaches used by the four States, the case studies cannot be used to assess the relative merits of the different approaches because of the widely varying starting and intervention conditions in each State. Nevertheless, in spite of the heterogeneity of approaches and underlying conditions, it is reasonable to conclude that the supplemental efforts of the demonstration projects funded by the cooperative agreements did, in fact, benefit the occupant protection programs in each State. The focused interventions were well planned and executed and represented a net increase in each State's efforts to get people to buckle up.

It appears that an important byproduct of the demonstration project activities was the elevation of the importance of seat belt programs in the hierarchy of the safety activities in each of the States. This conclusion is supported by the fact that two of the states—Kentucky and Mississippi—were successful in elevating their seat belt laws from secondary to primary. The vigor with which the programs were pursued, and the continuing commitment to occupant restraint activities after the expiration of the funding agreements is a clear long-term benefit of these activities. It is also reasonable, given that other States that have passed primary seat belt laws have maintained the increases in seat belt use that immediately followed passage, to predict that the primary laws in Kentucky and Mississippi will have long term and continuing benefits.

Another encouraging result from these studies relates to the outcomes in Wyoming and North Dakota. The Wyoming program was successful in raising statewide seat belt usage by placing enforcement and message emphasis on male pickup drivers, a group with well below average belt use. Even though the primary focus was on pickup drivers, increases in belt use were noted for drivers and passengers of all vehicle types. This is not surprising and confirms what was seen previously in North Dakota's first demonstration project. The result also provides further support for the hypothesis that messages oriented to one group can be expected to appeal to (and increase belt use by) broad segments of the population statewide even if they only depict a particular subset of drivers or vehicle types.

## **Evaluation Processes**

Kentucky, Mississippi, North Dakota, and Wyoming made excellent use of the evaluation process and benefitted from embedding an evaluation as an integral part of the project. These States implemented a data-driven approach that focused on real problems rather than assumptions of what these problems might be. Also, the involvement of evaluation early in each project helped assure that the effects of interventions could be properly assessed. Appropriate experimental designs were included in the projects, and adequate baseline data were collected before any interventions began.

The results confirmed that the driving public heard seat belt messages and perceived increased enforcement. For example, by 2007 virtually every respondent to the Kentucky telephone survey used to assess exposure and knowledge was aware that the State had a law requiring seat belt use, and over 75% knew that the law had changed in the last year. In addition, the percentage of respondents who thought the law was a primary law increased dramatically in the 2007 survey. Thus, Kentucky survey respondents were knowledgeable about seat belt

activities at the State level, and it is reasonable to conclude that much of that correct knowledge emanated from the media materials distributed under the demonstration project.

Overall, the projects used a range of evaluation approaches including direct observations, telephone and licensing office surveys, focus groups, and analysis of secondary source data such as citations and warnings. Experience from previous projects obtained from reading reports and direct contacts with those performing the evaluations was beneficial to the current evaluations in selecting measures and measurement approaches. The prior success of evaluations also helped encourage the project management in each State to include evaluation specialists on their team. As a result of the cumulative State-level experience with evaluation and the support provided by NHTSA, it appears that States are becoming increasingly sophisticated with evaluation techniques and more appreciative of their benefits.

## **Conclusion**

The evaluations conducted by Kentucky, Mississippi, North Dakota, and Wyoming each concluded that their demonstration projects were a useful adjunct to CIOT and produced a meaningful increase in seat belt use. The four State demonstration projects covered herein were designed to examine the benefits of adding locally-derived and implemented innovative methods to supplement CIOT. The results of this examination indicate that adding innovative approaches to CIOT is both a productive program activity and an excellent learning opportunity. It is reasonable to conclude even more strongly that the basic demonstration project approach is sound and assisted the involved States in boosting seat belt use.

**This Page Intentionally Left Blank**

# **APPENDIX A: KENTUCKY**

## Appendix A Table of Contents

Background.....	A-3
Goal of the Program.....	A-3
The Campaign.....	A-4
Evaluation.....	A-6
Surveys of Seat Belt Use.....	A-6
Public Awareness and Exposure.....	A-8
Courtesy Warnings.....	A-11
Law Enforcement Focus Groups.....	A-13
Discussion.....	A-14

## **KENTUCKY**

### **Background**

NHTSA encouraged Kentucky to apply for Section 403 demonstration grant funding in 2004 to address the issue of its low seat belt usage. At that time, Kentucky had a secondary seat belt law and a usage rate of only 66.0%, far behind the national average of 80% and the majority of States. Kentucky's belt use rate was the second-lowest in the southeast region of the U.S. While belt use had risen slowly in the State over the years, the gains were minimal, particularly after 2003. Kentucky realized only a 13 percentage point increase in seat belt use from 1995 through 2005. In terms of areas of the State, seat belt use is lowest in the eastern and south-central regions, particularly on the rural minor collector/local roads. The usage rate is highest in the region of the State that includes the largest population centers (i.e., Louisville, Lexington, northern Kentucky).

Kentucky initially used its demonstration project funds to conduct an Occupant Protection Assessment in June 2005. The assessment was intended to guide the State Highway Safety Office towards program improvements to increase Kentucky's seat belt use rate. The findings and recommendations of the assessment were also intended to provide the foundation for a plan to increase occupant restraint use as part of the State's 403 demonstration project.

Not surprisingly, a leading recommendation of the assessment was for the State to enact a primary seat belt law. During the 2006 regular session, the Kentucky General Assembly succeeded in passing a primary seat belt bill. The Governor signed this bill into law and it became effective on July 12, 2006. The new law established a 6-month educational period, however, in which no seat belt citations of any kind could be written but motorists could be pulled over for not wearing their seat belts as a primary offense and issued a "courtesy" warning. The law specified that a written warning containing specific information be issued to violators from the effective date of the law through December 31, 2006. Following this educational period, law enforcement would have the ability to issue citations carrying a \$25 fine for violations of Kentucky's primary seat belt law. The new law specifies that the fine is pre-payable and that court costs will not be imposed. Prior to the passage of the primary law, a seat belt offense in Kentucky carried a fine and court costs in excess of \$100. The high economic consequences of issuing a seat belt citation deterred many police from issuing tickets.

### **Goal of the Program**

In light of the changes in Kentucky's seat belt law that occurred in 2006, the 403 demonstration project was extended and the activities were modified to accommodate the new law's implementation. An action plan was developed by the Kentucky Transportation Cabinet within the Department of Transportation Safety to define the research question that the project would answer, namely, will a courtesy warning period, combined with highly visible enforcement and sustained media messaging, enhance the effectiveness of the passage of a primary law? The timeline of the plan is shown in Figure A-1 on the next two pages.

## The Campaign

The action plan also outlined the specific activities that the State Highway Safety Office would conduct to achieve the project goal. These included:

- Develop and disseminate courtesy warnings to all law enforcement agencies for their use during the initial 6-month implementation phase of the primary law. By law, the warnings had to contain information about the fine to be assessed, the date the courtesy warnings will end and educational materials on the benefits of complying with the seat belt law.
- Educate law enforcement about the legal requirements of the new seat belt law. All law enforcement executives were informed of the upcoming warning period. The courtesy warnings were reproduced in book format and made available to law enforcement agencies across the State. Subsequently, each regional Kentucky State Police post served as a distribution point for law enforcement agencies to obtain the courtesy warning books.
- Encourage agencies to make primary stops and issue seat belt warnings during their regular patrol activities and during all special enforcement periods through the end of 2006. During the summer and fall of 2006, law enforcement agencies were encouraged to make primary traffic stops for seat belt violations and to maximize the use of the warnings through the end of the year.
- Collect copies of all warnings issued and make them available for analysis.
- Implement a media campaign to make the public aware of the new primary law and to support enforcement activity. Three 30-second radio spots were developed for this campaign. All used different themes to convey the message that police will pull over drivers of vehicles in which the occupants are not buckled up. Radio spots for this campaign ran from September 12 through October 8; October 30 through November 26; and December 11-17, 2006. This overlapped the time when law enforcement had been asked to maximize stops for seat belt warnings.
- Conduct observational surveys at 21 representative survey sites across the State during regular intervals between September 2006 and April 2007 to measure changes in belt usage.
- Conduct telephone surveys in early 2007 and again in May/June 2007 to measure the impact of the publicity about the new primary seat belt law and the enforcement efforts (including public awareness about the warning period).
- Analyze warning and citation data throughout the project period.



# Kentucky Office of Traffic Safety 403 Demonstration Media Plan



FEBRUARY 2006							MARCH 2006							APRIL 2006							MAY 2006							JUNE 2006																		
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S												
			1	2	3	4				1	2	3	4							1		1	2	3	4	5	6						1	2	3											
5	6	7	8	9	10	11	5	6	7	8	9	10	11	2	3	4	5	6	7	8	7	8	9	10	11	12	13	4	5	6	7	8	9	10												
12	13	14	15	16	17	18	12	13	14	15	16	17	18	9	10	11	12	13	14	15	14	15	16	17	18	19	20	11	12	13	14	15	16	17												
19	20	21	22	23	24	25	19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	25	26	27	18	19	20	21	22	23	24												
26	27	28					26	27	28	29	30	31		23/30	24	25	26	27	28	29	28	29	30	31				25	26	27	28	29	30													
NOVEMBER 2006							DECEMBER 2006							MARCH 2007							APRIL 2007							MAY 2007							JUNE 2007											
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S					
			1	2	3	4						1	2						1	2	3	1	2	3	4	5	6	7						1	2	3	4	5							1	2
5	6	7	8	9	10	11	3	4	5	6	7	8	9	4	5	6	7	8	9	10	8	9	10	11	12	13	14	6	7	8	9	10	11	12	3	4	5	6	7	8	9					
12	13	14	15	16	17	18	10	11	12	13	14	15	16	11	12	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	16	17	18	19	10	11	12	13	14	15	16					
19	20	21	22	23	24	25	17	18	19	20	21	22	23	18	19	20	21	22	23	24	22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	20	21	22	23					
26	27	28	29	30			24/31	25	26	27	28	29	30	25	26	27	28	29	30	31	29	30						27	28	29	30	31			24	25	26	27	28	29	30					

K E N T U C K Y	<b>January 2006</b> Primary seat belt law introduced in KY legislature	<b>April 2006</b> Primary seat belt law achieves final passage; Governor signs into law	<b>May 2006</b> Law enforcement informed about requirements of new law at regional briefings; courtesy warnings developed	<b>July 2006</b> Letters sent to law enforcement; distribution of warnings begins  New Primary belt law goes into effect - warning period begins	<b>August 2006</b> Regional law enforcement area briefings held – continued use of warnings encouraged
	<b>September 2006</b> Mini-sample observational surveys; seat belt radio campaign begins	<b>November 2006</b> Continuation of radio campaign	<b>December 2006</b> Letter to law enforcement to remind them about upcoming end of warning period  Mini-sample observational surveys	<b>January 2007</b> Primary enforcement with citations begins  Media campaign ends; analysis of courtesy warnings begins	<b>February 2007</b> Public awareness (telephone) surveys  Mini-sample observational surveys
	<b>April 2007</b> Mini-sample observational surveys	<b>May 2007</b> <i>Buckle Up Kentucky</i> Mobilization; Mini-sample observational surveys	<b>June 2007</b> Full statewide observational surveys begin	<b>July 2007</b> Public awareness (telephone) surveys	<b>August 2007</b> Focus group interviews with law enforcement

	<b>May 2006</b>	<b>June 2006</b>	<b>May 2007</b>	<b>June 2007</b>
	Earned Media	Earned Media	Earned Media	Earned Media
	Paid Media	Enforcement	Paid Media	Enforcement
	Enforcement		Enforcement	

## Evaluation

The program was evaluated by observational surveys of belt use, public awareness and exposure surveys, courtesy warning data, and law enforcement focus groups.

### Observational Surveys of Seat Belt Use

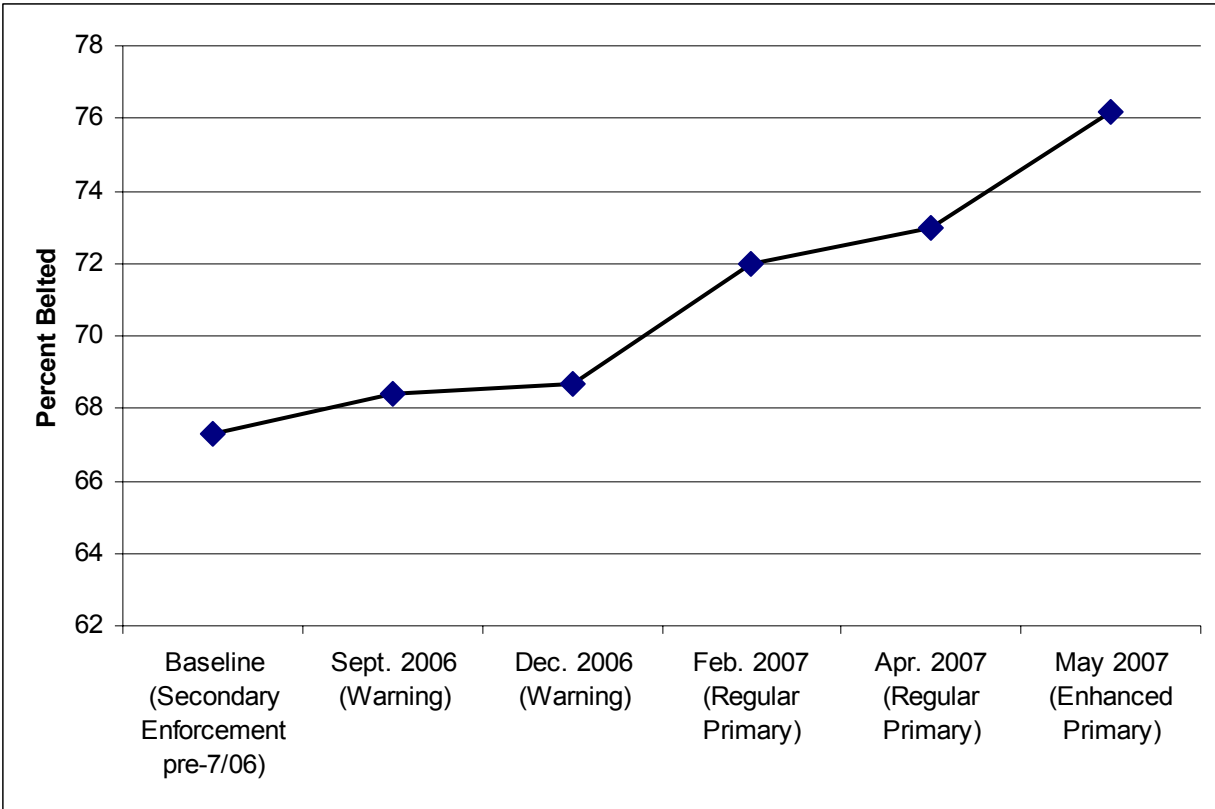
Surveys of actual belt use were conducted by the University of Kentucky Transportation Center using the same NHTSA-approved methodology as is employed for the annual statewide survey. Observations were made at 21 “mini-sample” survey sites across the State that were selected from the full set of annual observation locations to represent the entire State accurately. Surveys were conducted at the mini-sample locations at the following intervals:

- Early September 2006 (baseline)
- Early December 2006 (near the end of the courtesy warning period)
- February 2007 (after citations were allowable)
- Late April 2007
- May 2007 (during enforcement mobilization).

Data were collected in September and December 2006 to document belt usage during the public information phase of the campaign following enactment of the primary enforcement law. Data were collected in February and April 2007 after enforcement of the law began, with the May 2007 data being collected during the enforcement phase of the campaign (mobilization). The usage rates obtained are shown in Table A-1 and Figure A-2.

**Table A-1. Seat belt use rates for each wave of data collection**

<b>Survey Period</b>	<b>Enforcement Status</b>	<b>% Usage</b>
Baseline	Secondary enforcement	67.3
September 2006	Warning period	68.4
December 2006	Warning period	68.7
February 2007	Regular primary enforcement	72.0
April 2007	Regular primary enforcement	73.0
May 2007	Enhanced primary enforcement (CIOT mobilization)	76.2



**Figure A-2. Kentucky seat belt use by study period**

The 2006 mini-sample survey conducted prior to the May enforcement campaign (and also prior to the passage of the primary seat belt law) showed a usage rate of 67.3%. The 2006 statewide survey conducted in June through August 2006 found a statewide usage rate of 67.2%, reflecting virtually no change due to the passage of the law and the initial implementation of the warning period. As the warning period continued, however, modest increases were seen. In September 2006 (after 2 months of primary enforcement with law enforcement agencies issuing warnings) the rate increased to 68.4%, an increase of 1.2 percentage points. In December 2006, close to the end of the warning period, the rate had increased slightly more, to 68.7%.

The survey results show that the largest increases were not observed until after full implementation of the primary law (with citations) that began in January 2007. The mini-sample survey in February 2007 showed a rate of 72%, a 3.3 percentage point increase from December 2006. The rate increased another percentage point by April's survey, to 73%.

As is typical, usage increased in 2007 during the May enforcement mobilization. In 2007, usage during the enforcement period was 3.2 percentage points above the April 2007 pre-campaign value, whereas in 2006, only a 0.7 percentage point increase was observed for all vehicles during the enforcement mobilization.

The 2007 statewide survey of 200 locations found a usage of 71.8% with a rate of 74.0% for the 21 mini-survey sites. This closes the gap somewhat with the 2006 nationwide use rate of 81.0% reported by NHTSA,<sup>1</sup> but still leaves considerable room for improvement.

### **Public Awareness and Exposure**

The University of Kentucky's Survey Research Center collected telephone survey data from 2005 to 2007. The 2005 and 2006 telephone surveys were conducted before and after the statewide *Click It or Ticket* campaigns. These surveys focused on awareness of the seat belt campaigns and self-reported behaviors relating to seat belt use. The survey in March of 2007 was after the "warnings only" period and after the State's new seat belt law was fully enforceable. The 2007 surveys included additional and modified questions about the "warnings only" period that took place from July 12, 2006 to December 31, 2006 and changes to the law concerning seat belt enforcement. The purpose of these questions was to help evaluate the impact that the "warnings only" period associated with the transition from a secondary to a primary seat belt law had on awareness and self-reported behaviors related to seat belt use. During each survey period, two separate surveys were conducted. The first was a random sample of all licensed drivers in Kentucky, and the second was a sample of only pickup truck drivers in the State. A third analysis was conducted in which pickup truck drivers were dropped from the all vehicle survey to yield a profile of the non-pickup truck driver in Kentucky. Approximately 350 responses (exact totals varied by survey wave) were collected for each survey wave.

Table A-2 on the next page summarizes the key questions in the survey and the trend in their responses. Relevant findings from the analysis of the five waves of survey data and the findings from the new questions that were added to the 2007 survey include:

- Eight respondents (2.3% of the sample) in the 2007 all-vehicle survey and 16 respondents (4.5% of the sample) in the 2007 pickup truck survey said that they had received a written warning for not wearing a seat belt.
- Of the 24 people who received warnings, 6 (or 25% of those warned) indicated that they had increased their seat belt use in the last 30 days. This is compared to approximately 10% or less of the total sample indicating that they had increased seat belt use in the last 30 days.
- Dropping pickup trucks from the all vehicle survey did not substantially alter the results of the survey analysis.
- On average, between 5 and 8% of respondents per wave in the all-vehicle survey indicated that they received a citation for not wearing a seat belt. The percentages were slightly higher for the survey of pickup truck drivers with between 7.5 and 10.5% of respondents reporting receiving a ticket. This is consistent with the lower observed seat belt use by pickup drivers.

---

<sup>1</sup> NHTSA, *Seat Belt Use in 2006—Use Rates in the States and Territories*, April 2007 (revised data), DOT HS 810 690.

**Table A-2. Summary of Kentucky Telephone Survey Results**

	Pre 2005 %	Post 2005 %	Pre 2006 %	Post 2006 %	Mar 2007 %	*Sig. Level
<b><i>Reported always wearing shoulder belt</i></b>						
Drivers of All Vehicles	77.3	81.8	76.0	79.9	80.2	ns
Pickup Truck Drivers	65.7	69.8	65.5	68.5	72.6	ns
<b><i>Reported always wearing lap belt</i></b>						
Drivers of All Vehicles	76.9	81.8	75.8	79.7	80.1	ns
Pickup Truck Drivers	63.8	71.4	65.4	70.6	75.3	p < 0.01
<b><i>Did not use seat belt within the last day</i></b>						
Drivers of All Vehicles	19.5	15.7	19.4	14.1	14.0	ns
Pickup Truck Drivers	26.6	21.9	27.5	21.3	24.0	ns
<b><i>Recently increased seat belt use</i></b>						
Drivers of All Vehicles	5.5	8.0	9.0	9.4	9.3	ns
Pickup Truck Drivers	9.0	11.4	7.1	11.8	9.8	ns
<b><i>Knows KY has law requiring seat belt use</i></b>						
Drivers of All Vehicles	96.1	98.6	89.5	96.3	99.2	p < 0.01
Pickup Truck Drivers	98.6	97.5	92.0	96.6	98.3	p < 0.01
<b><i>Said Police can stop for seat belt violation</i></b>						
Drivers of All Vehicles	47.1	43.7	39.6	63.5	90.8	p < 0.01
Pickup Truck Drivers	45.0	40.5	52.0	64.6	87.7	p < 0.01
<b><i>Thinks it is somewhat likely will get ticket</i></b>						
Drivers of All Vehicles	46.0	51.5	44.5	52.2	60.5	p < 0.01
Pickup Truck Drivers	38.7	47.7	47.2	51.0	54.7	p < 0.01
<b><i>Received a ticket</i></b>						
Drivers of All Vehicles	5.0	5.7	7.9	8.0	5.9	ns
Pickup Truck Drivers	9.3	9.1	9.3	10.4	7.5	ns
<b><i>Strongly agrees that police ticket more often</i></b>						
Drivers of All Vehicles	16.6	23.2	14.8	24.4	25.6	p < 0.01
Pickup Truck Drivers	22.5	21.6	14.6	21.9	22.7	ns
<b><i>Was aware of special seat belt related efforts</i></b>						
Drivers of All Vehicles	13.2	41.1	15.6	31.7	18.9	p < 0.01
Pickup Truck Drivers	18.3	43.5	16.5	33.6	24.3	p < 0.01
<b><i>TV as source of media</i></b>						
Drivers of All Vehicles	40.0	57.6	49.2	53.4	39.4	ns
Pickup Truck Drivers	47.7	48.1	45.3	42.7	36.0	ns
<b><i>Radio as source of media</i></b>						
Drivers of All Vehicles	8.0	15.9	11.9	16.1	19.7	ns
Pickup Truck Drivers	18.5	25.6	26.4	21.4	16.3	ns
<b><i>Aware of KY seat belt law change</i></b>						
Drivers of All Vehicles	-	-	-	-	76.9	NA
Pickup Truck Drivers	-	-	-	-	75.5	NA

\* Sig. Level was calculated using Chi Square analysis of the frequency of responses to each item over time for each of the surveys. The pickup truck driver survey was a separate survey. Any p < 0.05 indicates a statistically significant change in the frequency of responses for the given sample over time; ns = not significant; "-" = not asked; NA = not applicable.

- The pattern of awareness of special enforcement efforts changed significantly over time for the all-vehicle survey (chi-square [8, N = 1,744] = 130.73, p = 0.000) and pickup truck survey (chi-square [8, N = 1,742] = 92.42, p = 0.000). Most notably, increases in awareness occurred after the CIOT campaigns in 2005 and 2006. For the all-vehicle survey, the percentage of respondents indicating that they had seen special enforcement rose from a baseline of 13.2% in early 2005 to 41.1% post-CIOT in 2005, declined to 15.6% pre-CIOT 2006 before rising to 31.7% post-CIOT in 2006, and declined to 18.8% in the early 2007 survey wave. The truck survey showed a similar pattern, going from 18.3% pre-CIOT 2005 to 43.5% post-CIOT 2005, declining to 16.5 percent pre-CIOT 2006 before increasing to 33.6% post-CIOT 2006 and declining again to 24.3% in the 2007 survey wave.
- Self-reported lap belt use increased significantly over time for the pickup truck survey, (chi-square [16, N = 1,635] = 31.89, p = 0.010). Pickup truck drivers who reported wearing a lap belt “all of the time” increased from 63.8% in the 2005 pre-CIOT wave to 71.4% post-CIOT 2005, returned to near baseline at 65.4% in the 2006 pre-CIOT wave before increasing to 70.6% post-CIOT 2006, and increased again to 75.3% during the 2007 survey wave. Self-reported shoulder belt use, however, averaged 68.5% across all waves of the pickup truck survey, and no significant changes were found over time (chi-square [16, N = 1,726] = 17.22, p = 0.371). In the all-vehicle survey, self-reported lap belt use also increased significantly from baseline for the all-vehicle survey (chi-square [16, N = 1,621] = 26.67, p = 0.045). Drivers who reported wearing a lap belt “all of the time” increased from 76.9% in the 2005 pre-CIOT wave to 81.8% post-CIOT 2005, returned to below baseline at 75.8% pre-CIOT 2006 before increasing to 79.7% post-CIOT 2006, and increased again to 80.1% during the 2007 survey wave. Self-reported shoulder belt use averaged 79.0% across all waves of the all-vehicle survey, and no significant changes were found over time (chi-square [16, N = 1,744] = 24.29, p = 0.083).
- For the all-vehicle survey, the pattern of responses changed significantly over time for the item that asked respondents the last time they had not worn a seat belt (chi-square [16, N = 1,721] = 33.67, p = 0.006). Most notably, the percentage saying that they had not worn a seat belt in the last day dropped from a high of 19.5% in the 2005 pre-CIOT survey to a low of 14.0% in the 2007 survey period. The pickup truck survey did not show any statistically significant changes in the pattern of responses over time (chi-square [16, N = 1,669] = 18.09, p = 0.319).
- Self-reported shoulder and lap belt use in the survey of pickup truck drivers was generally 10 to 15 percentage points lower than self-reported belt use in the all-vehicle surveys.
- Across all waves of the all-vehicle survey, an average of 95.9% of respondents knew that Kentucky had a law requiring seat belt use. The highest percentage (99.2%) came during the 2007 survey period. The pickup truck survey showed similar results with an average of 96.2% of respondents saying they knew Kentucky had a seat belt law, but the highest rate (98.6%) was during the 2005 pre-CIOT survey wave. As part of the 2007 survey only, when asked if the law had changed in the past year, 76.9% of the all-vehicle survey

respondents and 75.5% of the pickup truck survey respondents indicated that, indeed, the seat belt law had changed in the last year.

- The percentage of all-vehicle survey respondents indicating that a stop could be made just for a seat belt violation increased significantly from a low of 39.6% in the 2006 pre-CIOT survey to a high of 90.8% in the 2007 survey (chi-square [8, N = 1,780] = 264.70, p = 0.000). A similar significant change was found for the pickup truck survey with percentages increasing from a low of 40.5% in the 2005 post-CIOT survey to a high of 87.7% during the 2007 survey (chi-square [8, N = 1,695] = 234.45, p = 0.000).
- Of those people who reported increasing seat belt use in the 2007 survey, the seat belt law was the most represented reason for increased use (35%), followed by an increased awareness of safety-related factors.
- Results showed a significant change in the pattern of responses to the all-vehicle survey item that asked participants what the likelihood of getting a ticket for not wearing a seat belt was (chi-square [12, N = 1,670] = 34.36, p = 0.001). Most notably, the percentage of respondents in the all-vehicle survey who thought it was “somewhat likely” they would receive a ticket if they did not wear their belt increased from a low of 44.5% in the 2006 pre-CIOT wave to 60.5% in the 2007 survey wave. The survey of pickup truck drivers showed a similar significant change in respondents saying it was “somewhat likely” they would get a ticket (chi-square [12, N = 1,692] = 34.09, p = 0.001), with an increase from 38.7% during the 2005 pre-CIOT wave to 54.7% in the 2007 wave.
- Television was the most identified medium for messaging related to the seat belt programs. On average, 50.7% of the all-vehicle survey respondents and 44.2% of the respondents in the survey of pickup truck drivers identified television when asked where they saw or heard messages related to seat belt use.

## **Tickets and Courtesy Warnings**

This section summarizes data related to seat belt enforcement efforts in Kentucky from January 1, 2005 through March 2007. These data include citations issued under Kentucky’s secondary seat belt law (from January 2005 through July 12, 2006 which covered two annual mobilizations),<sup>2</sup> warnings issued by State and local police in Kentucky from the middle of July 2006 to the end of December 2006 and tickets issued under Kentucky’s new primary seat belt law from January through March of 2007. These three types of enforcement efforts—secondary, warnings and primary—became of interest because of the legislation that transitioned Kentucky from a secondary to a primary law. Under this legislation, which took effect July 12, 2006, law enforcement officers were forbidden to issue any citations until January 1, 2007. During the interim period, they were encouraged to stop unbelted drivers and passengers and to issue courtesy warnings.

Overall, 23,971 warnings were returned by 108 participating law enforcement agencies (31% of all law enforcement agencies in Kentucky) and entered into a database. August 2006 was the busiest month for the issuance of warnings with 5,976 warnings issued across the State.

---

<sup>2</sup> Counts of citations for each county were obtained from the Administrative Office of the Courts by examining the number of charges/cases filed in the District Court.

This was followed by a dip to a low of 2,084 in October 2006 and a rise in December 2006 to 3,771 warnings issued. Males were issued 15,933 warnings while females were issued only 7,925 warnings. Thus, males were almost twice as likely as females to be issued a warning for not wearing a seat belt. For vehicle type, drivers of cars were warned most often with 13,026 warnings issued; pickup trucks were second at 6,122; SUVs were third at 2,276; and vans received the fewest warnings at 1,113. The great majority of violators (21,663) were licensed in the State of Kentucky. Drivers from Tennessee were second with 561 warnings and drivers from Ohio third with 431 warnings.

An analysis examined whether the extent of issuance of warnings was predictive of the rate of citation issuance after January 2007 when the primary law was in full effect. The available citation and warning data were used to form the following measures on a county-by-county basis (i.e., county was the unit of analysis):

- *Secondary period* – Seat belt tickets per 100,000 population per month during available months prior to July 12, 2006 exclusive of the months of May and June of each year (2005 and 2006) when CIOT campaigns were underway and the number of tickets was unusually large.
- *CIOT* – Seat belt tickets per 100,000 population per month during the months of May and June of each year (2005 and 2006) as a measure of the intensity of each county's *Click it or Ticket* campaign.
- *Warnings* – Courtesy warnings per 100,000 population per month from July 2006 through December 2006.
- *Primary period* – Seat belt tickets per 100,000 population per month during the first three months of 2007 when the primary law was in effect and law enforcement was permitted to issue citations.

Using rates is preferred to using raw frequencies since the rates of citations/warnings represent standardized values whereas using raw frequencies of citations/warnings could bias any analysis towards patterns related to the larger counties where more tickets were issued.

Linear regression was utilized to determine if the Secondary Period Citation Rate, CIOT Citation Rate or Warning Rate by county would predict the rate of primary citations. Thus, Primary Period Citation Rate served as the dependent variable, and the independent or predictor variables were the other three measures.

The linear regression model including all three predictors accounted for a significant and relatively large amount of the variance,  $R^2 = 0.323$ , for the citation rates after the primary law was enacted. Secondary Period Citation Rate and Warning Rate were both significant predictors of Primary Period Citation Rate. Both coefficients were positive (1.181 and 0.303, respectively), indicating that the rate of citations issued after the primary law took effect on January 1, 2007 was positively associated with the rate of citations under the secondary law excluding the *Click It or Ticket* months and the rate of warnings issued during the warning period. Citation rate during *Click It or Ticket* months was not a significant predictor of Primary Period Citation Rate.



This analysis clearly showed that the issuance of warning tickets was predictive of citation activity—counties where more warnings were issued showed higher rates of ticketing in the first three months under the primary law. This suggests that the warning period was a productive interim step that likely allowed law enforcement agencies and officers to become familiar with the process of using a seat belt violation as the basis for a traffic stop.

Graphs of the frequencies of tickets and warnings issued by month for each county in the State showed some interesting patterns. The most typical pattern is exemplified in Figure A-3 which shows frequency data for all counties combined. This pattern is characterized by spikes in frequencies for the two May/June CIOT mobilizations (2005 and 2006—the only mobilizations conducted during this period) that were included in the studied period as well as increasing frequencies for citations in 2007 data under the primary law that followed the warning period.

### **Law enforcement focus groups**

In order to determine if the interpretation of the warning ticket analytical results was, in fact, accurate and to obtain the view of law enforcement personnel of the utility of the warning period, a set of focus groups was arranged with law enforcement personnel from across Kentucky. Six sessions were held in August 2007 involving command and patrol personnel from over 25 Kentucky law enforcement agencies. Since the participants were promised that their participation would be on a confidential basis, the specific agencies will not be listed. However, they represented:

- Different types of law enforcement agencies—local police departments, county police departments, sheriff’s agencies and State police agencies;
- Different regions of the State including urban, suburban and rural areas; and
- Varying levels of warning ticket activity during the July 12, 2007 to December 31, 2007 period.

These focus groups provided an opportunity to assess whether the issuance of warnings was perceived as valuable by law enforcement and to highlight any operational issues that were encountered.

The Kentucky warning ticket approach was initially a political expedient. Legislators required it as a condition for passing a primary law. When the new Kentucky primary law was passed, most law enforcement and traffic safety personnel accepted the moratorium on tickets as simply a delay in getting the primary seat belt law they wanted. However, if the focus group participants are representative, State law enforcement personnel think that the six-month warning period was a positive experience which benefited highway safety in Kentucky.

The warning period appeared to serve as an excellent learning experience for both drivers and law enforcement officers. It helped engage law enforcement in seat belt efforts better than a direct transition from a secondary to a primary law likely would have.

The police appreciated the intense publicity campaign because it reduced their need to explain the reason for the seat belt stop and made people more understanding. It is also likely that the publicity coupled with repeated requests from the State to issue as many warnings as possible created an atmosphere in which law enforcement officers elevated the importance of seat belt stops. The net result is that seat belt enforcement now has a higher priority than before the new law. Future publicity efforts might consider adding mention of the fact that incorrect seat belt use is still illegal. Focus group participants noticed many drivers who apparently buckled up incorrectly (e.g., shoulder belt behind the back) in response to the law change and associated publicity.

No new problems were encountered from the courts, and the operational problems experienced were really minor frustrations that can be easily solved in any future implementation, such as having to use paper warning tickets when all other tickets were issued from a laptop computer that could scan the offender's license. It is therefore reasonable from these focus groups and the analysis of the warning tickets to conclude that inserting a warning period when a secondary law State transitions to a primary law is worthwhile. It not only encourages legislators to pass the law but also helps prepare both law enforcement and drivers for stricter seat belt enforcement.

## **Discussion**

The leading recommendation from Kentucky's Occupant Protection Assessment was for the State to enact a primary seat belt law. The General Assembly passed a primary law, and it became effective on July 12, 2006. The new law established a 6-month educational period in which the offender could be pulled over for not wearing a belt but only a warning could be issued. Because of the changes in the law, the Kentucky demonstration project was extended and its activities were modified to focus on the new law's implementation. Specifically, the project focused on the research question: Will a courtesy warning period, combined with highly visible enforcement and sustained media messaging enhance the effectiveness of the passage of the primary law? The clear answer appears to be that the warning period was a net benefit that likely yielded increased primary enforcement tickets, better public understanding and acceptance of the law and an elevated importance for seat belt enforcement among police.

The open issue is whether a warning period should be recommended to other States when they transition from a secondary to a primary seat belt law. This is a complex issue. Clearly, many States have gone from secondary to primary without a warning period and have seen the belt use of their population increase considerably. This would support the argument that a warning period is simply a delay. On the other hand, in those States that are reluctant to enact a primary law, the inclusion of a warning period may be sufficient to win over legislators who are unsure about supporting the change. This was certainly true in Kentucky. Also, the additional commitment of law enforcement personnel to seat belt enforcement highlighted by the Kentucky focus groups may be an important side benefit. A comparison of law enforcement attitudes in Kentucky to those in other States that transitioned from secondary to primary without a warning period would be needed to make a firm determination that this was, in fact, a benefit of the warning period.

# Total: All Counties Combined

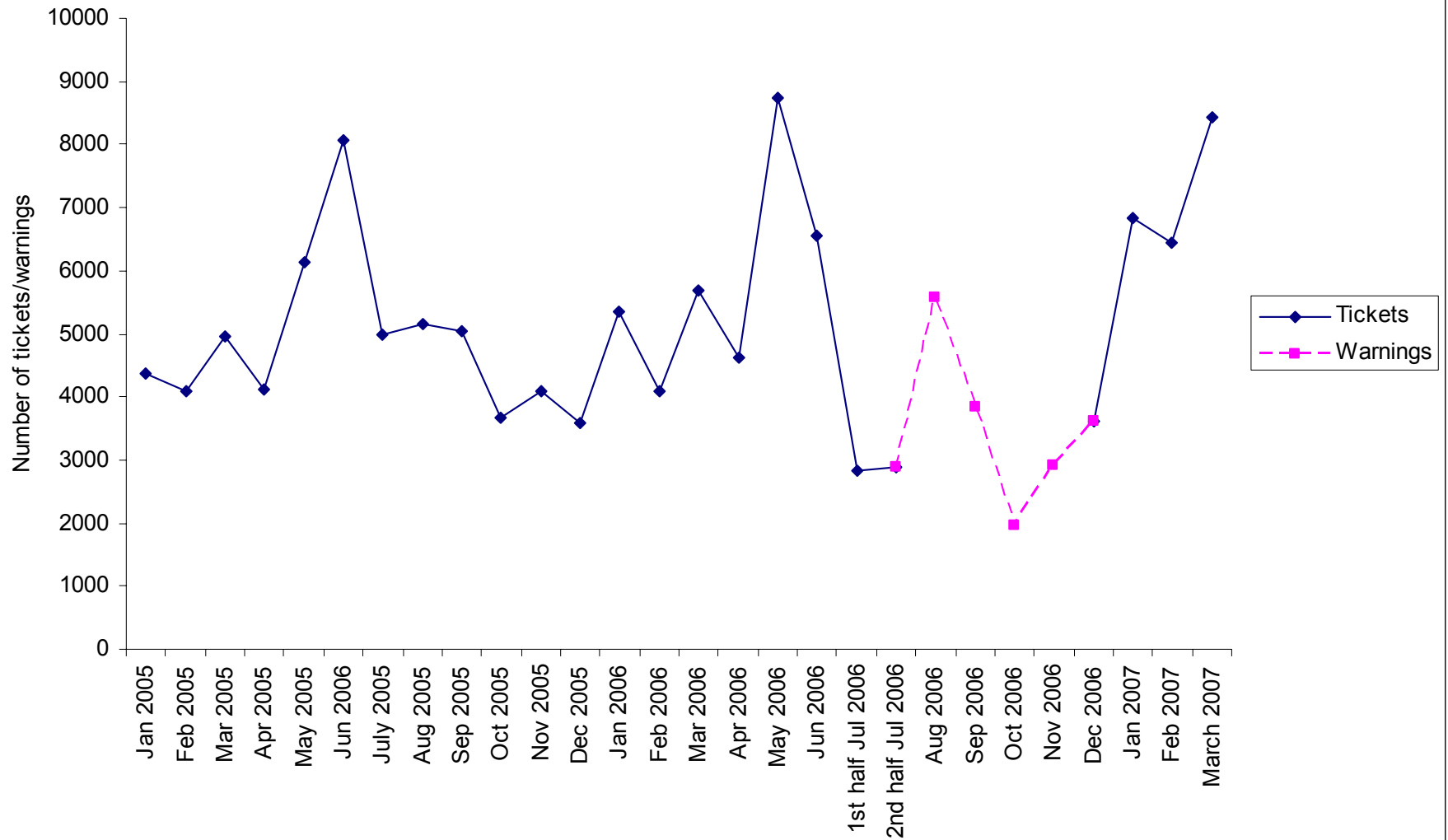


Figure A-3. Seat belt citations/warnings issued by month for all Kentucky counties combined

The Occupant Protection Assessment apparently played an important role in obtaining passage of the primary law. This assessment was funded by the demonstration project and likely would not have been undertaken in the absence of the project support and requirements. Thus, it is fair to conclude that the demonstration project in Kentucky had three significant benefits. First, it helped catalyze the passage of a primary law which should have long-term safety benefits. Second, it helped make the warning period an effective tool in the total seat belt program. Third, through the evaluation of its activities, a clear and interesting picture was obtained of the benefits of a highly publicized and actively pursued warning program.

# **APPENDIX B: MISSISSIPPI**

## Appendix B Table of Contents

Background.....	B-3
The Primary Law and Project Objectives.....	B-3
Low Usage County Selection.....	B-3
The Campaign.....	B-5
Evaluation.....	B-7
Observation Survey.....	B-7
Driver Licensing Office Survey.....	B-8
Discussion.....	B-11

## **MISSISSIPPI**

### **Background**

In 2004 when this demonstration project was in the early stages of discussion, Mississippi had a statewide seat belt use rate of 63.2%, which was among the lowest rates in the United States. By comparison, the national seat belt use rate during 2004 was 80%.<sup>3</sup> Mississippi also had consistently ranked in the top five States for traffic fatalities per 100 million vehicles miles traveled, in large part due to non-use of seat belts. In 2001, more than half of the crash-related fatalities were unrestrained occupants.

One of the most significant challenges in Mississippi over the years has been its secondary seat belt law. When Mississippi implemented the *Click It or Ticket* (CIOT) campaign in 2001, the State saw greater involvement of local law enforcement agencies and the community, which in turn yielded increased seat belt use rates. In 2002, the belt use rate went from 55% before CIOT and its accompanying public information and education, to 62% afterwards. Nevertheless, the absolute seat belt use rate was still low, and the State was concerned that further increases would be hindered by the limitations of a secondary enforcement law.

The Mississippi Office of Highway Safety examined the current status of seat belt use and occupant protection programs in Mississippi and also explored what has been successful in other secondary enforcement States to increase belt use. Mississippi worked to implement effective strategies including high-visibility enforcement initiatives, where appropriate.

### **The Primary Law and Project Objectives**

The background of the project included a seat belt assessment completed in July 2005. The main outcome from the assessment was the identification of the need for primary enforcement of the State's seat belt law. Mississippi enacted a primary seat belt law on May 27, 2006. The initial intent of this demonstration project was to determine if seatbelt usage could be increased in a secondary law State. With the passage of the Primary Law, the scope was changed to include increasing seat belt usage in the lowest usage counties by utilizing the CIOT model. The first effort, therefore, required identification of the lowest usage counties before the conduct of the CIOT campaign.

### **Low Usage County Selection**

In 2006, two observational surveys of seat belt use were conducted by the Social Science Research Center at Mississippi State University. One was conducted prior to the May media and law enforcement intervention on a sub-sample of 64 sites in 8 Mississippi counties (a mini survey). The official follow-up survey, using all 409 survey sites in 16 counties, was completed following all spring law enforcement and media interventions. In addition to providing consistent and quantitative measures of the success of the program, the surveys provided data for identifying counties with low belt use.

---

<sup>3</sup> NHTSA, *Traffic Safety Facts, 2004 Data: Occupant Protection*, DOT HS 809 909.

# Mississippi Office of Traffic Safety 403 Demonstration Media Plan



FEBRUARY 2006							MARCH 2006							APRIL 2006							MAY 2006							JUNE 2006								
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S		
			1	2	3	4				1	2	3	4							1			1	2	3	4	5	6						1	2	3
5	6	7	8	9	10	11	5	6	7	8	9	10	11	2	3	4	5	6	7	8	7	8	9	10	11	12	13	4	5	6	7	8	9	10		
12	13	14	15	16	17	18	12	13	14	15	16	17	18	9	10	11	12	13	14	15	14	15	16	17	18	19	20	11	12	13	14	15	16	17		
19	20	21	22	23	24	25	19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	25	26	27	18	19	20	21	22	23	24		
26	27	28					26	27	28	29	30	31		23/30	24	25	26	27	28	29	28	29	30	31				25	26	27	28	29	30			

OCTOBER 2006							NOVEMBER 2006							DECEMBER 2006							APRIL 2007							MAY 2007							JUNE 2007											
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S					
1	2	3	4	5	6	7				1	2	3	4							1	2	1	2	3	4	5	6	7						1	2	3	4	5							1	2
8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9	8	9	10	11	12	13	14	6	7	8	9	10	11	12	3	4	5	6	7	8	9					
15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16	15	16	17	18	19	20	21	13	14	15	16	17	18	19	10	11	12	13	14	15	16					
22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23	22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	20	21	22	23					
29	30	31					26	27	28	29	30		24/31	25	26	27	28	29	30	29	30						27	28	29	30	31			24	25	26	27	28	29	30						

M I S S I S S I P P I	<b>April 2006</b> 	<b>June 2006</b> 	
	<b>October 2006</b> 	<b>November 2006</b> 	<b>December 2006</b> 
	2007 Data Unavailable		

	<b>May 2006</b> 	<b>June 2006</b> 	<b>May 2007</b> 	<b>June 2007</b> 
--	---------------------	----------------------	---------------------	----------------------



The spring pre/post surveys showed that statewide Mississippi had an approximate 13 percentage point increase in belt use to 73.6% statewide. However, even though Mississippi launched the seat belt media and enforcement campaign, Lee County dropped from an already low 53.2% usage rate before intervention to a 51.5% usage rate after intervention for a decrease of 3.2% or 1.7 percentage points. No survey was conducted for Leflore County before the May intervention, but post intervention data showed only a 51.3% usage rate.

Due to the low usage rates in Lee and Leflore counties from these spring surveys, the Mississippi Office of Highway Safety selected both counties as the low compliance counties for the demonstration project activities in the fall. The efforts of increased media awareness, educational awareness and enforcement on the low seat belt usage were a focus point of the Mississippi Office of Highway Safety. Leflore County, with its 80% African American population, was saturated with an extensive paid media campaign focused on African Americans. The focus on African Americans was limited, however, to the radio messages which followed the approach developed by NHTSA for the nationwide campaign aimed at this audience but utilized local talent. TV messages were not targeted to a specific subgroup of the driving population. Lee County, with an 80% White population, received the general CIOT enforcement messaging. Two counties, Lowndes and Lauderdale, were used as comparison counties, with no additional heightened enforcement or paid media efforts.

The intervention in the two low-usage project counties was studied during the Thanksgiving mobilization in 2006 (November 17 – 30).

## **The Campaign**

The major thrust of the Mississippi project was to construct a statewide effort based on a core component of highly visible enforcement of the State's seat belt use law. These enforcement efforts were accompanied by media events and education. Significant activities included seat belt use observation surveys and awareness/perception surveys conducted before and after the enforcement program, the appearance of paid and earned media on television, radio, and in print advertisements and active participation by law enforcement. Press events with visible support from local and State politicians, private sector partners, the law enforcement community, seat belt coalitions, and other traffic safety advocates provided additional earned media coverage and demonstrated strong indication of increasing support for seat belt use. The result was an extensive media/enforcement program consisting of the activities and events described below.

**Media Target Populations.** Two radio advertisements were produced for the Thanksgiving mobilization—one was directed at the general population with a strong enforcement message, and one was directed at African American drivers by following the content used by NHTSA and casting local African American talent. CIOT radio and television paid media were purchased for the Thanksgiving mobilization in the media markets with the overall lowest seat belt usage. Major media markets for this demonstration project included Greenwood (Leflore County) and Tupelo (Lee County). A total of 1,681 television spots and 982 radio spots were aired from November 17- 30, 2006.

**Press Events.** Four press events emphasizing a general enforcement message were held the first week of the campaign to launch the CIOT Thanksgiving campaign. Two of the news conferences were coordinated through the Department of Public Safety Public Affairs office.

The other two press events were initiated by the law enforcement liaison in each of the test areas (Leflore County and Lee County). A roadblock with the Mississippi Highway Patrol was televised during the mobilization period. The special projects coordinator in the Office of Highway Safety produced a media kit that was distributed to local media during the campaign and also used by the Department of Public Safety Public Affairs division. The media kit included seat belt information as well as CIOT and public information regarding Mississippi's new primary seat belt law. This media kit was distributed during the May CIOT mobilization and again in Lee County and Leflore County during the first week in November.

**Post-Event Media.** Local agencies were asked to conduct press events in their areas to show support for the campaign and to discuss the results. The law enforcement liaisons for each county publicized the results in local papers and at the regional law enforcement liaison meeting for Mississippi Highway Patrol Troops D and G that covered the focus areas.

**Outreach.** The Mississippi Association of Highway Safety Leaders, a statewide agency consisting of law enforcement, State agencies, private associations, and citizens, was asked to make contacts in their respective communities regarding the Thanksgiving CIOT campaign. The law enforcement liaisons for Leflore and Lee Counties discussed the upcoming blitz with members of Sobriety Trained Officers Representing Mississippi, and at regional meetings for Mississippi Highway Patrol Troops D and G.

**Recruitment of Law Enforcement Agencies.** The Mississippi Governor's Office of Highway Safety contacted each qualifying law enforcement agency in the designated low belt usage areas, which included Leflore County (City of Greenwood) and Lee County (City of Tupelo), in person, accompanied by a letter requesting their participation in the program. Those agencies not currently funded by the Office of Highway Safety received a grant application packet. Four mini-grants were distributed to ensure participation in the lowest usage counties. Each selected local agency received a seat belt mini-grant for overtime during the two-week period. The Mississippi Highway Patrol, with the majority of funds going to Troops D and F, received a grant for overtime during the Thanksgiving mobilization period.

**Enforcement Activity in the Targeted Areas.** The Mississippi Highway Patrol conducted special details in each of the two lowest seat belt rate counties. These enforcement activities included checkpoints and saturation patrols. The Mississippi Highway Patrol worked approximately 2,456 man-hours on the program during the Thanksgiving mobilization. Local enforcement also conducted checkpoints and saturation patrols, working approximately 400 man-hours.

**Mississippi Grants.** During the month of November, agencies in the low use areas for occupant protection were given grants from the Mississippi Office of Highway Safety to conduct extra efforts to increase the seat belt use rate. Those agencies included the Lee County Sheriffs Department, Tupelo Police Department and Mississippi Highway Patrol Troop F to focus on the enforcement, media and educational efforts in Lee County. The Leflore County Sheriffs Office, Greenwood Police Department, and Mississippi Highway Patrol Troop D focused on the enforcement, media, and educational efforts in Leflore County.

In summary, the following activities were used during the Thanksgiving blitz period, from November 17 - 30, 2006 to increase seat belt use in Lee and Leflore counties:

- Implementation of mini-grants to four local law enforcement agencies (Greenwood, Leflore County, Lee County, and Tupelo).
- Implementation of a seat belt enforcement grant with the Mississippi Highway Patrol for the northern region of the State.
- Running of CIOT media messages in the two-county area within the Greenwood and Tupelo media markets.
- Conduct of pre and post seat belt mini-surveys in four counties, with two counties (Lauderdale and Lowndes) serving as comparison counties.

## **Evaluation**

The program was evaluated by observations of seat belt use and self-report surveys conducted at driver licensing offices.

### **Observation Survey**

The baseline survey prior to the 2006 Thanksgiving blitz in the two test and two comparison counties was conducted between October 23 and November 12, 2006. The post-campaign survey in these counties was conducted between December 1 and December 15, 2006. Across the four counties, there was a belt use increase of 11.5% over the baseline or an increase of 6.7 percentage points. Data for the Thanksgiving blitz are included in Table B-1.

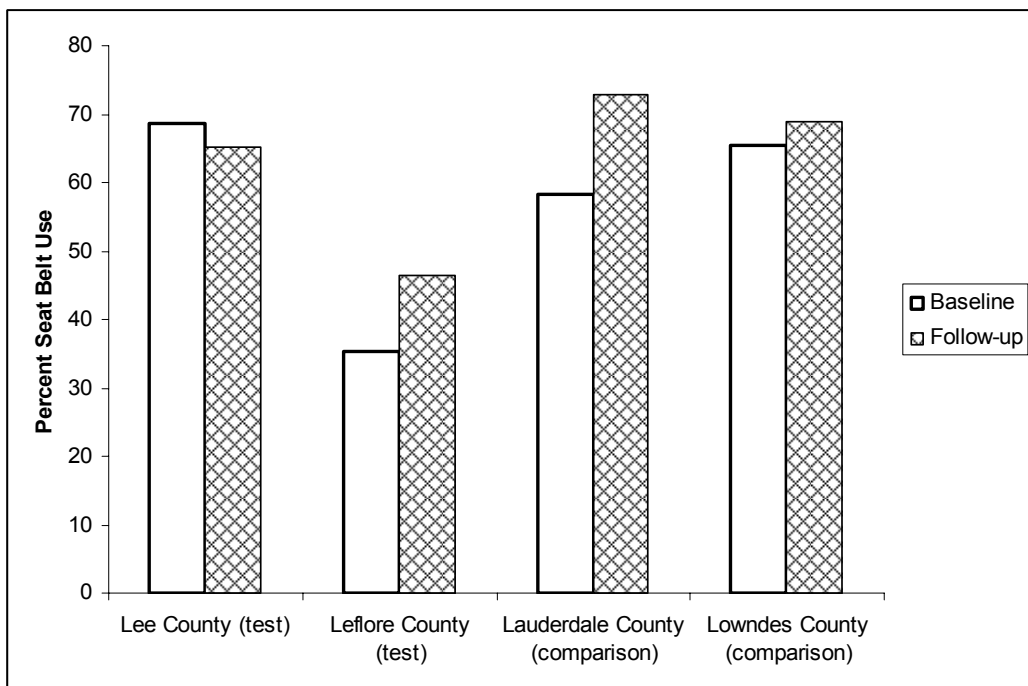
One of the test counties (Leflore) achieved a statistically significant belt use increase of 31.0% over the baseline (for an increase of 11.0 percentage points). Gains were documented in belt use in all the tests done in Leflore County, although they were not all statistically significant gains. The advertisement directed toward the African American motoring public was possibly successful in reaching this demographic. The other test county (Lee) showed a decrease in seat belt use in all waves. The pre/post belt use data by county are shown in Figure B-1.

Notable belt use increases between the baseline and post-campaign observations were seen for the following data categories:

- 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%)

**Table B-1. The 2006 Thanksgiving Blitz Belt Use Data**

<b>Category</b>	<b>Baseline % Use</b>	<b>Follow-Up % Use</b>	<b>% Increase Over Baseline</b>
Overall	57.9	64.6	11.5
Vehicle: car	58.4	68.4	17.1
Vehicle: pickup	57.4	60.2	4.9
Race: White	65.8	68.6	4.3
Race: non-White	43.8	56.3	28.5
Gender: male	51.0	59.2	16.1
Gender: female	67.2	71.1	5.9
White male	57.7	61.9	7.3
White female	76.8	77.3	0.7
Non-white male	38.5	52.8	37.2
Non-white female	50.7	59.8	18.1
Lee County (test)	68.6	65.1	-5.1
Leflore County (test)	35.4	46.4	31.0
Lauderdale County	58.2	72.9	25.2
Lowndes County	65.4	69.0	5.5
Cars: Lee County (test)	70.8	70.2	-0.7
Cars: Leflore County (test)	37.3	51.3	37.8
Cars: Lauderdale County	59.8	75.8	26.8
Cars: Lowndes County	69.4	74.3	7.1
Pickups: Lee County (test)	67.0	61.9	-7.6
Pickups: Leflore County (test)	32.1	35.3	10.1
Pickups: Lauderdale County	54.9	66.0	20.2
Pickups: Lowndes County	62.2	64.6	3.9



**Figure B-1. Pre/post seat belt use data by test and comparison county**

## Driver Licensing Office Survey

The Mississippi Department of Public Safety collected self report data from motorists at driver licensing offices across the State as part of their evaluation of the annual CIOT program. Surveys were also conducted in four communities just after the Thanksgiving Day 2006 holiday enforcement blitz as part of the demonstration grant. Survey data had previously been collected in three of the communities several months prior to the holiday enforcement blitz, during the CIOT campaign in May. These three communities were Greenwood, (Leflore County), Columbus (Lowndes County), and Meridian (Lauderdale County).

Individuals were approached while they were waiting for service and were asked to fill out a one-page questionnaire. The one-page questionnaire was used to assess public knowledge and awareness, changes motorists may have made in their seat belt use behaviors, how vigorously they felt their police agencies enforce the law, and the likelihood police would stop them for not wearing seat belts. The questionnaire remained unaltered between survey intervals in order to measure change as the demonstration programs progressed. Table B-2 summarizes the survey questions and responses across the two survey waves. Highlights from the analysis of survey data are discussed below.

**Self-Reported Seat Belt Use.** In terms of self-reported seat belt use, respondents showed a statistically significant increase in reporting that they *always* wear their seat belts when they drive or ride in cars from before to after CIOT in 2006 (60.8% to 64.8%). Self reported belt use among passenger car drivers continued to increase from the May to the November survey waves in the one test community (Greenwood) where data were available for analysis. The same could not be said for the comparison communities, Columbus and Meridian. Self-reported belt use among drivers of other vehicle types could not be analyzed due to the low number of respondents

**Importance of Enforcing the Law.** The proportion of respondents indicating that it is important for the police to enforce the seat belt law was consistently above 80% in both test and comparison communities but did not change significantly in response to the intervention.

**Chances of Getting a Ticket.** The proportion of respondents indicating that they would “always” get a ticket for not wearing a seat belt was highest in the test communities at the end of the November intervention. The proportion indicating “always” in the comparison communities dropped off after the May intervention.

**Enforcement of Law.** The proportion of respondents who think the seat belt law is enforced “very strictly” was higher in Greenwood (Leflore County) after the November intervention. In the Lee County test community, only the November intervention data were reported. The proportion indicating “very strictly” in the comparison communities was higher after the May intervention but did not improve after that.

**Table B-2. Summary of Mississippi Driver Licensing Office Survey Results**

	April 2006 %	June 2006 %	*Sig. Level
<b>Reported always wearing seat belt in cars</b>			
Drivers of All Vehicles	60.8	64.8	p < 0.05
Pickup Truck Drivers	49.4	57.1	ns
<b>Reported always wearing seat belt in trucks</b>			
Drivers of All Vehicles	57.8	61.7	ns
Pickup Truck Drivers	55.0	61.6	ns
<b>Reported always wearing seat belt in SUVs/Vans</b>			
Drivers of All Vehicles	60.1	61.7	ns
Pickup Truck Drivers	46.5	57.4	ns
<b>Thinks there is always a chance of ticket</b>			
Drivers of All Vehicles	25.4	26.9	ns
Pickup Truck Drivers	17.9	25.8	p < 0.05
<b>Thinks it is important to enforce seat belt law</b>			
Drivers of All Vehicles	83.0	84.1	ns
Pickup Truck Drivers	73.8	73.6	ns
<b>Thinks Police enforce law very strictly</b>			
Drivers of All Vehicles	17.2	22.9	p < 0.01
Pickup Truck Drivers	9.3	20.2	p < 0.01
<b>Has received a ticket for not wearing seat belt</b>			
Drivers of All Vehicles	8.9	8.7	ns
Pickup Truck Drivers	9.3	8.5	ns
<b>Recently seen or heard about seat belt enforcement</b>			
Drivers of All Vehicles	51.3	77.9	p < 0.01
Pickup Truck Drivers	41.6	79.8	p < 0.01
<b>Recently seen or heard about night enforcement</b>			
Drivers of All Vehicles	24.2	44.8	p < 0.01
Pickup Truck Drivers	19.4	49.7	p < 0.01
<b>Personally experienced enforcement</b>			
Drivers of All Vehicles	26.4	34.2	p < 0.01
Pickup Truck Drivers	21.7	32.7	p < 0.05
<b>Recently seen or heard about seat belts</b>			
Drivers of All Vehicles	67.8	89.0	p < 0.01
Pickup Truck Drivers	63.3	90.4	p < 0.01
<b>Radio as source of media</b>			
Drivers of All Vehicles	20.3	38.1	p < 0.01
Pickup Truck Drivers	16.2	39.2	p < 0.01
<b>Newspaper as source of media</b>			
Drivers of All Vehicles	17.4	33.6	p < 0.01
Pickup Truck Drivers	10.5	33.2	p < 0.01
<b>TV as source of media</b>			
Drivers of All Vehicles	45.7	66.8	p < 0.01
Pickup Truck Drivers	42.1	65.3	p < 0.01
<b>Police as source of media</b>			
Drivers of All Vehicles	7.6	11.4	p < 0.01
Pickup Truck Drivers	5.3	10.1	ns
<b>Recently seen or heard about seat belts and pickup trucks</b>			
Drivers of All Vehicles	22.3	37.1	p < 0.01
Pickup Truck Drivers	24.6	45.7	p < 0.01
<b>Click It or Ticket as media message</b>			
Drivers of All Vehicles	71.7	83.3	p < 0.01
Pickup Truck Drivers	73.7	86.9	p < 0.01
<b>Buckle Up In Your Truck as media message</b>			
Drivers of All Vehicles	3.2	8.9	p < 0.01
Pickup Truck Drivers	3.9	10.6	p < 0.01

\* Sig. Level was calculated using Chi Square analysis of the frequency of responses to each item over time for drivers of all vehicles. Separate analyses were then conducted for drivers of pickup trucks from the sample. Any p < 0.05 indicates a statistically significant change in the frequency of responses for the given sample over time; ns = not significant.

**Seen/Heard About Enforcement.** The proportion of respondents indicating that they had seen or heard about police enforcement that was focused on belt use in the past month remained equal to 80% in the Lee County test community and 76% in the Leflore test community at the end of the November intervention. The proportion indicating an affirmative response measured lower (below 70%) in the two comparison communities, a noticeable decrease from the measurement taken just after the May intervention, providing evidence that messages and/or enforcement were sustained in the test communities but not in the comparison communities.

**Personal Experience With Enforcement.** Reported personal experience with enforcement that was focused on seat belt use increased after the May intervention in test and comparison communities and continued to increase in one test community after the November intervention, where data were available, and in one comparison community but not in the other.

**Source of Messages.** Television was the most commonly reported source of exposure to program messaging peaking at 67% of respondents in the post intervention survey up from 46% in the baseline survey. Radio (up from 20% to 38% of respondents) and newspapers (up from 17% to 34%) were the next highest reported sources of exposure to messaging.

## **Discussion**

The initial intent of this demonstration project was to determine if seatbelt usage could be increased in a secondary law State. However, with passage of the primary law, the goal was changed to include increasing seat belt usage in the two counties (Lee and Leflore) in which belt use was lowest. Significant gains in belt usage were observed in one of the test counties (Leflore) and reductions in belt usage were observed in the other (Lee). The baseline data, however, indicate that Lee County's seat belt use was not as low as thought when it was selected for the intervention. In fact, with a usage rate of 68.6%, Lee County had the highest baseline rate of any of the counties studied. The significant increase in belt usage in Leflore County may indicate that the advertisement directed at African Americans was effective when combined with enforcement. Significant increases in belt use were also observed for the non-White population in general, particularly males.

The disparity between the baseline belt use rates in Lee and Leflore Counties highlights the need to have actual belt usage data in hand when selecting experimental sites. Since Lee's seat belt use was at the high end of the range for the State and Leflore's was in the low range, it is difficult to assess the success of the intervention. The diametrically opposite response to the campaign in the two counties is difficult to explain. Several possible hypotheses include:

- Underlying demographic differences that affected the way the population responded to the media messages. Perhaps Lee residents were "turned off" while people in Leflore resonated to the message.
- Varying media and enforcement processes in the two counties. Perhaps the timing of message delivery or on-the-road enforcement was not appropriate to the population of non-belt users in Lee.

The available information does not support a selection among these or any other explanations for the phenomenon observed. Further research such as additional surveys or focus groups might add some clarification, but would be difficult to mount in a valid manner because of the elapsed time since the campaign.



# **APPENDIX C: NORTH DAKOTA**

## Appendix C Table of Contents

Background.....	C-3
Goal of the Program.....	C-3
The Campaign.....	C-5
Evaluation.....	C-6
Observation Survey.....	C-6
Public Opinion Survey.....	C-8
Discussion.....	C-11

## **NORTH DAKOTA**

### **Background**

Over the past several years, a primary goal of the North Dakota Department of Transportation's (NDDOT) Drivers License and Traffic Safety divisions has been to increase seat belt use through campaigns that have concentrated heavily on enforcement and public information and education.

The seat belt usage rate reported in the official statewide survey conducted in June of 2005 was 76.3%. While this rate demonstrated a continued increase in seat belt use in the State, it was below the national average of 80.0 to 81.0% use in the 2004 to 2006 time period. In 2006, the usage rate increased to 79.0%, but it still remained lower than the national average.

The majority of the State's driving population is centered in small towns located on State-designated roadways, and almost a third of the population drives pickup trucks. NDDOT asserts that the typical North Dakotan takes pride in being an independent thinker and believes self-sufficiency is more important than passing laws that infringe on independence and freedom. This environment means that, as seat belt rates increase, it becomes more and more difficult to change the behavior of the remaining unbuckled drivers.

### **Goal of the Program**

With funding from a 403 demonstration project from the National Highway Traffic Safety Administration (NHTSA), NDDOT coordinated a campaign in priority counties identified as having the greatest potential to increase the overall statewide seat belt usage rate. The priority counties selected were Grand Forks and Cass in the eastern part of the State and Burleigh and Stark in the western part of the State. They were selected based on opportunity for improvement (i.e., they had relatively low belt use and sufficient populations so that an increase in belt use would affect the statewide rate), local community support, law enforcement involvement and geographical location. The two comparison counties, Stutsman in the east and Ward in the west, were selected based on their similarities of geographical location and demographics to the "priority" counties. Figure C-1 shows the location of the priority and comparison counties. This cooperative agreement was coordinated with a similar award made to the Wyoming Department of Transportation to use the same approach.

# North Dakota Office of Traffic Safety 403 Demonstration Media Plan



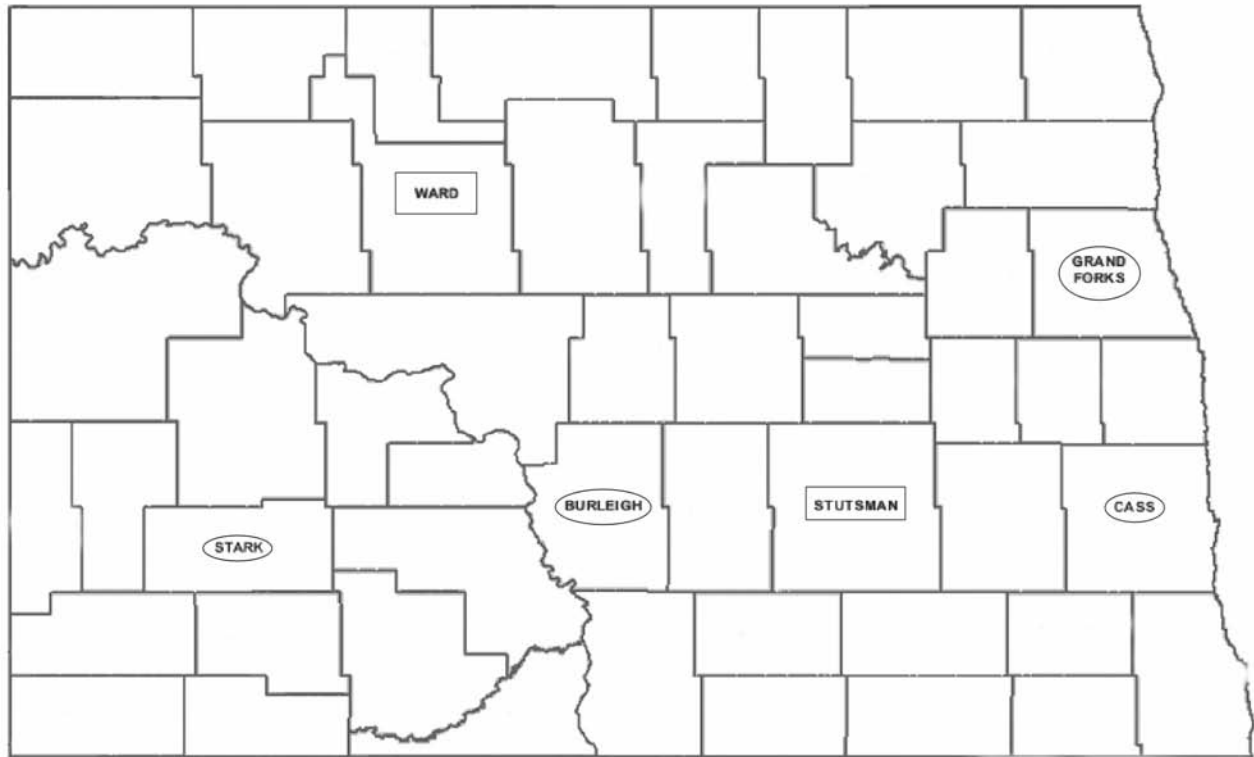
FEBRUARY 2006							MARCH 2006							APRIL 2006							MAY 2006							JUNE 2006						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
			1	2	3	4				1	2	3	4							1	1	2	3	4	5	6						1	2	3
5	6	7	8	9	10	11	5	6	7	8	9	10	11	2	3	4	5	6	7	8	7	8	9	10	11	12	13	4	5	6	7	8	9	10
12	13	14	15	16	17	18	12	13	14	15	16	17	18	9	10	11	12	13	14	15	14	15	16	17	18	19	20	11	12	13	14	15	16	17
19	20	21	22	23	24	25	19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	25	26	27	18	19	20	21	22	23	24
26	27	28	26	27	28	29	30	31	23	30	24	25	26	27	28	29	28	29	30	31	25	26	27	28	29	30								

NOVEMBER 2006							DECEMBER 2006							MARCH 2007							APRIL 2007							MAY 2007							JUNE 2007										
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S				
			1	2	3	4					1	2							1	2	3	1	2	3	4	5	6	7						1	2	3	4	5						1	2
5	6	7	8	9	10	11	3	4	5	6	7	8	9	4	5	6	7	8	9	10	8	9	10	11	12	13	14	6	7	8	9	10	11	12	3	4	5	6	7	8	9				
12	13	14	15	16	17	18	10	11	12	13	14	15	16	11	12	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	16	17	18	19	10	11	12	13	14	15	16				
19	20	21	22	23	24	25	17	18	19	20	21	22	23	18	19	20	21	22	23	24	22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	20	21	22	23				
26	27	28	29	30	24	31	25	26	27	28	29	30	25	26	27	28	29	30	31	29	30	27	28	29	30	31	24	25	26	27	28	29	30												

N O R T H  D A K O T A	<b>February 2006</b> Pre-Seatbelt & Awareness Surveys	<b>March Mobilization 2006</b> Earned Media Paid Media Enforcement Sub-Sample Surveys - Media & Seat Belt	<b>April 2006</b> Sub-Sample Surveys - Media & Seat Belt Quarterly Reports Due May Mobilization Pre-Survey	<b>May Mobilization 2006</b> Earned Media Paid Media Enforcement	
	<b>June 2006</b> Enforcement Statewide & Media Surveys	<b>November Mobilization 2006</b> Earned Media Paid Media Enforcement Sub-Sample Surveys - Media & Seat Belt	<b>December 2006</b> Sub-Sample Surveys - Media & Seat Belt		
	<b>March Mobilization 2007</b> Earned Media Paid Media Enforcement Sub-Sample Surveys - Media & Seat Belt	<b>April 2007</b> Sub-Sample Surveys - Media & Seat Belt Quarterly Reports Due May Mobilization Pre-Survey	<b>May Mobilization 2007</b> Earned Media Paid Media Enforcement	<b>June 2007</b> Enforcement Statewide & Media Surveys Quarterly Reports Due	

	<b>May 2006</b> Earned Media Paid Media Enforcement	<b>June 2006</b> Earned Media Enforcement	<b>May 2007</b> Earned Media Paid Media Enforcement	<b>June 2007</b> Earned Media Enforcement
--	--	---	--	---



**Figure C-1. Map of North Dakota showing priority counties (ellipses) and comparisons (rectangles)**

## **The Campaign**

To accomplish the goal of the campaign, a multi-element approach was used. This approach included implementing strong community outreach and education efforts with an intensive, targeted media campaign combined with high-visibility enforcement in four priority counties over a period beginning in March 2006 and ending in June 2007. All of the activities not directly related to the May 2006 and May 2007 CIOT mobilizations were generated by the demonstration project.

Safe Communities coalitions coordinated the outreach portion of the project in the four priority counties and received \$3,000 to assist their activities. Each coalition coordinator prepared an activity plan that attempted to maximize earned media opportunities. Some funding was used to obtain and distribute posters, brochures and other materials. The Safe Communities programs complemented the paid media campaign by engaging in noon talk shows, media interviews and by setting up displays and exhibits at public events.

A major media campaign featuring the defending “World of Outlaws” racing champion and North Dakota racing celebrity, Donny Schatz, was organized in Fargo (Cass County) for the May 2007 seat belt mobilization campaign. Although originally part of the May CIOT campaign, the spots were available for reuse in the priority counties.

Paid media distribution was organized by professional TV and radio agencies that maximized the exposure of the materials for the available budget by negotiating favorable media buys in which the stations donated additional time above and beyond that which was bought in each of the four priority counties.

More than 15 local law enforcement agencies were identified in the 4 priority counties as potential participants in this campaign. However, to ensure the funds could be best utilized by the agencies serving the greatest population, nine local agencies were identified in the four counties to participate. On the State level, the North Dakota Highway Patrol agreed to participation during the high-visibility enforcement periods by its district offices within the 4 priority counties thereby bringing the total of participating law enforcement agencies to 10.

Five waves of media and high-visibility enforcement were conducted. The campaigns took place on: March 20-26, 2006; May 22-June 4, 2006; November 20-26, 2006; March 19-25, 2007; and May 21-June 3, 2007. The May campaigns coincided with the national May seat belt mobilization efforts and were not funded by the demonstration project. Community outreach and earned media efforts were implemented and followed by intensive radio and television media campaigns. The media campaigns were completed prior to each enforcement period. The 10 law enforcement agencies that participated in the program issued 4,336 occupant protection citations overall, the largest number (568) being written by the North Dakota Highway Patrol.

**Evaluation**

The program was evaluated by an observational survey of belt use and by a public opinion survey conducted by the North Dakota Department of Transportation, Office of Traffic Safety at Driver Services examination sites.

**Observation Survey**

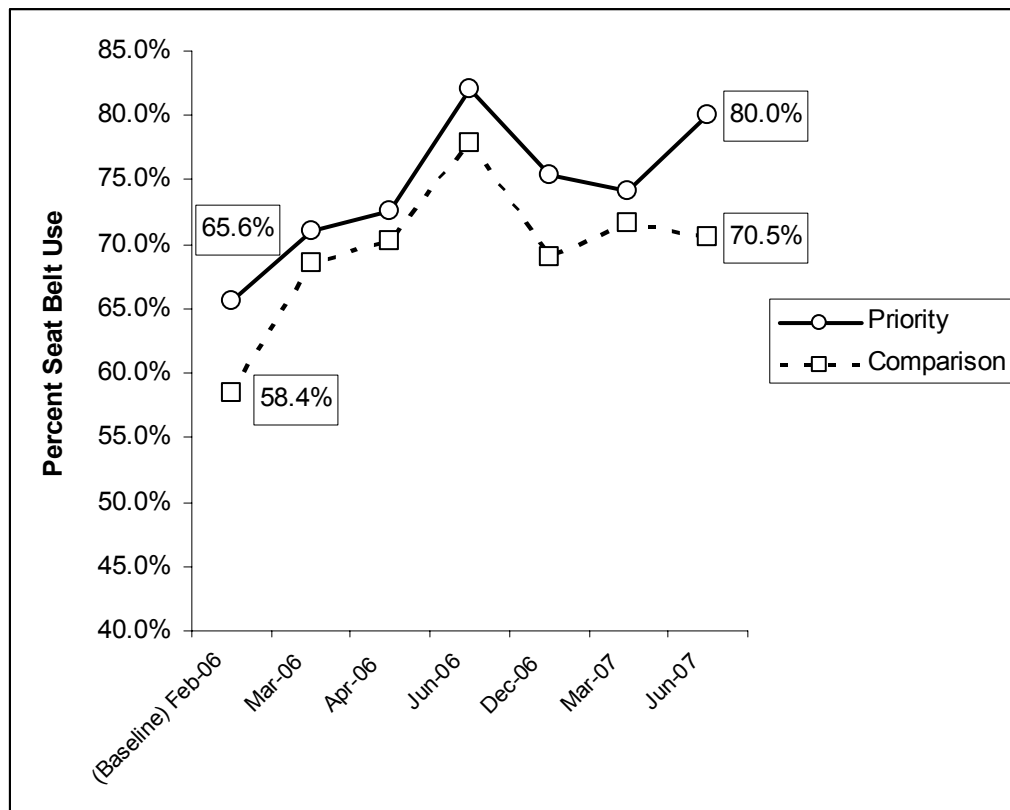
Seat belt use was observed in each of the priority counties and the two comparison counties during the seven waves of the project. Belt use rates for the priority and comparison counties are listed below in Table C-1 and shown graphically in Figure C-2.

**Table C-1. Belt use at priority and comparison counties across all waves of the project**

	<u>Percent belt use</u>		
	<u>Priority</u>	<u>Comparison</u>	<u>Combined</u>
Survey 1 - Feb 2006 (baseline)	65.6%	58.4%	63.6%
Survey 2 - March 2006	71.1%	68.5%	70.4%
Survey 3 - April 2006	72.6%	70.2%	72.0%
Survey 4 - June 2006	82.0%	77.8%	80.6%
Survey 5 - December 2006	75.4%	69.0%	73.7%
Survey 6 - March 2007	74.1%	71.6%	73.4%
Survey 7 - June 2007	80.0%	70.5%	77.0%

The observation surveys were conducted by DLN Consulting, Inc. pre and post the media and enforcement campaigns. The data show a steady increase in seat belt use from the February 2006 survey through June 2006 in both the priority and comparison counties. Over the next 6 months, no enforcement blitzes or observation surveys were conducted. For December 2006 the survey results showed a decline in usage rates from the June 2006 survey although the rate remained considerably higher than the February 2006 baseline use rate. Seat belt usage rates declined slightly in March 2007 at the priority counties but increased at the comparison counties.

The final observations in June of 2007 showed a sizable increase in seat belt use at the priority counties and a decrease in the comparison counties.



**Figure C-2. Seat belt use by measurement period for priority and comparison counties**

Overall, from February 2006 to June 2007, seat belt use increased by 14.4 percentage points in the priority counties and 12.1 percentage points in the comparison counties. However, the comparison counties never recorded as high a usage rate as did the priority counties. For the comparison counties, this was a 20.7% overall increase over the baseline. The priority counties demonstrated a slightly higher overall increase of 22.0%.

The largest increases were achieved in Burleigh county (20.9 percentage points), Ward county (20.9 percentage points) and Grand Forks county (19.0 percentage points). Females showed a higher belt use than males and achieved an overall belt use increase of 15.4 percentage points. Males achieved an overall belt use increase of 11.4 percentage points.

It is interesting to note in Table C-2 that rural occupants in the priority and comparison counties combined used belts more than did their urban counterparts although urban occupants achieved a higher increase in use over time (14.6 percentage points for urban occupants and 9.2 percentage points for rural occupants). It may be important to note, however, that NDDOT designates “urban” as being any community with 2,500 residents or more. Many of the urban sites surveyed in North Dakota would be considered very small towns in other parts of the country. It is also noteworthy that the statewide seat belt use rates for all of North Dakota were 79.0% in the 2006 survey and 82.2% in the 2007 measurement. Thus both the rural and urban populations in the priority and comparison counties exhibited greater increases in seat belt use

rates than did the State as a whole. This may be at least partly the result of the low baseline use rates which led to the selection of these counties.

**Table C-2. Seat belt use on urban and rural roads**

	<u>Percent belt use</u>	
	<u>Urban</u>	<u>Rural</u>
February 2006	59.8%	72.8%
March 2006	65.3%	83.7%
April 2006	69.6%	77.1%
June 2006	77.3%	87.2%
December 2006	70.2%	82.0%
March 2007	69.9%	80.5%
June 2007	74.4%	82.0%

In terms of vehicle type, occupants were most likely to be belted in vans and least likely to be belted in pickup trucks. Even though the usage rate for pickup truck occupants was the lowest of all of the vehicle types in all seven surveys, the usage rate for pickup truck occupants demonstrated a greater increase (16.2 percentage points) than automobile occupants (13.0 percentage points), SUV occupants (11.1 percentage points), or van occupants (10.9 percentage points).

Female pickup truck occupants demonstrated the greatest increase in usage rates over time (18.8 percentage points) followed by female occupants of automobiles (18.4 percentage points). Female usage rates increased by 15.4 percentage points for all types of vehicles while male usage rates increased by 11.4 percentage points for all vehicle types.

### **Public Opinion Survey**

The North Dakota Department of Transportation, Office of Traffic Safety distributed a paper and pencil, one-page survey at driver licensing offices that examined self-reported seat belt use, exposure to safety messages and the enforcement of seat belt laws. This survey was intended to help determine if the public was aware of the increased media and enforcement efforts. Four waves of surveys were collected at the driver license sites in each of the priority and comparison counties. The first wave (pre wave or baseline) was collected before any program activities took place (February 20 – 24, 2006). The subsequent three “post waves” of data were collected after each media and enforcement campaign (March 27 – 31, 2006; November 27 – December 1, 2006; and March 26 – 30 2007). Table C-3 shows the survey questions and summarizes the responses across waves. A discussion of the major findings follows.



**Table C-3. Summary of North Dakota Driver Licensing Office Survey Results**

	<b>Feb 2006 %</b>	<b>Mar 2006 %</b>	<b>Nov 2006 %</b>	<b>Mar 2007 %</b>	<b>*Sig. Level</b>
<b><i>Reported always wearing seat belt</i></b>					
Intervention	49.7	51.5	58.6	58.4	p < 0.01
Comparison	56.5	50.2	57.4	49.5	ns
<b><i>Thinks there is always a chance of ticket</i></b>					
Intervention	14.7	14.9	18.3	15.7	ns
Comparison	15.9	16.9	22.0	15.6	ns
<b><i>Thinks Highway Patrol enforces law very strictly</i></b>					
Intervention	25.2	23.1	23.0	27.2	ns
Comparison	30.7	30.5	34.3	32.0	ns
<b><i>Thinks Local Police enforce law very strictly</i></b>					
Intervention	21.8	21.5	21.2	21.7	ns
Comparison	25.9	25.5	28.7	26.5	ns
<b><i>Has received a ticket for not wearing seat belt</i></b>					
Intervention	12.7	16.7	11.5	15.3	p < 0.05
Comparison	13.8	15.4	17.0	17.1	ns
<b><i>Thinks North Dakota's law is too strong</i></b>					
Intervention	13.2	14.0	8.7	10.7	p < 0.01
Comparison	11.0	10.8	14.9	12.7	ns
<b><i>Recently read, seen or heard media</i></b>					
Intervention	60.7	67.8	74.5	68.7	p < 0.01
Comparison	61.3	62.3	72.2	60.4	p < 0.01
<b><i>TV as source of media</i></b>					
Intervention	31.7	37.9	46.5	42.3	p < 0.01
Comparison	33.6	29.9	40.5	35.4	p < 0.05
<b><i>Radio as source of media</i></b>					
Intervention	22.8	26.3	33.0	25.9	p < 0.01
Comparison	20.2	24.3	33.7	23.8	p < 0.01
<b><i>Newspaper as source of media</i></b>					
Intervention	17.4	17.1	19.1	18.4	ns
Comparison	21.7	15.9	18.2	15.9	ns
<b><i>Billboards as source of media</i></b>					
Intervention	15.3	18.3	22.9	18.6	p < 0.01
Comparison	20.8	21.9	30.2	17.1	p < 0.01
<b><i>Click It or Ticket as media message</i></b>					
Intervention	10.6	20.6	33.3	22.3	p < 0.01
Comparison	14.9	19.5	29.6	17.4	p < 0.01
<b><i>Buckle Up/Wear Seat Belts as media message</i></b>					
Intervention	14.0	10.9	8.4	11.5	p < 0.01
Comparison	11.3	11.7	8.2	11.0	ns

\* Sig. Level was calculated using Chi Square analysis of the frequency of responses to each item over time for intervention and comparison sites separately. Any p < 0.05 indicates a statistically significant change in the frequency of responses for the given sample over time; ns = not significant.

**Self-reported seat belt use.** Respondents were asked how often they wear their seat belts when they drive or ride in a vehicle. For the priority counties as a whole, the percentage of respondents indicating that they always wear seat belts rose from 49.7% in February 2006 to a high of 58.6% in the November 2006 wave. This effect was primarily due to significant increases in reported seat belt use at Grand Forks and Cass. Most notably, Cass rose from a low of 38.0% of respondents indicating that they always use belts in the February 2006 wave to a high of 66.1% in the March 2007 wave. Burleigh and Stark Counties showed increases in the percentages of respondents who indicated that they always wear seat belts, but these changes were not statistically significant. Stutsman and Ward, the comparison counties, did not show statistically significant changes in self-reported seat belt use.

Males were more likely to have lower rates of self-reported seat belt use than were females in all counties. Overall, there is support for the conclusion that the interventions were associated with the increases in self-reported seat belt use for both males and females.

**Awareness of paid media campaigns.** Respondents were asked if they read, saw or heard anything about wearing seat belts. Overall, 66.8% of the sample indicated that they had read, heard or seen something. At both the priority and comparison sites, significant increases from pre to post survey waves were found for the percentage of respondents indicating that they had read, seen, or heard something. The highest levels of exposure came during the November 2006 wave with 74.5% of respondents at the priority sites and 72.2% of respondents at the comparison sites indicating that they read, saw or heard some form of media about wearing seat belts. Further examination revealed that significant increases in exposure occurred at the priority sites of Grand Forks, Cass, and Burleigh and also at Stutsman, a comparison site. Respondents at Cass showed the greatest change in knowledge, rising from a low of 39.4% in the February 2006 wave to a high of 78.8% being exposed to a message in the November 2006 wave.

**Knowledge of campaigns.** Respondents were then asked “What did it say?” in reference to the message they had read, seen, or heard. These open-ended responses were coded based on content. Click It or Ticket (CIOT) was the primary response that was received, although it was not possible to separate general CIOT messages such as those from the national campaign and the Danny Schatz messages made specifically for North Dakota. Significant increases in the percentage of respondents identifying CIOT were seen at both the priority and comparison counties. For the priority counties, the percent of respondents identifying CIOT went from a low of 10.6% in February 2006 to a high of 33.3% in the November 2006 wave. Comparison counties showed a similar pattern, going from a low of 14.9% in February 2006 to a high of 29.6% in the November 2006 wave. This pattern has been seen before and can be interpreted as indicating the significant strength of the CIOT media campaign. Basically, it is not possible to shield comparison communities from the CIOT messages. Thus, it is probably most accurate to consider CIOT as the baseline condition in both the priority and comparison counties. The intervention in the priority counties attempted, in essence, to improve of the statewide CIOT message that both the priority and comparison counties received.

**Citations for seat belt violations.** A question asked respondents if they had ever been cited for a seat belt violation. A significant increase in the number of people reporting that they received a ticket occurred at the intervention sites between the February 2006 wave (12.7%) and the March 2006 wave (16.7%), followed by a return to below baseline in the November 2006 wave (11.5%) and another increase during the March 2007 wave (15.3%). Respondents at the comparison sites did not show a significant increase in reported ticketing, although a slightly

greater percentage of them reported receiving a citation. The percentage of people in the comparison counties who reported receiving a citation over the same four measurements was 13.8%, 15.4%, 17.0%, 17.1% and 15.5%.

**Opinions about North Dakota seat belt law.** The survey asked respondents about their opinions of the North Dakota seat belt law—whether it was too weak, too strong or just right. Most respondents perceived the law as just right. For those indicating that the law is too strong, there were only modest differences across the waves and between the counties. No significant changes in opinions were found over time, although males were about twice as likely as females to perceive the law as too strong.

## **Discussion**

The North Dakota focus on counties that were perceived to have the greatest opportunity to make gains that could affect the statewide belt use rate appears to have been productive. Seat belt use and awareness of the media and enforcement were higher in the four “priority” county than in the two comparison counties. Nevertheless, seat belt observations showed increases in belt use in both priority and comparison counties although larger increases were observed for the priority counties. Also, self-report surveys completed at driver licensing offices revealed that a large percentage of respondents had heard some of the program messages related to seat belt use not only in the priority counties but also in the comparison communities. This is possibly the result of the pervasive effects of the national and State CIOT campaigns. A similar pattern has been seen in other States that have attempted to isolate communities to serve as comparisons. In this age of multi-media and broad distribution of TV and radio by cable and satellite, it is possible that no community is truly isolated from the influence of a high-visibility media program such as CIOT. Thus, comparison counties, even when as remote from the intervention sites as is Cass County (see Figure C-1) are likely to receive at least some of the mass media from a statewide campaign and therefore are not totally isolated control communities.

Another interesting and unexpected result was that “rural” occupants used belts more than did their urban counterparts both before and after the mobilizations. This is contrary to the general findings that belt use in rural areas lags that in urban communities. The North Dakota results, however, may simply be a result of the definition of the distinction between urban and rural in a State that is predominately rural.

The program in North Dakota was powerful in terms of content and reach. Seat belt use increased in both the priority and comparison counties. It should be noted that a similar program was in progress in Wyoming and may have contributed to a spillover effect into North Dakota, although this effect cannot be documented from the available data.

**This Page Intentionally Left Blank**

# **APPENDIX D: WYOMING**

## Appendix D Table of Contents

Background.....	D-3
Goal of the Program.....	D-3
The Campaign.....	D-5
Evaluation.....	D-5
Observational Survey.....	D-5
Public Opinion Survey.....	D-8
Discussion.....	D-11

## **WYOMING**

### **Background**

Wyoming is the most rural State in the Nation. With a total population under 500,000, cities and towns are few and far between. The Wyoming traffic safety program accepts the assumptions that rural seat belt use is low because:

- People are comfortable driving long distances on rural roadways and do so with a sense of assurance that they are good drivers and their roadways are safe.
- The driving public has little perception that they might be involved in a crash, let alone one that is life threatening.
- Traveling many miles with virtually no other traffic in sight creates a false sense of security and generates a perception of safety.

When these assumptions are coupled with a higher-than-average number of pickup drivers (in some places in Wyoming over one-half of the vehicles on the road), it is not surprising that most of the fatality and injury crashes involve males in pickup trucks.

In the 1989 legislative session, a law to encourage seat belt use was adopted. This law allowed a \$10 reduction in a citation fee if the driver's seat belt was in use at the time of an infraction. In the 2000 legislative session, a law requiring use of safety equipment was adopted for all drivers and passengers under the age of 12. Additionally, the statute included penalties of \$25 for the driver and \$10 for each passenger not buckled. Still, an officer may not stop a vehicle solely for the lack of seat belt usage (i.e., secondary enforcement was still the prescribed enforcement type).

### **Goal of the Program**

In the past, Wyoming has creatively balanced education and enforcement to increase seat belt use and did so again with this demonstration project. The State has relied heavily on public information and education campaigns supported by enforcement of the secondary law at specific times of the year. These efforts have been successful, yet Wyoming continues to have higher fatality rates than the national average.

Wyoming crash data show that males between the ages of 18 and 34 have the lowest seat belt usage. The most common vehicle involved in these crashes is the pickup truck. This group was the primary target of the Section 403 demonstration project described herein. Secondary targets were males in any vehicle and the general public. Instead of blanketing the State with public information and education campaigns at selected times of the year, as was done in previous campaigns, this campaign targeted "priority" counties that had high crash and fatality rates, low seat belt use and populations significant enough to impact the statewide use rate. The priority counties, as shown in Figure D-1, were Albany, Campbell, Fremont, Laramie, Natrona, and Sheridan. Uinta was selected as a comparison county. The cooperative agreement award by the National Highway Traffic Safety Administration (NHTSA) to Wyoming for the demonstration project was made in conjunction with an award made to the North Dakota Department of Transportation that used the same approach during the same timeframe.

# Wyoming Highway Safety Program 403 Demonstration Media Plan



FEBRUARY 2006							MARCH 2006							APRIL 2006							MAY 2006							JUNE 2006							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
			1	2	3	4				1	2	3	4							1		1	2	3	4	5	6						1	2	3
5	6	7	8	9	10	11	5	6	7	8	9	10	11	2	3	4	5	6	7	8	7	8	9	10	11	12	13	4	5	6	7	8	9	10	
12	13	14	15	16	17	18	12	13	14	15	16	17	18	9	10	11	12	13	14	15	14	15	16	17	18	19	20	11	12	13	14	15	16	17	
19	20	21	22	23	24	25	19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	25	26	27	18	19	20	21	22	23	24	
26	27	28					26	27	28	29	30	31		23 <sup>30</sup>	24	25	26	27	28	29	28	29	30	31				25	26	27	28	29	30		

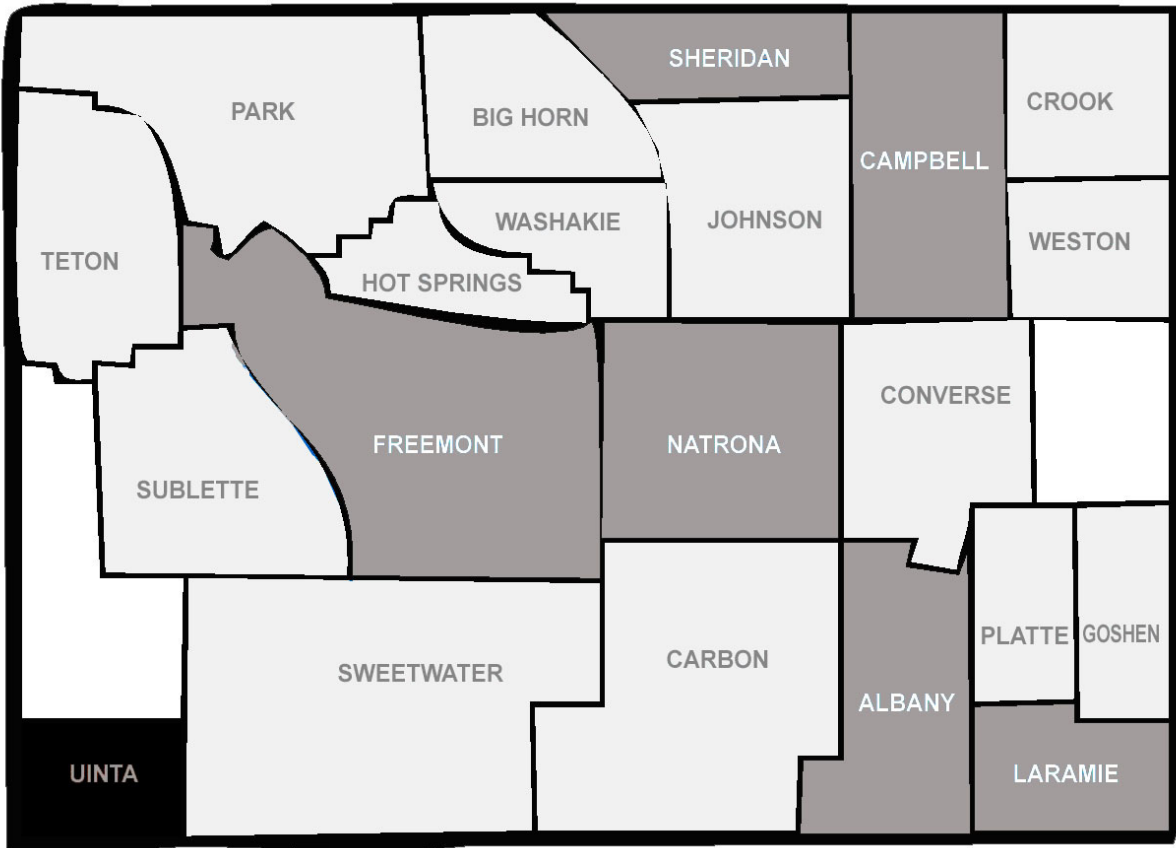
  

NOVEMBER 2006							DECEMBER 2006							MARCH 2007							APRIL 2007							MAY 2007							JUNE 2007							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
			1	2	3	4						1	2				1	2	3	1	2	3	4	5	6	7				1	2	3	4	5							1	2
5	6	7	8	9	10	11	3	4	5	6	7	8	9	4	5	6	7	8	9	10	8	9	10	11	12	13	14	6	7	8	9	10	11	12	3	4	5	6	7	8	9	
12	13	14	15	16	17	18	10	11	12	13	14	15	16	11	12	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	16	17	18	19	10	11	12	13	14	15	16	
19	20	21	22	23	24	25	17	18	19	20	21	22	23	18	19	20	21	22	23	24	22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	20	21	22	23	
26	27	28	29	30			24 <sup>31</sup>	25	26	27	28	29	30	25	26	27	28	29	30	31	29	30						27	28	29	30	31			24	25	26	27	28	29	30	

W Y O M I N G	<b>February 2006</b> Pre-Opinion	<b>March 2006</b> Pre-Opinion    Post-Opinion Pre-Observation    Post-Observation Media Blitz    Enforcement Community	<b>May 2006</b> Pre-Observation Media Blitz Community Enforcement
	<b>June 2006</b> Media Blitz    Post-Opinion Community    Post-Observation Enforcement	<b>November 2006</b> Pre-Observation    Post-Observation Media Blitz    Post-Opinion Community Enforcement	<b>December 2006</b> Post-Observation Post-Opinion
	<b>March 2007</b> Pre-Observation    Post-Observation Media Blitz    Post-Opinion Community Enforcement	<b>May 2007</b> Pre-Observation Media Blitz Community Enforcement	<b>June 2007</b> Media Blitz    Post-Opinion Community    Post-Observation Enforcement

	<b>May 2006</b> Earned Media Paid Media Enforcement	<b>June 2006</b> Earned Media Enforcement	<b>May 2007</b> Earned Media Paid Media Enforcement	<b>June 2007</b> Earned Media Enforcement
--	--	---	--	---





**Figure D-1. Map of Wyoming showing priority counties (gray) and comparison county (black)**

### **The Campaign**

Five media and high-visibility enforcement campaigns were conducted. The campaigns took place in March 2006, May 2006, November 2006, March 2007 and May 2007. The May campaigns coincided with the national *Click It or Ticket* (CIOT) seat belt mobilization efforts. The campaigns combined community education, enforcement, and intensive media efforts in the six priority counties. Twelve law enforcement agencies participated in these campaigns. They reported issuing 337 occupant protection citations and 261 warnings. Most citations (182) were issued by the Wyoming Highway Patrol. This level of seat belt activity by law enforcement was an increase from levels prior to the intervention and was considered by those involved to represent a meaningful increase in attention to seat belt violations.

### **Evaluation**

The program was evaluated by an observational survey of belt use and a public opinion survey that was conducted by the Wyoming Department of Transportation (WYDOT) at Wyoming Driver Services license examination sites.

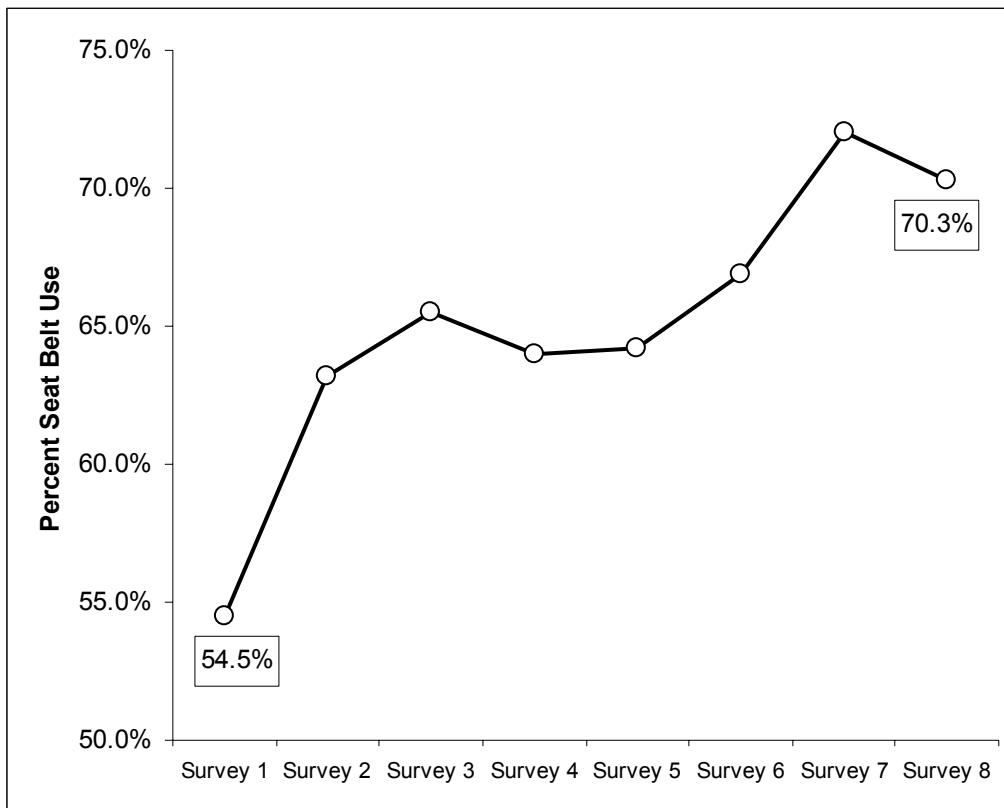
### **Observational Survey**

For purposes of this study, belt use was observed in each of the priority counties and the one comparison county by DLN Consulting, Inc.. Eight waves of observations were conducted.

Belt use for all of the priority counties combined for each wave is presented in Table D-1 and Figure D-2.

**Table D-1. Combined priority county belt use for each wave**

	<u>Percent belt use</u>
Survey 1 - March 6-13, 2006 (baseline)	54.5%
Survey 2 - March 27-April 1, 2006	63.2%
Survey 3 - June 5-10, 2006 (after May mobilization)	65.5%
Survey 4 - November 7-11, 2006	64.0%
Survey 5 - November 28-December 2, 2006	64.2%
Survey 6 - March 8-13, 2007	66.9%
Survey 7 - April 19-21, 2007	72.0%
Survey 8 - June 4-8, 2007 (after May mobilization)	70.3%



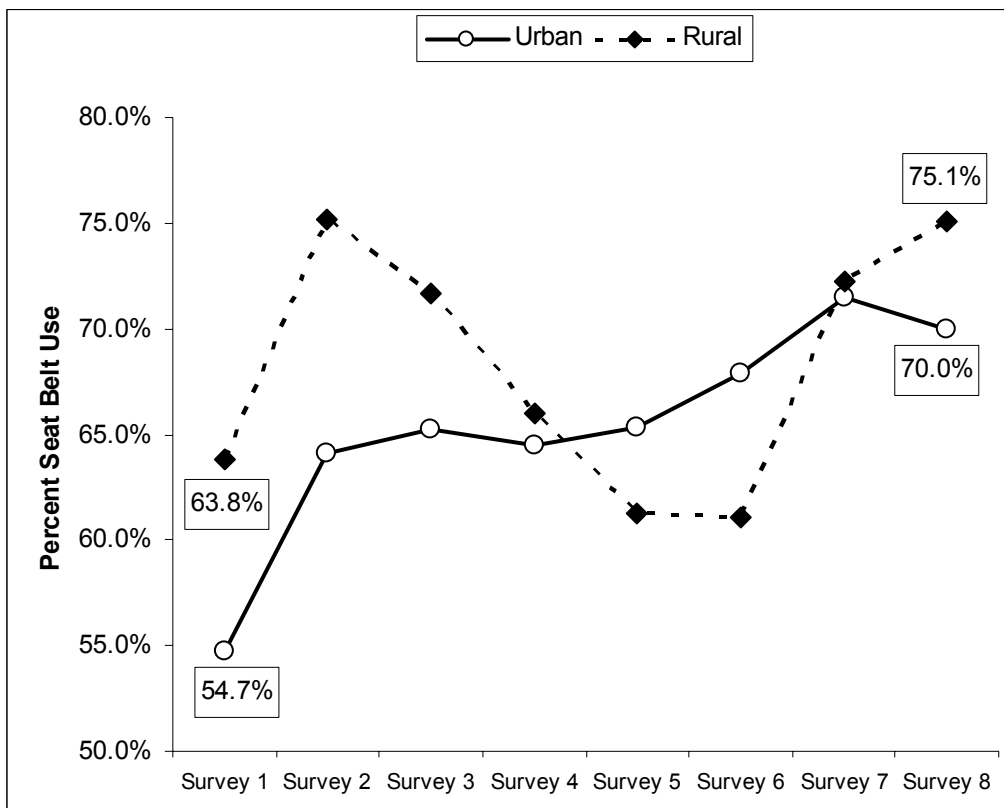
**Figure D-2. Belt use in priority counties (see Table D-1)**

The data show belt use for the priority counties starting at a baseline use rate of 54.5% and a gradual increase to 70.3% for an overall increase of 15.8 percentage points. In contrast, the comparison county showed an increase of less than 1.0% over this time frame. The largest increases were achieved in Laramie County (27.2 percentage points), Albany County (17.3 percentage points), Natrona County (16.1 percentage points), and Fremont County (10.6 percentage points). Females showed higher belt use than males.

It is interesting to note that rural occupants used belts more than did their urban counterparts, although urban occupants showed a higher increase in use over time (15.3 percentage points for urban occupants in contrast to 11.3 percentage points for rural occupants [See Table D-2 and Figure D-3]). The higher use by rural residents is consistent with the findings in North Dakota (see Appendix C), but contrary to conventional wisdom. Again, the salient issue may be the definition of “urban” in a State that is predominately rural. Nevertheless, it is of note that the areas in Wyoming and North Dakota considered to be more urbanized by the State authorities had lower belt use than those areas considered rural by the same agency and responded more to the intervention.

**Table D-2. Belt use on urban and rural roads**

	<u>Percent belt use</u>	
	<u>Urban</u>	<u>Rural</u>
Survey 1 –	54.7%	63.8%
Survey 2 –	64.1%	75.2%
Survey 3 –	65.2%	71.7%
Survey 4 –	64.5%	66.0%
Survey 5 –	65.3%	61.3%
Survey 6 –	67.9%	61.1%
Survey 7 –	71.5%	72.2%
Survey 8 –	70.0%	75.1%



**Figure D-3. Urban/rural seat belt use (see Table D-2)**

Van and SUV occupants were most likely to be buckled up. Pickup truck occupants were least likely to be buckled up. However, while the pickup truck usage rates were the lowest in each of the eight surveys, this vehicle type recorded a higher overall increase in usage rate (16.5 percentage points) than did automobiles (11.9 percentage points) and SUVs (14.6 percentage points). There were increases of 15.5 percentage points among males in SUVs, 14.1 percentage points among males in both pickup trucks and vans, and 10.8 percentage points among males in cars.

Each of the eight surveys was analyzed to determine if the numbers of pickups observed in the different counties had any effect on the overall usage rate of the individual counties. Laramie, Albany, and Uinta Counties typically recorded the highest seat belt usage rates and the lowest number of observed pickups in each of the surveys. Campbell, Natrona and Fremont Counties typically had the most observed pickups and the lowest seat belt usage rates.

For all occupants, female pickup truck occupants demonstrated the greatest increase in usage rates over time (23.2 percentage points), followed by female occupants in vans (18.0 percentage points) and male occupants in SUVs (15.5 percentage points). Both male and female occupants, drivers and passengers, documented increases in seat belt use in all types of vehicles.

Finally, it is important to note that an approved methodology was developed for a statewide observation survey in March 2006, and a statewide baseline usage rate of 61.2% was observed. Since March, a statewide pre-May mobilization survey was conducted in April 2007, and two statewide surveys were completed after the May mobilization campaigns of 2006 and 2007. In each of the surveys, an increase in seat belt use was realized. The usage rates obtained with the new methodology are shown in Table D-3.

**Table D-3. Statewide belt use when the “new” methodology was used**

March 2006	61.2%
June 2006	63.5%
April 2007	71.4%
June 2007	72.2%

These results indicate that the goals of the program in Wyoming were achieved. The priority counties showed an increase in belt use as did the statewide data. In addition, there was an increase in belt use among males occupying pickups and by male occupants of all vehicle types. Males had been lagging in seat belt use, and their notable increased use is a positive step.

### **Public Opinion Survey**

As part of the study to assess the effects of efforts to increase seat belt use in Wyoming, a survey was conducted by the WYDOT at four driver services (licensing) offices. The survey collected data on self-reported seat belt use, exposure to safety messages, and enforcement of seat belt laws in the priority counties (there was no survey in Uinta, the comparison county). The specific data collection sites were located in Casper (Natrona County), Laramie (Albany County), Cheyenne (Laramie County) and Sheridan (Sheridan County). At each of these sites, the general population was exposed to increased media and enforcement blitzes. The same

survey form was used at all four offices for all the waves of data collection. The data were collected in nine waves. The first two waves were combined to represent the baseline data. The dates of each wave are listed in Table D-4.

**Table D-4. Dates and descriptions of opinion survey data collection**

<u>Dates</u>	<u>Description</u>
Wave 1 – February 27 – March 3, 2006	March 2006 baseline week 1*
Wave 2 – March 6, 2006 – March 10, 2006	March 2006 baseline week 2*
Wave 3 – March 13, 2006 – March 17, 2006	March 2006 media only
Wave 4 – March 20, 2006 – March 24, 2006	March 2006 media and enforcement
Wave 5 – March 27, 2006 – March 31, 2006	Post March 2006 campaign
Wave 6 – June 5, 2006 – June 9, 2006	Post May/June 2006 campaign
Wave 7 – November 27, 2006 – December 1, 2006	Post November 2006 campaign
Wave 8 – March 26, 2007 – March 30, 2007	Post March 2007 campaign
Wave 9 – June 4, 2007 – June 8, 2007	Post May/June 2007 campaign

\*Waves 1 and 2 constituted the baseline and were combined

The questions in the survey and a summary of the responses are shown in Table D-5 on the next page. The following sections discuss the primary findings.

**Self-reported seat belt use.** Respondents were asked how often they wear seat belts when they drive or ride in a vehicle. Across all waves, 62.8% of the respondents reported that they “always” wear a seat belt. The usage percentage ranged from a baseline of 61.1% to a post June 2007 report of 66.6%. More females (70.5%) than males (55.6%) reported that they always use their seat belts and female rates increased over time. An examination of reported seat belt use by age revealed no significant changes across time. Occupants of pickup trucks reported lower rates of always wearing seat belts (53.4%) than did occupants of SUVs (66.8%) and cars (65.7%).

Self-reported seat belt use was also examined for any possible association with receipt of a ticket. The only major change across the waves occurred for people who did not receive a ticket. This group showed a significant increase in seat belt use culminating in a high of 68.9% for the June 2007 wave. Those who indicated receipt of a ticket reported much lower rates of seat belt use, and their rates did not change across the waves.

An interesting finding related to support for a primary seat belt law is that those people who support a primary seat belt law were almost twice as likely to indicate that they “always wear seat belts” (78.2%) when compared to those people who do not support a primary seat belt law (42.1%).

**Knowledge of Campaigns.** Respondents were asked if they knew the name of any seat belt campaign in Wyoming. They were then presented with six choices and asked to check all that they knew. Knowledge of at least one campaign increased from 84.4% in the March 2006 baseline wave to a high of 92.4% in the June 2007 Post wave.

**Table D-5. Summary of Wyoming Driver Licensing Office Survey Results**

	<b>Feb- Mar 2006 %</b>	<b>Mar 2006 Media Only %</b>	<b>Mar 2006 Media and Enforce %</b>	<b>Mar 2006 Post %</b>	<b>Jun 2006 %</b>	<b>Nov 2006 %</b>	<b>Mar 2007 %</b>	<b>Jun 2007 %</b>	<b>*Sig. Level</b>
<i>Reported always wearing seat belt</i>	61.1	60.9	62.0	61.1	60.9	64.8	64.8	66.6	p < 0.05
<i>Thinks there is always a chance of ticket</i>	20.9	21.1	18.0	18.8	19.9	25.3	19.6	24.5	p < 0.01
<i>Thinks police enforce law very strictly</i>	18.6	18.0	14.4	15.7	18.0	21.4	17.0	22.0	p < 0.01
<i>Has received a ticket for not wearing seat belt</i>	8.5	6.6	7.5	6.2	6.5	8.1	7.6	7.3	ns
<i>Was stopped and warned</i>	1.8	1.7	2.1	3.0	2.1	2.7	2.2	2.0	ns
<i>Has seen increased enforcement</i>	25.7	26.8	26.2	29.6	34.3	31.0	30.8	43.2	p < 0.01
<i>Knew any media message</i>	84.4	83.7	84.6	87.1	90.8	90.9	91.6	92.4	p < 0.01
<i>TV as source of media</i>	39.6	40.7	45.8	49.5	50.9	49.5	49.4	51.7	p < 0.01
<i>Radio as source of media</i>	25.6	23.6	29.1	29.0	40.3	33.9	34.9	33.7	p < 0.01
<i>Newspaper as source of media</i>	10.4	10.3	9.3	13.1	10.4	11.7	12.7	12.6	ns
<i>Highway Message Boards as source of media</i>	42.1	40.4	39.7	35.0	40.0	41.2	40.2	45.1	p < 0.01
<i>Click It or Ticket as media message</i>	51.5	47.2	49.6	49.1	61.9	55.0	53.2	59.0	p < 0.01
<i>Click It Don't Risk It as media message</i>	9.3	18.8	32.0	36.7	38.8	50.2	54.5	57.1	p < 0.01

\* Sig. Level was calculated using Chi Square analysis of the frequency of responses to each item over time for all measurement sites combined. Any p < 0.05 indicates a statistically significant change in the frequency of responses for the given sample over time; ns = not significant.

The percentage of respondents who recognized *Click It, Don't Risk It* (this project's primary tag line) increased from 9.3% in the March 2006 Pre Program wave to 57.1% in the June 2007 Post wave. *Click It Or Ticket* was the most recognized name in a single measurement wave with 61.9% of the total sample indicating they knew the campaign name in the June 2006 Post wave. Recognition of *Click It Or Ticket* then fell to 55.0% in the November 2006 Post wave and 53.2% in the March 2007 Post wave before rising to 59.0% in the June 2007 Post wave.

**Media type where message was seen/heard.** Respondents most frequently mentioned television (46.5%), variable message signs (41.0%) and radio (31.0%) as the sources of their knowledge of media messages.

Reported exposure to television media campaign messages increased significantly over time for the sample as a whole. Both males and females showed increases in exposure to television messages. Whites (who represented over 87% of the sample and were therefore the only racial group that could be separately analyzed) showed significant increases in exposure, as did drivers of passenger cars, pickup trucks and SUVs.

## **Discussion**

This demonstration project identified six priority counties and one comparison county and conducted five media and enforcement blitzes. The target audience within these counties was male pickup truck drivers between the ages of 18 and 34. Overall, substantial increases in belt use were noted in the priority counties while virtually no increase was noted in the comparison county.

In terms of goals, it can be concluded that all goals of the program in Wyoming were achieved. Not only was there an increase in belt use among males occupying pickup trucks, but there was also an increase in belt use by male occupants of all vehicle types, as well as a general statewide increase in belt use. It can be concluded from this program that targeting priority counties and specific demographics within counties can be a successful method for increasing seat belt use.











DOT HS 811 080  
March 2009



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

