



# Evaluation of A Rural Demonstration Program To Increase Seat Belt Use in The Great Lakes Region

FINAL REPORT

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16. Abstract  Six States in the Great Lakes Region (Region 5) participated in a <i>Rural Demonstration Program</i> to increase seat belt use in rural areas and among high-risk occupants, such as young males and occupants of pickup trucks. These efforts, which included enforcement and publicity, preceded statewide <i>Click It or Ticket</i> mobilizations in 2005 and 2006. Results from telephone surveys showed large and significant increases in awareness of program efforts, including special enforcement. These results also suggested that the 2006 program had higher baseline rates of awareness and slightly less change associated with it than the 2005 effort. Observational surveys of seat belt usage found similar results, with a median 6.5-point rural increase in 2005 and a median 3.8-point rural increase in 2006. Statewide, there was a median 4.7-point increase in 2005 and a 4.1-point increase in 2006. Over the two-year program, there was a median 9.2-point increase in rural areas and a median 6.5-point increase statewide. In addition to significant overall increases in all States, there were significant increases among key high-risk groups, including males, younger people, and occupants of pickup trucks. Two-year increases among these groups averaged 11 to 12 percentage points. Trends in seat belt use, both observed and among crash victims, showed continued increases during the period of the RDP/CIOT mobilizations, a time during which there was very little progress nationwide.					
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## **Background**

This report describes the activity, visibility, and impact of a two-year *Rural Demonstration Program* (RDP) to increase seat belt use in the Great Lakes Region (GLR), also known as NHTSA's Region 5. It describes results from the second year of activity (2006) in comparison with the first year (2005), and it describes program impact in the context of more than five years of mobilization efforts in the region. The six States of the GLR implemented the RDP immediately prior to the May National *Click It or Ticket* (CIOT) mobilizations in both years. During these pre-CIOT periods, all six States initiated media campaigns and most of them intensified enforcement in targeted rural areas. Messaging was designed to alert rural residents that the seat belt laws were being enforced. All six States conducted statewide CIOT campaigns, which included additional paid media and enforcement.

## **Media**

In each of the two years, about 227 counties were targeted by the RDP media campaigns. Four States targeted reasonably large segments of their rural population and two States (Indiana and Ohio) conducted more focused campaigns. In 2006, about \$1.2 million was spent on paid advertising for the RDP and about \$3.2 million was spent for CIOT, similar to the amounts spent in 2005. These expenditures translated to about 15¢ per capita during the RDP and 9¢ per capita during CIOT, with average gross rating points (GRPs) of about 440 during the RDP and 520 during CIOT. Compared with 2005, there was a slight shift to more radio and less television advertising in 2006.

## Enforcement

Nearly all States used regular grantees as their core group of participating enforcement agencies, with additional agencies recruited by means of special grants or equipment incentives. Law enforcement liaisons (LELs) played a major role in the recruitment process and all States reported using overtime funding for one or both waves of enforcement. Three States used enforcement zones, along with saturation patrols and regular patrols, in their enforcement strategy and the remaining three States used only regular and saturation patrols.

Five of the six States intensified enforcement during the 2006 RDP, compared with three States in 2005. About 33 citations per 10,000 residents were issued in the five States that enforced during the 2006 RDP. This was 30% more than in the three States that enforced during the 2005 RDP. In general, citation rates in the three primary law States were at or above the benchmark levels, with higher rates during the RDP than during CIOT. In secondary law States, RDP citation rates were generally lower than in primary law States and below the benchmark levels of 20 citations per 10,000 residents. During CIOT, however, citation rates were at or above benchmark levels in all six States.

## Awareness

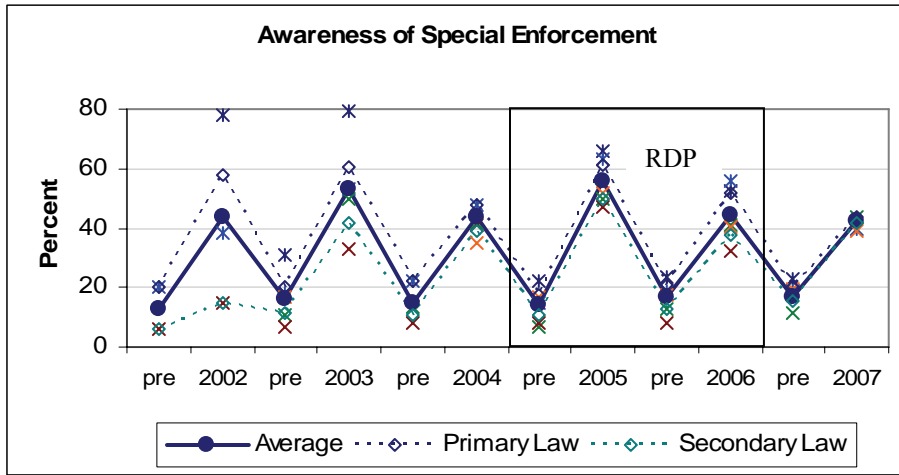
There were significant increases in nearly every index of awareness and in every State. This was the case in both years, *statewide* and in *rural targeted areas*. Comparing the two years, baselines were generally higher and increases were smaller in 2006 than in 2005. Awareness of *special enforcement efforts* generally increased more during CIOT than during the RDP, while awareness of *general seat belt messages* increased more during the RDP (the first phase of the mobilization) than during CIOT.

Based on six years of telephone surveys conducted before and after mobilizations in the GLR states, it appeared that:

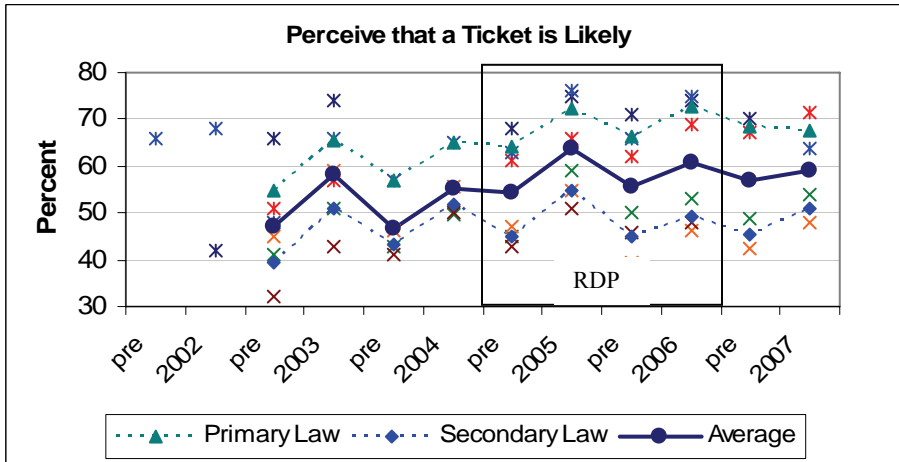
- Awareness of *general seat belt messages* increased through 2004, after which there was a slight decline; there were no consistent differences between primary and secondary law States.
- Recognition of the *CIOT slogan* increased through 2005, after which there was a leveling-off; an initially large difference between primary and secondary law States diminished over time as secondary law States adopted the CIOT slogan.
- Awareness of *special enforcement efforts* remained relatively constant at 40 to 50% (post-CIOT) through 2005, after which there was a slight decline; there was little difference between primary and secondary law States on this index.
- The perceived *likelihood of getting a ticket* also increased through 2005, followed by a slight decline; there were large (20-point) differences between primary and secondary law States; and this perception did not decline until after 2006 in primary law States, a year later than the decline was seen in secondary law States.



**Percent of Respondents Aware of *Special Enforcement Efforts*: Average Results of Telephone Surveys Before and After May Mobilizations in the GLR (2002-2007)\***



**Percent of Respondents Perceiving That a *Ticket for Non-Use is Likely*: Results of Telephone Surveys Before and After May Mobilizations (2002-2007)\***



\*Note that data points connected by dotted lines represent averages (i.e., overall, primary law, and secondary law averages). All other symbols represent individual State data points. Fewer data points are available for Years 2002 and 2007 than for other years.

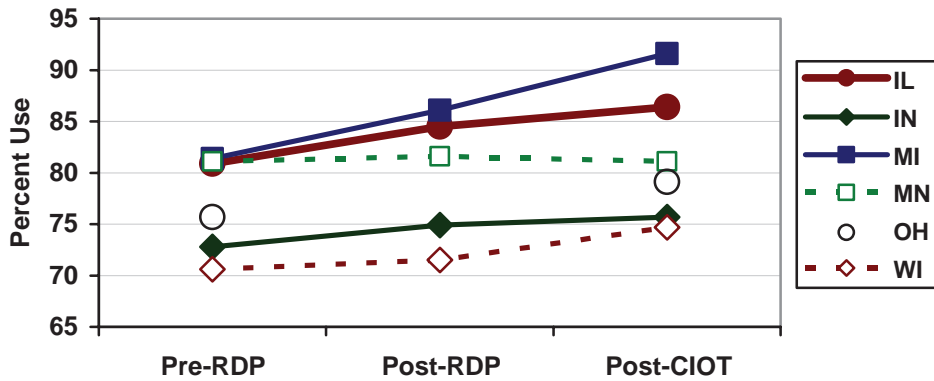
**Sources of Information**

Television was the most frequent source of awareness for general seat belt messages prior to the start of the 2006 mobilization. Baseline enforcement-related information was obtained more uniformly from several media, including television, radio, newspapers, and outdoor advertising. During the mobilization, however, television became the main source of both general *and* enforcement-related messages. With regard to format, awareness of general messages came primarily from paid ads; enforcement-related information came from a combination of paid ads and news stories.

## Changes in Observed Usage

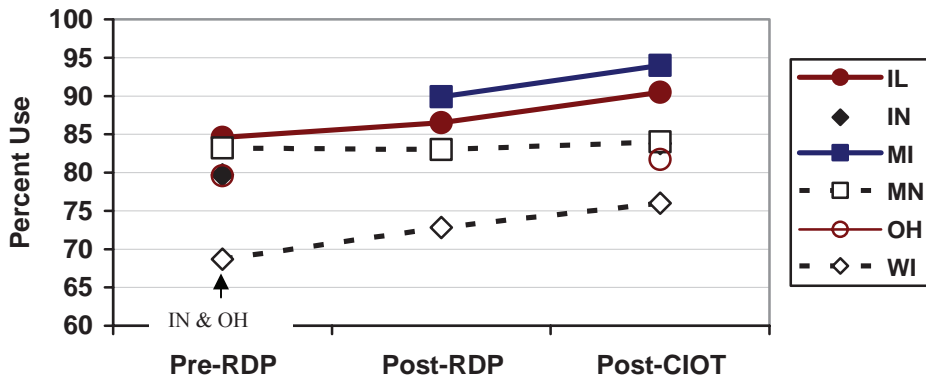
All States except Minnesota experienced significant *rural* increases in observed usage in 2006. The median overall increase was 3.8 percentage points, compared with a median 6.5-point increase in 2005. Rural area changes ranged from no change in Minnesota to a 10.2-point increase in Michigan. In five States where phase-specific changes were measured, the median increase in rural areas was about 2 points during each phase. Three States found significant increases during the RDP and three found significant increases during CIOT; the timing of a 3-point overall increase in Ohio is unknown.

**Observed 2006 Seat Belt Use Rates in *Rural Targeted Areas*: by Phase**



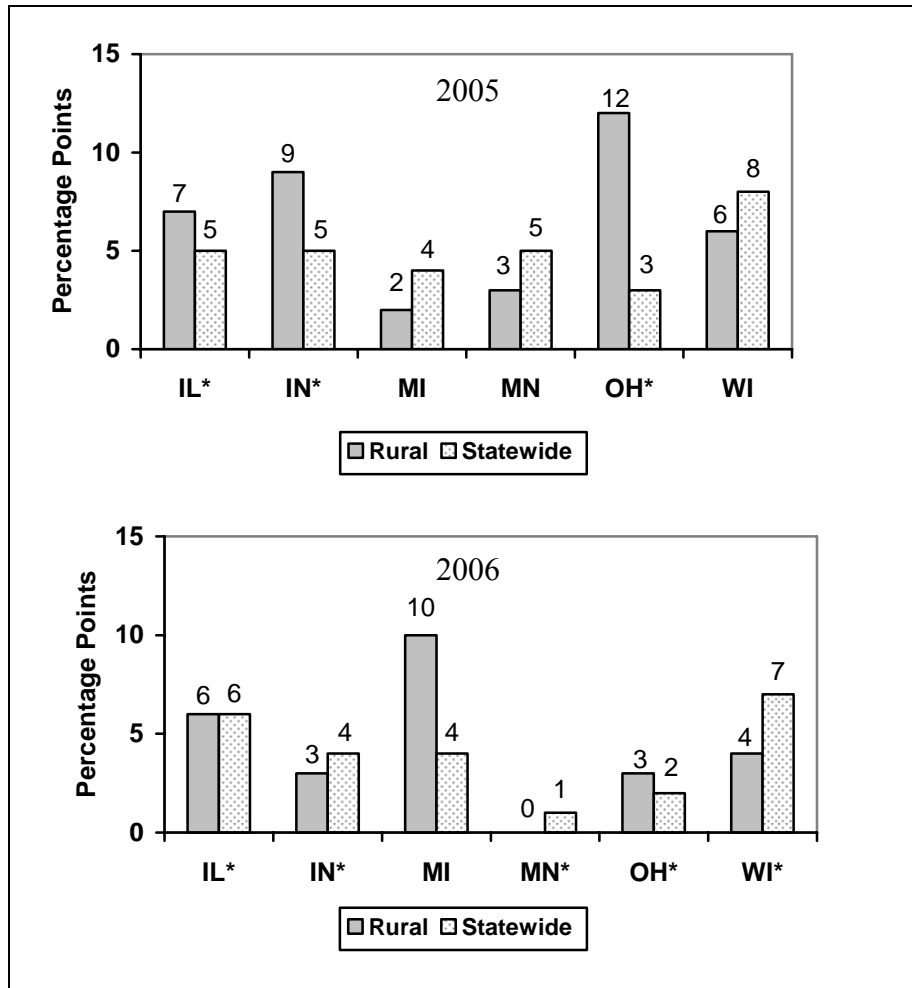
Five States experienced significant *statewide* increases in usage in 2006. The median gain was 4.1 points, compared with 4.8 points in 2005. The greatest increase was 7.3 points (in Wisconsin), compared with a 2005 greatest gain of 12 points, in Ohio. Illinois and Wisconsin experienced significant increases associated with both program phases in 2006. Michigan, which measured usage only before and after the CIOT, found a significant 4.1-point increase. Across both phases, there was a 4-point statewide gain in Indiana and a 2-point gain in Ohio, but it is not known when these increases occurred. Minnesota did not experience a significant gain, during either phase or overall.

**Statewide 2006 Observed Use Rates, by Phase**





**Increases in Observed Seat Belt Usage:  
Statewide and in Rural Areas in 2005 and 2006 <sup>1</sup>**

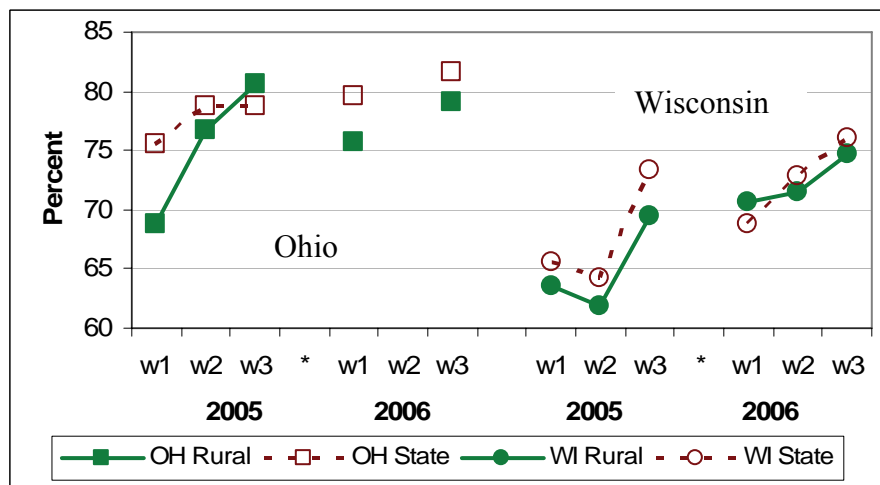
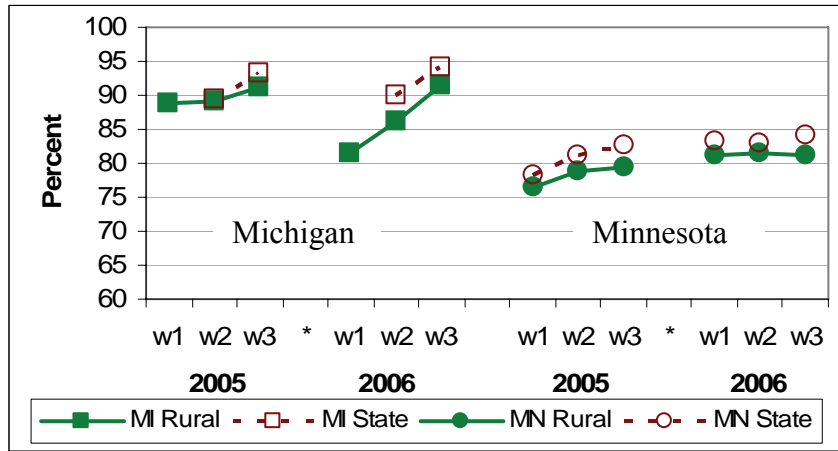
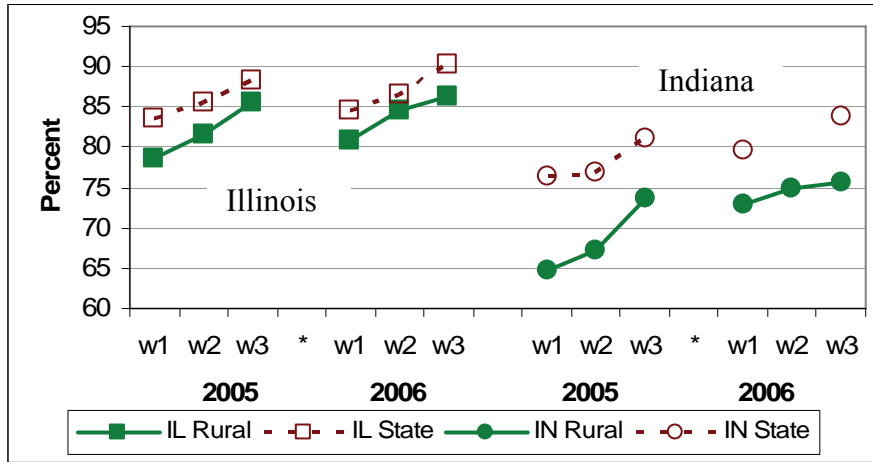


**Two-Year Changes in Observed Usage**

Over the two-year demonstration program, there was a median 9.2-point increase in observed usage *in the rural targeted areas* and a median 6.6-point *statewide* increase. These overall increases include changes (usually declines) between mobilizations. The largest and most significant *rural* increases were found in Indiana (+11 points), Ohio (+10 points), and Wisconsin (+11 points). In both Indiana and Ohio, relatively small rural areas were targeted by the RDP (12% and 6% of the States' populations, respectively). This focused approach may have been a factor associated with the larger two-year gains in these two States but that effect was limited primarily to the 2005 RDP effort.

<sup>1</sup> States that intensified enforcement during the RDP are identified with asterisks.

### Usage Trends in GLR States: Statewide versus Rural Areas in 2005 and 2006



## Impact on Subgroups in Rural Targeted Areas

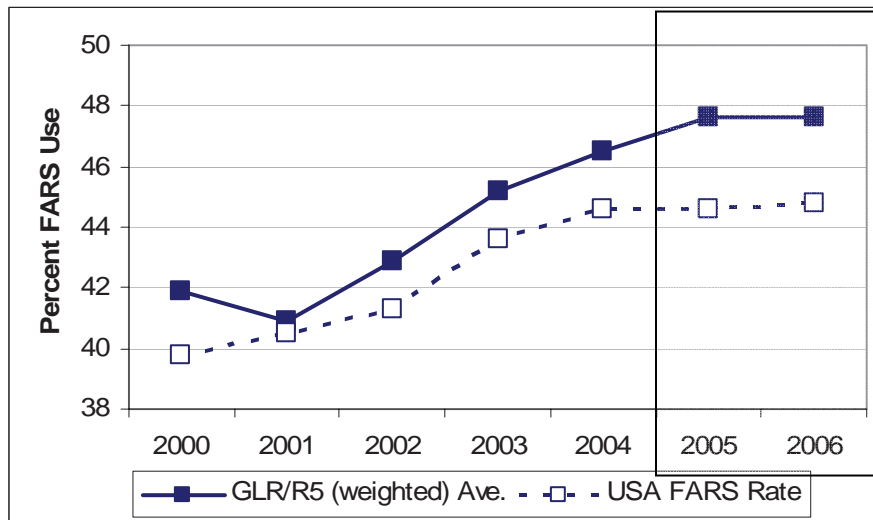
Over the two-year program, the largest average gains *in rural targeted areas* were among males, adults, and occupants of pickup trucks (all with 12-point average gains); followed by youth and older people (average of +11 points); and by drivers, passengers, and occupants of passenger cars (+10 points). All these gains include changes between mobilizations. The significant gains among males, youth, and occupants of pickup trucks are notable.

## Regional versus National Changes in Usage (Observed and Among Crash Victims)

*Observed seat belt use* in the 6 Great Lake States and in the Nation increased similarly from 2000 through 2003, after which usage in the GLR continued its upward trend and national usage began to level off. By 2006, there was a 4- to 5-point difference between the GLR rate and the U.S. rate. Thus, participation in the RDP was associated with continued increases in observed usage in the GLR during a period when national progress declined.

Seat belt use *among passenger vehicle occupants killed* in crashes increased at a slightly greater rate in the GLR than across the Nation through 2004. However, the GLR rate continued to increase through 2005, while national usage leveled off after 2004. In 2005 and 2006, usage in the GLR was 3 to 4 points higher than the U.S. rate, greater than in any of the five previous years. Regression analysis found this pre-to-post RDP difference between GLR and U.S. rates to be significant ( $p \leq 0.05$ ).

**Trends in GLR and U.S. Seat Belt Use Rates  
Among Passenger Vehicle Occupants Killed (Source: FARS) 2000 - 2006**



In summary, the 2005 mobilization appears to have had a greater impact than the 2006 effort. In both years, however, the usage was higher than in 2004, whereas there was very little nationwide change after 2004. Further, the RDP affected all subgroups, including high risk groups such as males, youth, and occupants of pickup trucks.

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## **I. Background**

### **A. High-Visibility Enforcement Programs to Increase Seat Belt Use**

The evolution of high-visibility enforcement (HVE) programs to increase seat belt usage is described in detail in a recent report by Nichols and Ledingham (2008).<sup>2</sup> They describe a 20-year expansion of efforts from local programs, such as those conducted in Elmira and Albany, New York (Williams, Lund, Preusser, & Blomberg, 1987; Rood, Kraichy, & Carmen, 1987) to statewide programs, the benchmark of which is the 1993 *Click It or Ticket* program implemented in North Carolina (Williams, Reinfurt, & Wells, 1996). More recently statewide HVE programs have been implemented in most states as part of National *Operation ABC* and *CIOT* mobilizations implemented twice each year from 1998 through 2004 and annually since 2005.

### **B. The North Carolina Benchmark Program**

The 1993 North Carolina CIOT provides an important benchmark for statewide programs. It was planned as a multi-year effort, an essential component for lasting change, but the greatest impact occurred in the first two waves of the program, which occurred over a period of about 6 months. These waves of HVE included earned media (i.e., news stories); paid media (about 8¢ per capita over 15 weeks); and seven weeks of intense enforcement over the two waves. Enforcement included extensive use of roadblocks or checkpoints, an approach not currently being used in most States, and it produced more than 60,000 citations (about 81 citations per 10,000 residents over the two waves). As a result, public awareness of the enforcement effort rose to 85% and observed usage increased to about 80%, a gain of 16 percentage points.

Two circumstantial factors likely enabled the large 16-point increase in usage. First, this was the first time an intensive HVE program was implemented across the State and second, the baseline usage rate for this program was 63 to 65%, a modest level compared with current average rates of about 80% usage.

### **C. Subsequent Statewide CIOT Programs**

Over the past decade, there have been annual cycles of HVE mobilizations to increase seat belt usage, expanding from just a few States in 1997 to more than 40 States by 2003, when the nationwide effort was renamed the National *Click It or Ticket* Mobilization. These annual cycles of HVE activity, organized and promoted by the National Highway Traffic Safety Administration and the Air Bag and Seat Belt Safety Campaign (AB&SBSC), resulted in the implementation of hundreds of statewide HVE efforts implemented since 1997. Summarizing these efforts, including an 8-State Regional CIOT program in the Southeast, evaluated by Solomon (2002) and 10 *Model State Programs*

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<sup>2</sup> These reviewers summarize the characteristics and results of more than 50 State and local programs and the 2003 and 2004 National CIOT mobilizations.

implemented in various regions of the Nation in 2002, evaluated by Solomon, Ulmer, and Preusser (2002), Nichols and Ledingham pointed out that, even in these *special* demonstration efforts, the levels of enforcement *intensity* and *visibility* were not equal to the levels achieved in North Carolina. While some of these programs had higher *per capita* levels of paid media, they generally did not implement enforcement at comparable levels of intensity as in North Carolina and few of them used checkpoints or enforcement zones (EZ's).<sup>3</sup> Perhaps most important, however, these programs achieved much more modest levels of *public awareness* of their enforcement efforts, averaging only 40 to 50% in recent mobilizations, compared with the 85% rate achieved in North Carolina. Likely as a result of this combination of factors, increases in observed usage were more modest (about 9 points, from median baselines of 65 to 69%).

#### **D. Need to Reach Higher-Risk, Low-Use Occupants**

There is yet another factor to be considered in efforts to increase usage and to reduce fatalities and injuries. High-visibility enforcement may not always be implemented in a manner that reaches drivers and passengers that are of greatest risk of being involved in a serious crash. Even in North Carolina, after conducting more than 6,000 checkpoints and issuing 60,000 citations for nonuse, there was a residual of “hardcore” nonusers. These people were typically young males, driving older vehicles or pickup trucks, and with poor driving records (Reinfurt, Williams, Wells, & Rodgman, 1996).

It is not clear what programs would be most effective in reaching such individuals. Some self-report survey results that suggest that increasing fines or imposing penalty points may have some impact (e.g., Automotive Coalition for Traffic Safety, 2001), but this evidence is not strong. Studies of primary law upgrades provide somewhat stronger evidence of impact. Nichols and Ledingham (2008) reported that most recent upgrades have significantly affected *higher-risk groups* and, in some cases, the impact on such groups was greater than on lower-risk groups. The 2000 law change in Michigan, for example, affected *younger occupants, males, and occupants of pickup trucks* more than older occupants, females, and occupants of other vehicles (Eby, Vivoda, & Fordyce, 2002). Similarly, a case study by Voas, Fell, and Tippets, et al.(2007) found that upgrades in California, Michigan, Washington, and Illinois increased seat belt use among occupants killed in *alcohol-related* crashes and, in three of these States, usage increases were greater in alcohol-related crashes than in non-alcohol related crashes. Finally, Masten (2007) reported that upgrades in Alabama, Indiana, Michigan, New Jersey, and Oklahoma were associated with increased usage among occupants killed in *nighttime* crashes and that, in some States, these increases may have been greater than among those killed in daytime crashes.

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<sup>3</sup> *Enforcement Zones* are similar to checkpoints in that vehicles pass through a *zone*, where police officers observe for noncompliance with the State's seat belt use law. The key difference between an EZ and a checkpoint is that no vehicle is stopped in an EZ unless there is observed noncompliance, whereas all vehicles or a pre-determined ratio of vehicles (e.g., every fifth vehicle) is stopped in a checkpoint.

The relevance of these findings is that higher-risk occupants can be reached, even at current high levels of usage. In fact, the relative impact on high-risk occupants (per unit of increase in usage) may be even greater at high rates of usage than at lower levels.

While the evidence regarding the impact of HVE programs on higher-risk occupants is not as strong as that regarding primary laws,<sup>4</sup> it is important to point out that most recent upgrades have been supported by one or more waves of HVE, usually as part of national mobilizations. In some States, additional waves or greatly intensified HVE have been implemented to maximize the impact of the law change (e.g., see Salzberg & Moffat, 2004). Thus, some of the impact of these events on higher-risk groups was likely associated with enforcement.

In addition, there is evidence that HVE programs that focus on high-risk, low-use groups are more effective in increasing belt use among such groups than efforts that do not focus on them. For example, nighttime enforcement can be more effective than daytime enforcement in raising seat belt use among nighttime motorists and it can be expected to affect nighttime usage more than it affects daytime usage (e.g., Wells, Preusser, & Williams, 1992; Chaudhary, Alonge, & Preusser, 2005). HVE efforts focused on pickup truck occupants in Amarillo, Texas, proved to have a greater impact on occupants of pickups than on occupants of other vehicles (Solomon, Chaudhary, & Cosgrove, 2004). A similar finding was reported for a region-wide program implemented in the Southeast Region – NHTSA Region 4. In two additional regional demonstrations, usage among pickup truck occupants increased but not to a greater degree than among other occupants (Tison, Solomon, Nichols, & Gilbert, under review).

In summary, if a HVE program is of sufficient intensity; if it is implemented in a manner that focuses on high-risk, low-use target groups; and if it results in high levels of public awareness among such groups, it can be expected to increase seat belt usage among them. Results from recent NHTSA Pickup Truck Demonstration Programs support this conclusion.

### **E. The Rural Demonstration Program (RDP)<sup>5</sup>**

Rural populations provide another example of a high-risk target population. Not only has rural usage historically been lower than urban usage (except on interstate highways and freeways), more than 70% of all fatalities, including unbuckled fatalities, occur on rural roads. Thus, NHTSA included a *Rural Demonstration Program* (RDP) in its recent initiatives to increase usage among high-risk, low-use target groups. The RDP was implemented in the six States of the Great Lakes Region, in conjunction with their May 2005 and 2006 CIOT mobilizations<sup>6</sup> and, like demonstrations aimed at occupants of

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<sup>4</sup> The basis for this statement is that primary law upgrades have been shown to be associated with changes in usage among crash victims (FARS use) and, while such usage has increased over time, as CIOT mobilizations have been implemented, the documented association between FARS use and HVE is not as strong as the association FARS use and law upgrades.

<sup>5</sup> Much of the development and implementation of the 2005 and 2006 RDP effort is documented in Mercer Consulting Group (2005, 2006).

<sup>6</sup> States in the GLR – NHTSA Region 5- are Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin.

pickup trucks, the RDP implemented two weeks of paid and earned media, at least one week of intensified enforcement (in five of the six States), and outreach efforts prior to the start of CIOT in 2005 and 2006. All three components -- media, enforcement, and outreach -- were focused on targeted rural areas over the two-week RDP period. This report provides a detailed analysis of the results of the 2006 program, in comparison with results from the 2005 RDP and in the context of several years of CIOT efforts. Program timelines and descriptions for each year of activity have also been provided in reports by the Mercer Consulting Group (2005, 2006).

## 1. Summary of 2005 Results

Regarding the 2005 RDP, Nichols, Ledingham, and Preusser (2007) concluded that all six GLR States experienced significant increases in observed seat belt usage, both rural and statewide, following the May 2005 RDP/CIOT mobilization. Associated with the two-week RDP phase, however, rural usage increased only in the three States that intensified enforcement during that phase. In addition, there were greater rural-area gains<sup>7</sup> in these three States, after the CIOT phase, than in the rural areas of States that did not enforce during the RDP. This suggests there was a cumulative rural effect associated with two waves of media and enforcement. The median increases in rural targeted areas were 9 percentage points in the three States that enforced during the RDP (Illinois, Indiana, and Ohio) and 3 points in the three States that did not enforce during this phase (Michigan, Minnesota, and Ohio). Statewide, however, usage increases were not significantly different between these two groups of States, each of which had a median 5-point increase in usage over the two phases.

## 2. Transition to the 2006 RDP/CIOT Program

In December 2005, the six GLR States participated in a regional leadership meeting to review the results of the first year of the RDP and to determine if any changes should be made for the second year. At this meeting, it was agreed that the 2006 effort would include:

- A two-week, rural-focused, paid media campaign (RDP media) followed immediately by a two-week statewide paid media (CIOT media) campaign;
- At least one week of intensified enforcement during the RDP and two weeks of intensified enforcement during CIOT;
- Use of the CIOT slogan for both phases of the program (rather than using a different slogan for the RDP phase);
- Shifting more paid media dollars from CIOT to the RDP, where possible;
- Increased emphasis on earned media (i.e., the generation of news stories);
- Additional outreach with employers, schools, and other organizations; and
- A slightly modified evaluation effort, with only two waves of required awareness and seat belt surveys, rather than three waves as in 2005. The middle wave of surveys (post-RDP) would be optional.

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<sup>7</sup> Overall usage refers to gains from baseline through the completion of the CIOT phase.



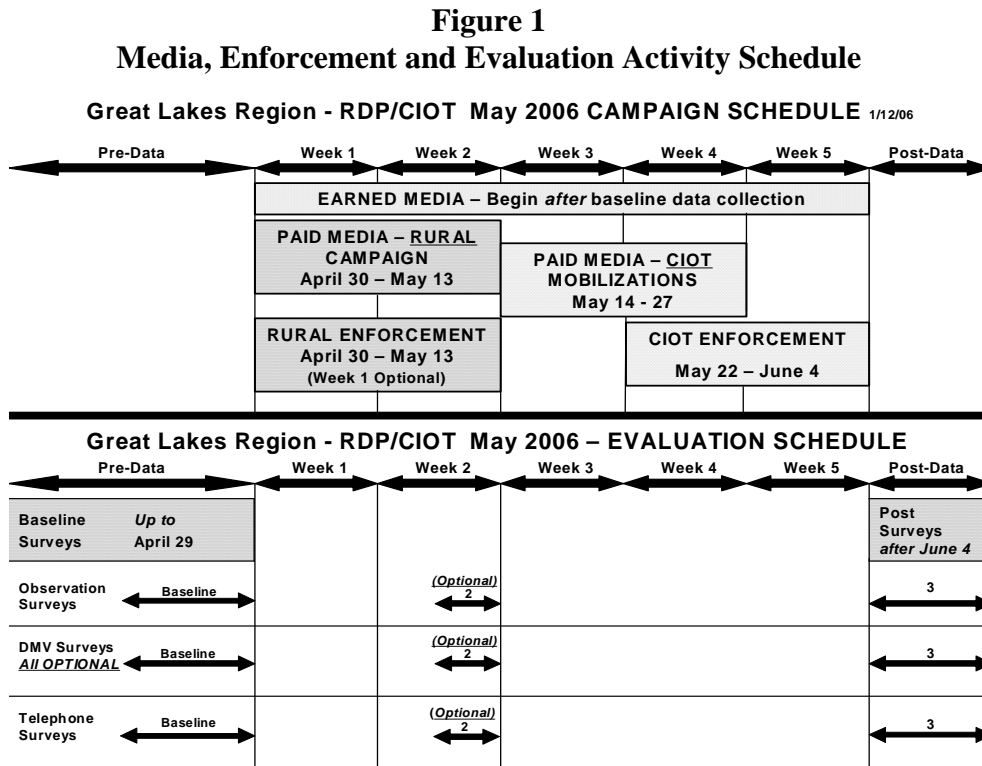
### 3. Federal-State Partnership

As in 2005, the continuation of this project involved a partnership between NHTSA and the GLR States. State media, enforcement, and outreach activities were funded via a combination of Federal and State funds. NHTSA provided overall media support via the Tombras Group; planning and coordination assistance via the Mercer Consulting Group (MCG); and evaluation support via the Preusser Research Group (PRG). Tombras and MCG worked with NHTSA and the State Offices of Highway Safety to develop and implement the program. PRG worked with NHTSA staff and with State evaluation contractors to plan and implement the evaluation. All survey data were collected by the State contractors, in accordance with agreed-upon procedures. Such data were then provided to PRG for analysis and synthesis into a regionwide evaluation.

## II. Methods

### A. Description of the May 2006 RDP/CIOT Program

The design of the 2006 RDP/CIOT program was nearly identical to that of the 2005 program, with the two-week RDP phase implemented immediately preceding the three-week CIOT phase of the mobilization. Schedules for media, enforcement, and survey activity for the RDP and CIOT phases are shown in Figure 1.



## 1. Paid Media

*Media Plans.* Updated media plans for the RDP and CIOT were developed for each State, either by Tombras or by the States' media contractors (in four of the six States for the RDP and in all six States for CIOT). As in 2005, the development of RDP media plans required the selection of target markets and counties, as well as the development of media placement schedules. Some adjustments were made in the selection of targeted markets and counties<sup>8</sup> and the media concepts and material, which were developed in 2005, were updated for the 2006 RDP.

In each State, the objective was to develop a strategy and a budget that would produce a “strong” buy in the rural targeted areas, using a combination of radio, broadcast television, and cable television. Tombras reviewed all media plans before implementation and provided comments and recommendations back to the States.

**Table 1.**  
**Media Markets, Counties, and Population in RDP Rural Targeted Areas**

<b>State</b> (pop/millions)	<b># Media Markets</b> (and # Counties within each)	<b># of Counties</b>	<b>Population</b> (millions)	<b>% of State Population</b>
IL (12.7m)	<b>5 markets:</b> Champaign (20); Davenport, IA (5); Metro East St. Louis, MO (2); Peoria (10); and Rockford (5).	42	2.9m	23%
IN (6.3m)	<b>4 markets:</b> Cincinnati, OH (3); Evansville (6); Louisville, KY (8); and Terre Haute (6).	23	0.8m	13%
MI (10.1m)	<b>5 markets:</b> Alpena (2); Grand Rapids (13); Lansing (5); Marquette (5); and Traverse City/Cadillac (24).	49	3.4 m	34%
MN (5.2m)	<b>5 markets:</b> Duluth (6); Fargo/Moorhead (14); La Crosse, WI (2); Minneapolis/St. Paul (15); and Rochester (5).	42	1.3m	25%
OH (11.5m)	<b>6 markets:</b> Charleston (1); Columbus (3); Dayton (4); Fort Wayne (1); Toledo (5); and Zanesville (1).	15	0.7m	6%
WI (5.6m)	<b>5 markets:</b> Duluth/Superior (6); Green Bay (15) La Crosse/Eau Claire (12); Madison (11); and Wausau/Stevens Point (12).	56	3.0m	54%
<b>2006 GLR</b> (Averages)	<b>30 Markets</b> (an average of five markets per State)	<b>227</b> (38)	<b>12.1m</b> (2 m)	<b>24%</b> (26%)
<b>2005 GLR<sup>9</sup></b> (Averages)	<b>29 markets</b> (an average of five markets per State)	<b>227</b> (38)	<b>10.4m</b> (1.7m)	<b>20%</b> (22%)

<sup>8</sup> Examples of such changes include: Indiana limited its 2006 buy to four markets, including Cincinnati but excluded Indianapolis; Michigan targeted the Grand Rapids market (rather than the Flint market) during the RDP; Minnesota added the Fargo/Moorhead market resulting in five targeted markets; and Wisconsin added the Green Bay market to its 2006 RDP, resulting in five targeted markets, rather than four. Illinois and Ohio targeted essentially the same markets and counties as in 2005.

<sup>9</sup> These 2005 totals and averages are revised slightly from those in the 2005 report, based on the finding that no RDP media were actually purchased in the Indianapolis market.

*Targeted Markets and Counties.* As in 2005, the size of RDP-targeted areas varied from State to State, based on available funds and on specific State objectives. Table 1 shows markets targeted, the number of counties involved, and the population size and proportions associated with the rural targeted areas in 2006.<sup>10</sup>

*Media Placement.* Tombras provided input to the States with regard to purchasing media at “strong” levels (200 gross rating points [GRPs] for television plus 150 GRPs for radio) and “very strong” levels (300 GRPs for television plus 200 GRPs for radio). Tombras also worked with States to identify overlapping markets where resources could be coordinated. One example was in the La Crosse, Wisconsin, market, which broadcasts to both Minnesota and Wisconsin counties. Information was also provided to the States by NHTSA’s Office of Communications and Consumer Information regarding *national media purchases* that were planned for the nationwide CIOT campaign. This enabled some States to lower the amount of their CIOT media buys and to shift funds to the RDP effort.<sup>11</sup> Unlike the 2005 campaign, when Tombras executed the media buys for four of the six GLR States, all six States used their own media contractors to purchase time for the 2006 RDP.

RDP ads were purchased for a two-week period (April 30 to May 13). As in 2005, purchases were focused on time spots, formats, and programs that were most likely to be viewed or heard by young men 18 to 34 years old. Media contractors purchased advertising within the targeted parameters and obtained “bonus” or “added value” spots to be played at similar times. Examples of targeted programming included: American Idol, Extreme Sports, Everybody Loves Raymond, Family Guy, Fear Factor, King of the Hill, Mad TV, NASCAR, Saturday Night Live, the Simpsons, and WWF. Radio strategies focused on Alternative, Country, Top 40 and Rock, with time parts including afternoon and evening drive time, some morning drive time, and weekend days. Funds spent on paid media were monitored and State media contractors were asked to conduct post-buy analyses and to report GRPs and number of ads purchased for each program phase.

*Advertising Concept.* As indicated, the RDP media concept was developed in 2005 and used again in 2006.<sup>12</sup> New poster art, Web banners and static-cling art were provided to complement existing material and to “freshen up” the message. The concept was “*Friendly Cop*,” which featured a local officer stopping a young driver for not buckling up and, after issuing a ticket for the seat belt violation, telling the young man that he will see him later at the ball game. The violator cannot believe that he has just received a

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<sup>10</sup> In some cases, only a sub-set of counties within a targeted DMA or market were included in a State’s media plan. Also, even though the CIOT phase was considered to be a *statewide* effort, not all markets were targeted during that phase either. With regard to the CIOT, however, the total population of the State is used to calculate media expenditure and enforcement rates.

<sup>11</sup> Section 157 (Title 23 U.S. Code) grant awards to the States provided nearly all the funding for paid media in three States.

<sup>12</sup> The concept development process is described in the first-year report by Nichols, Ledingham, and Preusser (2007). It was a comprehensive process that involved the development of alternative concepts, focus-group testing in the States, and consultation with the States as part of the selection of the final concept. The actual ads (and earned media materials) were provided in appendices of the first-year report.

ticket from this “friendly” officer that he knows. This “*Friendly Cop*” concept was designed to increase the perception among young male drivers that they are likely to be caught if they don’t buckle up – even in friendly territory.

The RDP and CIOT media programs were substantial, with about \$1.2 million spent for paid advertising during the RDP and more than \$3.2 million for CIOT, a total expenditure of \$4.5 million. As a result of these purchases, nearly 14,000 advertisements were reportedly aired, nearly 6,000 of which were RDP “Friendly Cop” ads and 8,000 of which were CIOT ads aired during the second phase of the mobilization.

## 2. Earned Media and Outreach

In 2006, each Highway Safety Office enlisted the aid of enforcement grantees and rural community partners to generate stories for the media. A second-year media planner was developed by Tombras to assist in this effort. It contained a fact sheet, a news release, a drop-in news article, an “op/ed” piece, and a sample letter-to-the-editor. Law enforcement liaisons (LELs) and personnel in local enforcement agencies played a major role in generating earned media across the region. In most States, LELs provided materials, often from the media kits, to local enforcement and non-enforcement organizations. This material included posters, payroll stuffers, incentive items, and large, over-the-road banners to broadcast the RDP and CIOT efforts. In addition, LELs worked with such organizations to generate media events, interviews, and local news stories. Overall, the States reported more than 3,000 news stories throughout the 2006 mobilization (RDP and CIOT) and approximately 100 media events.

The organizations targeted by RDP outreach efforts were those most likely to have rural contacts. They included a variety of organizations such as Farm Bureaus, implement dealers, weekly newspapers, auto dealers and trade groups, other transportation-related organizations, manufacturers, packagers, construction firms, food outlets, fertilizer stores, small town banks, “big-box” stores, and local colleges and universities. In addition, county health departments and county employers were often targeted. States reported the participation of hundreds of such partners. Sometimes their participation involved little more than displaying a poster but, in many cases, it also included some form of active support for the program. Although there was much variation in the reporting of outreach efforts, monthly reports suggested that there were 50 to 100 partners in a typical State.

## 3. Enforcement

*Duration and Timing.* Five of the six States intensified enforcement for some portion of the two-week RDP period. Illinois, Indiana, and Ohio enforced (in rural areas) during the entire two-week RDP, while Minnesota and Wisconsin enforced for one week. Michigan conducted an “additional” week of enforcement (in rural areas) but this enforcement did not begin until the start of the CIOT media campaign. Thus, in five States there was an initial one-week or two-weeks of rural enforcement, followed by one week of no enforcement activity, and then two full weeks of statewide CIOT enforcement. In Michigan, there was a week of rural enforcement, followed immediately by two weeks of

statewide enforcement, all of which occurred during the CIOT phase. Table 2 shows the enforcement schedules of the various States.

**Table 2. Media and Enforcement Schedules in the Six GLR States**

	Week 1	Week 2	Week 3	Week 4	Week 5
All States	<b>RDP Phase</b>		<b>CIOT Phase</b>		
	<b>RDP Media</b>		<b>CIOT Media</b>		
	IL	RDP Enforcement		CIOT Enforcement	
IN	RDP Enforcement		CIOT Enforcement		
MI			“Extra” Enforce.	CIOT Enforcement	
MN		RDP Enforce.		CIOT Enforcement	
OH	RDP Enforcement			CIOT Enforcement	
WI		RDP Enforce.		CIOT Enforcement	

*Agencies, Hours, and Approach.* As in 2005, a combination of grants and equipment incentives were used to gain the participation of State and local enforcement agencies. States collected information on the hours participating agencies worked and the number of citations for seat belt and other violations that agencies wrote. States then reported these numbers to the coordination contractor, MCG, and posted them on NHTSA’s mobilizationsdata.com Web site. Following are general descriptions of these data in the various States for both phases. Additional information is provided in the *Results* section and in Appendix D.<sup>13</sup>

The *Illinois* RDP enforcement approach consisted of a combination of seat belt *enforcement zones* and *saturation patrols*.<sup>14</sup> The core of participating agencies was made up of *regular enforcement grantees*. In order to gain participation from additional agencies, the State’s LELs and occupant protection coordinators (OPCs) contacted more than 130 non-grantees in targeted counties and urged them to apply for *special enforcement grants*. As a result of these efforts, 77 local agencies (20% of all agencies in targeted areas) and all 20 districts of the Illinois State Police participated in the RDP and provided activity reports to the Traffic Safety Office. Based on these reports, 2,300 enforcement zones and 438 saturation patrols were conducted, involving just over 8,800

<sup>13</sup> There were variations in these enforcement data. Most States reported data only for those agencies were funded, either by regular enforcement grants or by special incentive/reward grants. Some States, however, attempted to collect data from all participating agencies whether or not they received funding.

<sup>14</sup> An enforcement zone entails a procedure that is similar to an impaired driving checkpoint in that vehicles are directed through a “zone” where usage of front seat occupants can be observed. Unlike an impaired driving checkpoint, vehicles are not stopped unless a seat belt violation is observed.

hours of effort and resulting in nearly 11,000 citations for restraint violations (10,956 for seat belts; 384 for child restraints), a rate of 1.3 tickets per hour of paid enforcement.

For the two-week *CIOT* phase, Illinois reported that all 20 State Police districts participated, along with nearly 300 local agencies (36% of total), expending nearly 26,000 hours on seat belt enforcement and yielding nearly 47,000 citations (45,450 for seat belts and 1,546 for child restraints), a rate of about 1.8 citations per hour.

Indiana also used a combination of *contacts by LELs* and *overtime grants* to encourage local agencies and the Indiana State Police to intensify enforcement in the 23 targeted rural counties. Like Michigan, Indiana typically promotes the use of *enforcement zones* and, while the Indiana Criminal Justice Institute (ICJI)<sup>15</sup> requested that grantees conduct *zones* whenever possible, the number of EZs conducted was not reported. Thus, much of the 2006 *RDP activity* may have been in the form of *saturation patrols* and/or *regular patrols*.<sup>16</sup> ICJI reported that 26 local agencies (5%) and 8 districts of the ISP (50%) participated in the RDP, devoting about 1,100 hours on seat belt enforcement and yielding about 2,700 restraint citations (2,690 for seat belts; 71 for child restraints), for a rate of about 2.5 tickets per hour.

For the two-week *CIOT*, Indiana reported that 237 local agencies participated (54%), along with all 16 State Police districts. An estimated 3,766 *overtime hours* were spent on seat belt enforcement, yielding just over 15,000 citations (14,401 for seat belts and 883 for child restraints), for a rate of about four citations per hour. This was the highest citation rate calculated for any State in either year of the RDP.

Michigan activity was characterized by a combination of *enforcement zones* and *saturation patrols* during its “extra week” of enforcement.<sup>17</sup> As in Illinois and Indiana, participation was gained primarily via *ongoing enforcement grants*.<sup>18</sup> Additional agency participation was encouraged with eight \$5,000 *drawings for special grants* for agencies that provided complete activity reports. For this extra week of enforcement, the State Office of Highway Safety Planning reported participation by 27 local agencies (6%) and 24 districts of the Michigan State Police (38%). Approximately 1,300 hours of effort were devoted to seat belt enforcement, yielding nearly 1,250 citations (1,219 for seat belts; 20 for child restraints), for a rate of slightly less than one citation per hour.

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<sup>15</sup> ICJI is the entity responsible for the Governor’s highway safety program in Indiana.

<sup>16</sup> Motorist surveys showed an increased public awareness of EZs post-CIOT.

<sup>17</sup> Michigan was concerned about implementing the enforcement in two stages (i.e., with RDP activities separated from CIOT efforts by a week of no enforcement activity). Although an extra week of enforcement was added, it did not start until the first week of CIOT paid media. Thus, there was no intensified enforcement during the RDP itself.

<sup>18</sup> During the extra week of enforcement in Michigan, agencies were given the option of conducting EZs or saturation patrols. However, a more aggressive approach was taken with regard to CIOT, requiring EZs for all grant-supported enforcement activity. Previous experience suggested that the seat belt saturation patrol activity went largely unnoticed by the public.

For the two-week *CIOT* effort, Michigan reported participation by just over 500 local agencies (87%) and all 63 State Police districts. An estimated 23,400 hours (71% overtime) were placed on seat belt enforcement, yielding just over 24,000 citations (23,653 for seat belts and 739 for child restraints), about one citation per hour.

Minnesota, a secondary law State, conducted mostly *saturation patrols* during the RDP. Participation of the Minnesota State Patrol was obtained by means of funding written into *ongoing Safe and Sober grants*. Invitations to apply for *overtime grants* were sent to other agencies via e-mail. As in other GLR States, *LELs* played a major role in gaining participation. They followed up on the grant invitations and they used small *incentive/reward packages* to encourage agencies to participate and report their activities to the Office of Traffic Safety. As a result of these efforts, Minnesota reported RDP participation by about 400 local agencies (86%) plus all 11 districts of the State Police. These agencies expended just over 2,000 hours on seat belt enforcement during the RDP, resulting in nearly 2,700 citations (2,680 for seat belts, with 47% (1,260) in targeted areas), for a rate of about 1.4 citations per hour of enforcement.

For the two-week *CIOT enforcement effort*, Minnesota reported participation by 400 local agencies (86%) and all 11 districts of the State Police, resulting in about 4,000 overtime hours and 11,700 citations for seat belt violations, a rate of about 2.9 citations per hour.

Ohio, also a secondary law State, used *saturation patrols* (and likely *regular patrols*). The Ohio State Highway Patrol and other *regularly-funded agencies* were provided *additional overtime funding* to participate in the RDP. Other agencies were requested to participate on a *voluntary basis*. *Law Enforcement Liaisons* and *other local partners* were used to contact these agencies. Ohio reported six Highway Patrol districts (about 10%) and no local agencies participated in the RDP, devoting about 1,200 hours seat belt enforcement and resulting in 569 seat belt citations and 8 child restraint citations, a rate of about 0.5 citations per hour.

For the two-week *CIOT*, Ohio reported participation by more than 800 local agencies (85%) and 63 districts of the State Police (100%), resulting in 98,000 hours (not designated as overtime) spent on seat belt enforcement and yielding about 40,000 citations (39,963 for seat belts and 216 for child restraints), a rate of about 0.4 citations per hour, one of the lowest rates in the region.<sup>19</sup>

Wisconsin, a secondary-law State, conducted *regular* and *overtime* patrols. Participation by the Wisconsin Highway Patrol was gained via a *special RDP grant* to conduct enforcement in a 14-county region in the northern part of the State. Additional agencies were recruited by means of *\$4,000 equipment grants* provided to agencies that agreed to provide activity reports for both phases. *LELs* helped to secure participation by these, and other, unfunded agencies. Wisconsin reported RDP participation by 232 local agencies (37%) and three patrol districts (43%), resulting in nearly 2,000 hours devoted to seat belt

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<sup>19</sup> While this was the lowest rate per hour of enforcement, it is not know if this was the lowest rate per dollar spent. Also, it should be pointed out that the number of hours worked were, in some States, derived from grant requirements and, in other States, from actual reports of hours worked by the various agencies.



enforcement and about 2,200 citations (2,165 for seat belts and 55 for child restraints), a rate of about 1.1 citations per hour.

For the two-week *CIOT*, Wisconsin reported participation by more than 380 local agencies (60%) and all 7 districts of the Highway Patrol (100%), resulting in just over 23,000 hours (39% designated as *overtime*) spent on seat belt enforcement. About 11,000 citations were written (10,892 for seat belts and 238 for child restraints) for a rate of about 0.5 citations per hour, one of the lowest in the region.

*In summary*, the 2006 level of enforcement was substantial for both the *RDP* and *CIOT* phases, but with some variation among the States. With regard to method of recruiting agency participation, nearly all States used regular grantees as their core group of participants, with additional agencies recruited by means of special grants or equipment incentives. Law enforcement liaisons played a major role in the recruitment process across the region. All States except Wisconsin during the *RDP* and Ohio during *CIOT* reported using overtime funding in their regular or special grants. Among States that used overtime, the percentage of hours reimbursed at this rate averaged 95% during the *RDP* and about 80% during *CIOT*. Illinois and Michigan reported use of enforcement zones for both *RDP* and *CIOT* enforcement and Indiana likely used this highly visible enforcement approach as well. Enforcement in the other three States involved a combination of regular patrols and saturation patrols. By all indices, the 2006 *RDP* effort was more extensive than the 2005 *RDP* effort. An assessment of the relative magnitude of the 2005 and 2006 *CIOT* enforcement programs is less clear, with fewer hours but more citations reported in 2006 than in 2005.

## **B. Evaluation Approach**

Evaluation contractors in each State designed and conducted observational and awareness surveys, statewide and in rural areas.<sup>20</sup> Summary results were provided to PRG for the regional evaluation, using the guidelines and reporting forms shown in Appendix A. Most States conducted two waves of survey data collection, with the first conducted just prior to the start of the *RDP* (w1) and the last conducted after the completion of *CIOT* enforcement (w3). A few States conducted intermediate surveys that overlapped with the end of the *RDP* and the start of *CIOT* (w2).

### **1. Public Awareness and Perceptions**

Telephone and motorist surveys<sup>21</sup> were used to measure changes in *awareness* of general seat belt messages and of enforcement-related messages and activity. Table 3 provides a

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<sup>20</sup> Telephone surveys were conducted in all six States. In addition, motorist surveys were conducted in three States, Illinois, Indiana, and Wisconsin.

<sup>21</sup> These motorist surveys were conducted at driver license centers of State Departments of Motor Vehicles or Bureaus of Motor Vehicles located in various regions of each state. Surveys consisted of a one-page questionnaire regarding knowledge, attitudes, and perceptions regarding seat belt use, media, and enforcement activities. A contractor working for the State Office of Highway Safety offered these surveys to drivers visiting the licensing offices and asked them to complete the surveys, usually while they were waiting for photos to be taken or processed.

summary of the targeted areas and sample sizes of telephone surveys conducted in the GLR States to evaluate the 2006 RDP and CIOT programs.

**Table 3. 2006 Telephone Surveys: Number and Size of Surveys Conducted Statewide and in Rural-Targeted Areas**

State	Sample Frame	Wave 1 Pre-RDP	Wave 2 Pre-CIOT	Wave 3 Post-CIOT	Estimated Error <sup>22</sup>
IL	Statewide	n = 514	-	n = 566	4.3 %
	Rural Targeted	n = 242	n = 242	n = 242	6.3%
IN	Statewide	n = 1526	-	n = 1503	2.5%
	Rural Targeted	n = 399	-	n = 389	5.0%
MI	Statewide	n = 400	n = 400	n = 400	4.9%
	Rural Targeted	n = 150	n = 150	n = 150	8.0%
MN	Statewide	n = 728	-	n = 728	3.6%
	Rural Targeted	n = 276	n = 267	n = 288	6.0%
OH	Statewide	n = 880	-	n = 1124	3.3%
	Rural Targeted	n = 273	-	n = 199	7.0%
WI	Statewide	n = 263	-	n = 260	6.1%
	Rural Targeted	n = 165	n = 261	n = 168	7.7%

In addition to two waves of *statewide* surveys (w1 and w3), Illinois, Michigan, Minnesota, and Wisconsin conducted three waves of *rural* telephone surveys (w1, w2, and w3). These rural surveys generally consisted of over-samples of rural targeted areas, within the statewide survey sample frame. These three-wave surveys measured change from baseline to post-RDP (w2 minus w1) and from post-RDP to post-CIOT (w3 minus w2). Only two waves of rural surveys were conducted in Indiana and Ohio, limiting measurement of change to that occurring from baseline to post-CIOT (w3 minus w1).<sup>23</sup>

All telephone surveys used random-digit-dial (RDD) procedures. They were conducted by commercial polling firms in Michigan and Minnesota and by university research departments in Illinois, Indiana, Ohio, and Wisconsin. Each State used a modified version of a survey instrument developed by NHTSA for use in mobilizations. This protocol is shown in Appendix B. The number of respondents in the *statewide* samples ranged from 260 (in Wisconsin) more than 1500 (in Indiana). The size of the *rural* samples ranged from 150 (in Michigan) to nearly 400 (in Indiana).<sup>24</sup>

In three States, awareness surveys were also conducted at Department of Motor Vehicles or Bureau of Motor Vehicles licensing centers. These surveys provided additional

<sup>22</sup> The error estimate (for each row) reflects the expected error of a simple random sample, for the smallest sample in each row, at the 95% confidence level, when  $p = q = 0.5$  [Error =  $1.96 * \sqrt{((p*q) / (n-1))}$ ].

<sup>23</sup> In addition to statewide and rural-targeted surveys, Michigan conducted three waves of rural telephone surveys in areas that were not intended to be targeted for media and enforcement activity. However, according to post-buy reports, these areas did receive media during the RDP and they received enforcement during CIOT as planned. Thus, they do not constitute acceptable control or comparison areas.

<sup>24</sup> In situations where a rural over-sample is added to a statewide sample, the resulting rural sample size is larger than the over-sample, since a portion of the statewide sample also involves rural respondents.

information regarding changes in rural and statewide samples in Illinois, Indiana, and Wisconsin. They used one-page, paper-and-pencil surveys, with questions similar to those included in telephone surveys. Generally, these surveys were administered to drivers at licensing centers while they were waiting for photos to be taken. Table 4 shows the sample sizes of motorist surveys in the three States.

**Table 4. DMV/BMV Motorist Survey Characteristics  
Statewide, Rural-Targeted, and Control Samples**

State	Sample Frame	Wave 1 Pre-RDP	Wave 2 Pre-CIOT	Wave 3 Post-CIOT
IL	Statewide	n = 975	-	n = 1,000
	Rural Targeted	n = 700	-	n = 350
IN	Statewide	n = 1,600	-	n = 1,250
	Rural Targeted	n = 1,376	-	n = 550
	Control	n = 660	-	n = 570
WI	Statewide	n = 540	n = 590	n = 585
	Rural Targeted	n = 440	n = 490	n = 485

## 2. Observed Seat Belt Usage

Changes in seat belt usage were measured by means of observational surveys. Key characteristics of these surveys, such as number of surveys conducted, number of sites, and total number of observations, are summarized in Table 5. *Statewide* and *rural-targeted* surveys were conducted in all six States.

*Statewide.* A combination of full, statewide surveys and mini surveys were used to measure statewide changes in usage.<sup>25</sup> <sup>26</sup> Full surveys ranged in size from 113 sites in Indiana to 271 sites in Wisconsin. Mini surveys were generally much smaller, usually 50 to 60 sites, but the full range was from 50 in Illinois to 192 in Michigan.<sup>27</sup> These smaller surveys could usually be completed in a few days rather than a few weeks, making them more suitable for use at several stages of a brief, one-month program.

<sup>25</sup> Full surveys are defined as those which meet the requirements established for statewide observational surveys under Section 157 (U.S. Code 23). These requirements were established as part of the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21).

<sup>26</sup> Although full statewide surveys were conducted in all States following the end of the CIOT phase, mini surveys were conducted or extracted from these surveys in Illinois, Minnesota, and Wisconsin and used for comparison with baseline and post RDP surveys.

<sup>27</sup> Although the surveys conducted in Michigan were large (192 sites), they were not used as the State's official statewide survey (which was conducted by another contractor). Thus, these 192-site statewide surveys are designated as mini surveys.

**Table 5. Observational Surveys Conducted in the GLR States in 2006  
Number of Surveys, Sites, and Observations: Statewide and in Rural Areas**

State	Sample Frame	W1 Pre-RDP	w2 Pre-CIOT	w3 Post-CIOT	State	Sample Frame	w1 Pre-RDP	W2 Pre-CIOT	w3 Post-CIOT
IL	Statewide # sites = 50 # obs. = 43,817	mini	-	mini/full 50/258 43,800/ 132,056	MN	Statewide # sites = 84 # obs. = 4,696	mini	mini	mini/full 84/240 6,156/ 15,374
	Rural # sites = 27 # obs. = 6,686	mini	mini	mini		Rural # sites = 36 # obs. = 1,214	mini	mini	mini
IN	Statewide # sites = 113 # obs. = 19,284	full	-	full	OH	Statewide # sites = 265 # obs. = 23,580	full	-	full
	Rural # sites = 30 # obs. = 3,620	mini	mini	mini		Rural # sites = 48 # obs. = 2,646	mini	-	mini
	Control # sites = 30 # obs. = 32,621	mini	mini	mini		-	-	-	-
MI	Statewide # sites = - # obs. =	-	mini	mini	WI	Statewide # sites = 56 # obs. = 6,225	mini	mini	mini/full 56/271 6,421/ 29,134
	Rural # sites = 60 # obs. = 5,536	mini	mini	mini		Rural # sites = 48 # obs. = 3,791	mini	mini	mini
	Control <sup>1</sup> # sites = 15 # obs. = 1,547	Mini	mini	mini		-	-	-	-

In MI, the total rural sample was 75 sites and an average of 7,290 observations.

Observational sites for mini surveys were nearly always selected from the sites within the full statewide survey and similar procedures were followed in conducting both types of surveys. The combinations of mini and full statewide surveys used to measure statewide change in the six GLR States were as follows:

- *Indiana* and *Ohio* measured overall change via two full statewide surveys at w1, before the RDP and at w3, after CIOT.
- *Illinois*, *Minnesota*, and *Wisconsin* measured overall statewide change via a combination of a mini survey at w1, prior to the RDP and a full survey at w3, after CIOT.<sup>28</sup> In all three States, a sub-sample of the full statewide survey was extracted at w3, for comparison with the baseline mini survey at w1.
- *Michigan* conducted two large mini surveys (192 sites); one at w2 before CIOT and one at w3 after CIOT. There was no w1 (pre-RDP) statewide survey.

<sup>28</sup> Minnesota and Wisconsin also conducted an intermediate (w2) mini survey, enabling the measurement of change after the RDP, as well as after CIOT. In all three States, Illinois, Minnesota, and Wisconsin, sub-sample surveys comparable to the baseline mini-surveys were also available for comparison with the baseline mini surveys.

*Rural Targeted Areas.* Mini-surveys were used to measure change in rural-targeted areas in all six States. These surveys ranged in size from 27 sites in Illinois to 60 sites in Michigan.<sup>29</sup> Mini-surveys were also conducted in *non-targeted* rural areas in Indiana and Michigan.<sup>30</sup> The non-targeted-area surveys in Indiana consisted of 30 sites and the sample in Michigan consisted of 15 sites. All surveys were conducted by the evaluation contractors for the State.

### 3. Measuring Changes in Usage Among Crash Victims

In addition to measuring changes in observed usage, NHTSA's Fatality Analysis Reporting System (FARS) was used to examine changes in usage among occupants killed while riding in passenger cars, light trucks, or vans. These data were examined for the years from 2000 through 2006, nationally and among the GLR States, to determine the magnitude of change during the RDP, relative to preceding years.

### 4. Testing for Statistical Significance

Pearson chi-square tests were used to determine the significance of shifts in awareness and observed seat belt usage from one measurement period to another. All tests were based on two-by-two contingency tables with one degree of freedom. Of interest was the shift in proportions of two mutually exclusive (and dichotomous) outcomes, such as awareness of enforcement versus not aware of enforcement, or seat belt used versus seat belt not used, at each measurement period (e.g., baseline versus post RDP; post-RDP versus post-CIOT); etc.). Calculations were performed online, using the Simple Interactive Statistical Analysis (SISA) Web site (<http://www.quantitativeskills.com//sisa/>).

Binary logistic regression analyses were conducted to examine the differences in usage among fatal crash victims, nationally and in the Great Lakes Region, over time. In this case, the interaction between the GLR versus the Nation and time pre-RDP versus post-RDP was of interest, and the binary logistic regression approach using the Wald statistic was considered to be appropriate, noting that directly examining interactions with a chi Square is not possible.

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<sup>29</sup> Although most of the mini surveys consisted of sub-samples of rural sites taken from the full statewide survey within the targeted media markets, the mini survey used in Illinois was a totally independent, probability-based, survey designed to estimate seat belt use in the rural targeted areas.

<sup>30</sup> Although it was intended that non-targeted media markets would be sampled in Indiana and Michigan, four of five counties in the non-targeted sample in Michigan received paid media during the RDP (i.e., those in the Grand Rapids media market). Thus, the total rural 75-site sample was used to measure rural change for this report.

### III. Results

The following sections describe: (1) media and enforcement activity associated with both the RDP and CIOT phases; (2) changes in public awareness and perceptions regarding media and enforcement activity; (3) changes in observed seat belt use; and (4) changes in seat belt use among fatally-injured occupants of passenger vehicles.

Generally results for the 2006 mobilization are described first, followed by a comparison with 2005 results. In addition, changes in awareness and seat belt usage during the two-year RDP/CIOT effort are compared with changes over a broader 6- to 8-year period.

#### A. Markets, Counties, and Population Sizes

Table 6 provides a summary of targeted markets, counties, and population size for each State's RDP and CIOT in 2006, along with the regional *totals* and *averages* for both years of the program. On average, the GLR States targeted 5 markets, 38 counties, and 2 million residents during each RDP, about one-fourth of the State's population. During each CIOT, the objective was to expose all of the 51 million GLR residents to media (and enforcement), with an average of about 9 media markets and nearly 90 counties involved to target a statewide population that averaged 8.5 million residents.

**Table 6. Targeted Areas, by Phase, by State (2006) and Regionwide (2005 & 2006)<sup>31</sup>**

State 2006	Number of Media Markets Targeted		Number of Counties Targeted		Population Targeted (millions)		RDP Proportion of Total Population
	RDP	CIOT	RDP	CIOT	RDP	CIOT	
IL	5	10	42	103	2.9	12.8	<b>23%</b>
IN	4	9	23	92	0.8	6.3	<b>12%</b>
MI	5	10	49	83	3.4	10.1	<b>33%</b>
MN	5	7	42	88	1.3	5.1	<b>26%</b>
OH	6	12	15	89	0.7	11.5	<b>6%</b>
WI	5	7	56	72	3.0	5.5	<b>54%</b>
<b>2006 GLR Ave.</b>	<b>30 5</b>	<b>55 9</b>	<b>227 38</b>	<b>527 88</b>	<b>12.1 2</b>	<b>51.3 8.5</b>	<b>24% 26%</b>
<b>2005 GLR Ave.</b>	30 5	55 9	227 38	527 88	10.5 1.8	51.3 8.5	21% 22%
<b>GLR</b> rows show totals and weighted average for RDP proportion of population. <b>AVE.</b> rows show unweighted averages across all States for each category.							

<sup>31</sup> Not every market in every State was targeted during the CIOT phase due to limited resources. However, the total numbers rather than the targeted numbers, of markets, counties, and residents in the State are shown in the CIOT columns, because the objective of each CIOT mobilization was to affect usage across the entire State, and not just in the targeted areas.

## B. Media and Enforcement Activity

### 1. Media Expenditures

Table 7 shows that a total of \$1.27 million was spent for paid media in rural targeted areas during the 2006 RDP, an average of about 15¢ per capita, within targeted areas of each State. An additional \$3.23 million was spent on statewide media during CIOT (7¢ per capita), for a total expenditure of \$4.5 million (9¢ per capita) in that year.<sup>32</sup>

There was a substantial range in per capita expenditures during the RDP because Ohio and Indiana targeted relatively small areas (6% and 12% of their population, respectively) while other States targeted larger proportions, ranging from 23% in Illinois to 54% in Wisconsin. As a result of the combination of *expenditures* and target *population size*, RDP per capita expenses ranged from a low of 6¢ in Illinois to a high of 36¢ in Ohio.

**Table 7. Funding for RDP and CIOT Media in 2006**

<b>2006 State</b>	<b>RDP Media Funding</b>	<b>CIOT Media Funding</b>	<b>Total Funding</b>	<b>\$ Per Capita RDP</b>	<b>\$ Per Capita CIOT</b>	<b>\$ Per Capita Total</b>
<b>IL</b>	\$169,989	\$495,291	\$665,280	\$0.06	\$0.04	\$0.05
<b>IN</b>	\$122,389	\$418,182	\$540,571	\$0.15	\$0.07	\$0.09
<b>MI</b>	\$346,509	\$982,321	\$1,328,830	\$0.10	\$0.10	\$0.13
<b>MN</b>	\$141,000	\$406,094	\$547,094	\$0.11	\$0.08	\$0.11
<b>OH</b>	\$238,986	\$637,323	\$876,309	\$0.36	\$0.06	\$0.08
<b>WI</b>	\$207,178	\$293,608	\$500,786	\$0.07	\$0.05	\$0.09
<b>2006 GLR Ave.</b>	<b>\$1,226,051</b> <b>\$204,342</b>	<b>\$3,232,819</b> <b>\$538,803</b>	<b>\$4,458,870</b> <b>\$743,145</b>	<b>\$0.10</b> <b>\$0.15</b>	<b>\$0.06</b> <b>\$0.07</b>	<b>\$0.09</b> <b>\$0.09</b>
<b>2005 GLR Ave.</b>	\$1,270,382 \$211,730	\$3,096,159 \$516,027	\$4,366,541 \$727,757	\$0.12 \$0.17	\$0.06 \$0.06	\$0.09 \$0.09
<b>GLR</b> rows show totals and weighted averages for per capita expenditures (GLR \$ / GLR Pop.) <b>Ave.</b> rows provide (unweighted) averages each category (i.e., totals / 6 States).						

*Comparison with 2005.* The range in RDP per capita media expenditures was greater in 2005 than in 2006, ranging from a low of 7¢ in Illinois to a high of 44¢ in Ohio. Other than that difference, however, the 2005 and 2006 campaigns were very similar. An average of just over \$200,000 was spent on RDP media each year and just over \$500,000

<sup>32</sup> The reason that RDP per capita averages shown in the GLR rows are smaller than those shown in the “Ave” rows is that the GLR averages are weighted by population size. Thus, the high per capita expenditures in Indiana and Ohio are counterbalanced by the fact that smaller populations were targeted in these States. Averages shown in the row labeled “Ave” are unweighted, meaning that the size of the target populations in each State are not considered in these averages.

was spent on CIOT media. A more complete listing of the characteristics of media programs, for both phases and both years, can be found in Appendix C.

## 2. Allocations by Medium

Table 8 shows allocations by medium in 2006. While proportionately more RDP funds were spent on television (average of 53%) than on radio (45%) or other media (2%), States varied substantially with regard to these allocations. Michigan, Illinois, and Wisconsin spent much more on television than on radio; Ohio and Indiana (which focused on smaller rural populations) spent much more on radio than on television; and Minnesota spent similar amounts on both media. During the RDP, Michigan had largest TV/Radio ratio (with 84% spent on TV and 15% spent on radio) and Ohio had the smallest TV/radio ratio (with 3% spent on TV and 88% spent on radio).

Allocations for the CIOT phase were more consistent, with States spending an average of three times as much on television as on radio (averages of 74% and 23%, respectively). Every State spent at least twice as much on television as on radio and very little was spent on other media (i.e., billboards, banners, etc.), during either phase.

**Table 8. Funding Allocations by Medium, by Phase, and by State  
2006 RDP and CIOT Programs: (with 2005 Summary Comparison Data)**

2006 States	RDP Phase			CIOT Phase		
	TV %	Radio %	Other %	TV %	Radio %	Other %
<b>IL</b>	<b>69</b>	31	0	74	26	0
<b>IN</b>	41	59	0	80	20	0
<b>MI</b>	<b>84</b>	15	1	85	15	1
<b>MN</b>	54	46	0	64	28	8
<b>OH</b>	3	<b>88</b>	9	61	31	7
<b>WI</b>	<b>68</b>	32	0	76	24	0
<b>2006 GLR Ave.</b>	<b>56%</b> 53%	<b>43%</b> 45%	<b>2%</b> 1%	<b>74%</b> 73%	<b>23%</b> 24%	<b>2%</b> 1%
<b>2005 Ave.</b>	61%	34%	6%	69%	23%	8%
“Averages” are unweighted across the six States; GLR is a weighted average (i.e., total % in GLR allocated to a medium). TV includes broadcast and cable television; “Other” includes primarily outdoor (billboards, variable message signs)						

*Comparison with 2005.* There were modest differences in RDP media allocations between 2005 and 2006, with proportionately more spent on radio in 2006 (45%) than in 2005 (34%). Every State except Michigan spent proportionately more on radio (and less on television) in 2006. Indiana spent modestly more on radio than on television in both years (54% in 2005 and 59% in 2006).



Proportionately more RDP funds were spent on outdoor advertising in 2005 than in 2006, with Indiana and Ohio spending 12% and 17% of their 2005 RDP funds on outdoor, respectively, compared with 0% and 9% in 2006. Very little was spent on outdoor media for CIOT in either year, except that Indiana spent about 40% of its CIOT media funds on outdoor advertising in 2005, but no funds were reported spent on this category in 2006.

### 3. Number of Ads

Estimates of the number of television and radio ads broadcast were provided by the States as part of their reporting requirements.<sup>33</sup> Table 9 shows that, for the 2006 RDP, nearly 19,000 television ads and 17,000 radio ads were reported, for a total of nearly 36,000 ads aired in the electronic media (about 30 ads per 10,000 residents in the region). Based on these numbers, a *typical* State broadcast an average of about 6,000 total ads, relatively evenly divided between television and radio.

**Table 9. Number of Ads: Total and per 10,000 Residents, by State  
2006 RDP and CIOT Campaigns**

	2006 RDP				2006 CIOT			
	TV Ads	Radio Ads	TV + Radio	Total Ads (per 10K)	TV Ads	Radio Ads	TV + Radio	Total (per 10K)
<b>IL</b>	1,744	1,868	<b>3,612</b>	12	2,744	2,375	<b>5,119</b>	4
<b>IN</b>	3,870	4,060	<b>7,930</b>	99	4,759	2,579	<b>7,338</b>	12
<b>MI</b>	3,750	2,280	<b>6,030</b>	18	6,850	3,780	<b>10,630</b>	11
<b>MN</b>	1,185	3,780	<b>4,965</b>	38	1,608	4,045	<b>5,653</b>	11
<b>OH</b>	5,503	3,707	<b>9,210</b>	132	5,661	6,326	<b>11,987</b>	10
<b>WI</b>	2,793	1,177	<b>3,970</b>	13	4,002	1,603	<b>5,605</b>	10
<b>2006 GLR</b> <sup>1</sup>	<b>18,845</b>	<b>16,872</b>	<b>35,717</b>	<b>30</b>	<b>25,624</b>	<b>20,708</b>	<b>46,332</b>	<b>9</b>
Ave. <sup>2</sup>	3,141	2,812	5,953	55	4,271	3,451	7,722	10
<b>2005 GLR</b> <sup>1</sup>					24,203 (OH incl)	13,584 (OH incl)	37,787 (OH incl)	7 (OH incl)
(w/o OH)	19,777	11,626	31,403	32	22,554	10,360	32,914	8
Ave. <sup>2,3</sup>	3,955	2,325	6,281	42	4,511	2,027	6,583	9
Notes: <sup>1</sup> Regional Totals and per capita weighted averages (# ads in region ÷ regional population) <sup>2</sup> Ave. is unweighted (i.e., Total / 6 States); <sup>3</sup> 2005 RDP data not available for Ohio. w/o OH = totals and averages with Ohio excluded; OH incl. = totals with OH included								

There was substantial variation among the States with regard to the normalized number of ads aired during the RDP, ranging from about 13 (per 10,000 residents) in Illinois and Wisconsin to about 115 in Indiana and Ohio. The reason for the very high rate in the

<sup>33</sup> There are problems with this measure of media activity in that States monitor ads using different methods. While some may use media tracking services, most States relied on media plans or on post-buy reconciliations made by their media contractors. Another problem with this index is that it does not provide information with regard to the number of ads aired as part of programming designed to reach the targeted audience, generally young males. Still, this measure was considered to be a useful index to help understand how much paid and value-added or public service media occurred during each phase.

latter two States, of course, is that they targeted a much smaller proportion of the population than did the other four States, which averaged 20 ads per 10,000 residents.<sup>34</sup>

*Comparison with 2005.* A comparison of the 2005 and 2006 mobilizations is made difficult by the fact that ad information was not available for the 2005 RDP in Ohio.<sup>35</sup> Excluding Ohio from the comparison, about 16% fewer ads were aired during the RDP in 2006 than in 2005 (about 26,500 and 31,400, respectively). This shift was the net result of a substantial decline in television ads in 2006 (-33%), accompanied by a slight increase in radio ads (+13%). Overall, excluding Ohio, the RDP ad rate declined from 32 (per 10,000 residents) in 2005 to 23 in 2006. The shift from television to radio occurred during CIOT as well, with 12% fewer TV ads and 39% more radio ads airing in 2006 than in 2005. Again, these data exclude Ohio.<sup>36</sup>

*In summary,* these data show a slight overall decline in the number of ads aired during the 2006 RDP, with less emphasis on television and more on radio. At the same time, there was a slight increase in 2006 CIOT ads, with an increase in TV ads in Michigan and Ohio and an increase in radio ads in Illinois, Michigan, Minnesota, and Ohio.

#### 4. Gross Rating Points

Another index of media intensity is the sum of ratings achieved by a specific media vehicle or schedule. This measure, called *gross rating points*, represents the percentage of the target audience reached by an advertisement. If an ad appears more than once, the GRP represents the sum of appearances. For example, if a television add reaches 50% of the target audience and is aired 5 times, it would have a GRP rating of 250 (*frequency* (5) x *reach* (50% of target audience)).<sup>37</sup>

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<sup>34</sup> Although this index provides information with regard to frequency, it provides no information with regard to reach (i.e., proportion of the targeted population reached by the ads).

<sup>35</sup> Because of the unavailability of ad data from Ohio, the totals and averages shown in Table 9 for the 2005 RDP include data from only five States.

<sup>36</sup> Looking only at the CIOT phase in Ohio, there was a large increase in the number of CIOT ads, from 2005 to 2006 (+150%), with more than a tripling of TV ads (+234%) and a doubling of radio ads (+96%).

<sup>37</sup> Although the calculation of GRPs seems relatively straightforward, obtaining such estimates, in a standard format, from multiple media contractors proved difficult. In 2005, GRP data for the RDP phase were obtained from a single contractor, Tombras, for four States. Several contractors made the media purchases for CIOT (different contractors for different States) and only three provided GRP data. These data were more variable in their presentation and somewhat more difficult to compare. In 2006, six individual contractors were responsible for purchases for both the RDP and CIOT phases. As a result, estimates were calculated and reported in different formats. Thus, the summary of GRP/TRP information contained in Table 10 should be considered to be a summary of GRP best estimates.

**Table 10. A Summary Gross Rating Point (GRP) Estimates:  
2005 and 2006: RDP and CIOT Campaigns**

2005			2006			
State	RDP	CIOT	State	RDP	CIOT	Notes
<b>IL</b>	400	672	<b>IL</b>	390	383	<sup>1</sup>
<b>IN</b>	n/a	n/a	<b>IN</b>	440	n/a	<sup>2</sup>
<b>MI</b>	579	563	<b>MI</b>	536	598	<sup>3</sup>
<b>MN</b>	667	n/a	<b>MN</b>	219	n/a	<sup>4</sup>
<b>OH</b>	n/a	n/a	<b>OH</b>	573	661	<sup>5</sup>
<b>WI</b>	610	627	<b>WI</b>	484	450	<sup>6</sup>
<b>Ave.</b>	<b>564</b>	<b>621</b>	<b>Ave.</b>	<b>440</b>	<b>523</b>	
	4 States	3 States		6 States	4 States	
Notes (for 2006 entries):						
<sup>1</sup> based on <u>plan &amp; reconciliation</u> ;			<sup>4</sup> based on <u>post-analysis/3 markets</u>			
<sup>2</sup> based on <u>reconciliation</u> (radio only);			<sup>5</sup> based on <u>post-analysis</u> ;			
<sup>3</sup> based on <u>plan &amp; post-analysis</u> ;			<sup>6</sup> based on <u>plan &amp; post-analysis</u>			

Table 10 shows 2005 and 2006 GRP *estimates* for the RDP and CIOT. These data indicate that the media efforts in both the RDP and CIOT phases generally approached or exceeded the guidelines of 350 GRPs for a “strong” program and 500 GRPs for a “very strong” program.<sup>38</sup> For 2006, there was an average of 440 GRPs during the RDP and 523 GRPs during CIOT. In spite of more ads aired during the RDP than during CIOT (see previous section), higher GRPs were reported for CIOT, possibly due to a greater reach associated with the ads purchased and aired for CIOT (e.g., proportionately more TV ads than radio ads). Further, these data show a decline in GRPs from 2005 to 2006, possibly reflecting the shift from television to radio described above.

### 5. Earned Media

There was increased emphasis on earned media in 2006, compared with 2005. Reporting was also more complete. Table 11 shows that, in 2006, there were 26 media events during the RDP and 75 events during CIOT.<sup>39</sup> In addition, there were nearly twice as many news stories during CIOT as during the RDP (1,825 and 997, respectively). More than half of these stories were found in the print media.

*Comparison with 2005.* Relatively little information is available with regard to RDP earned media in 2005. Thus, no inter-year comparison can be made for the RDP. With regard to CIOT, however, the complete data set suggests that there were fewer total news stories in 2006 than in 2005. However, the 2005 total was highly skewed by the large number of stories reported by Indiana. Excluding Indiana from the comparison, more stories were generated in 2006 than in 2005. There were increases in the number of news

<sup>38</sup> Recommendations for a “strong” program were 200 TV GRPs + 150 radio GRPs = 350 Total GRPs; recommendations for a “very strong” program were 300 TV GRPs + 200 radio GRPs = 500 total GRPs.

<sup>39</sup> Appendix C contains more detailed information with regard to the number of earned media events and stories generated for each State and each phase of the 2005 and 2006 campaigns.

stories in Illinois, Michigan, Minnesota, and Wisconsin, primarily associated with CIOT, and there were declines in Indiana and Ohio associated with CIOT.

**Table 11. Indices of Earned Media Activity:  
2005 and 2006: RDP and CIOT Campaigns**

State	2005				State	2006			
	RDP		CIOT			RDP		CIOT	
	Media Events	News Stories	Media Events	News Stories		Media Events	News Stories	Media Events	News Stories
<b>IL</b>	n/a	n/a	8	208	<b>IL</b>	3	111	16	397
<b>IN</b>	n/a	n/a	16	2498	<b>IN</b>	2	75	2	72
<b>MI</b>	n/a	n/a	7	540	<b>MI</b>	6	272	6	596
<b>MN</b>	n/a	n/a	12	78+	<b>MN</b>	4	226	7	359
<b>OH</b>	n/a	n/a	54	434	<b>OH</b>	5	35	43	107
<b>WI</b>	n/a	n/a	6+	34+	<b>WI</b>	6	278	1	294
<b>Total</b>	<b>n/a</b>	<b>n/a</b>	<b>103+</b>	<b>3792+</b>	<b>Total</b>	<b>26</b>	<b>997</b>	<b>75</b>	<b>1825</b>

## 6. Enforcement

Three of the six GLR States intensified enforcement during the 2005 RDP. Five States enforced during the 2006 RDP. All six States intensified enforcement during CIOT (both years). Looking first at 2006, just over 15,000 enforcement hours were reportedly devoted to the RDP (about 17 hours per 10,000 residents) and nearly 184,000 hours were allocated for CIOT (about 32 hours per 10,000 residents). Just under 20,000 citations were issued for restraint violations during the RDP (about 22 citations per 10,000 residents) and just over 150,000 citations were issued during CIOT (about 27 per 10,000 residents).<sup>40</sup> Table 12 summarizes the number of hours worked and citations issued by State, by year, and by program phase. Table 13 provides population-normalized rates for these indices.<sup>41</sup>

<sup>40</sup> Percent of total enforcement agencies participating can be found in Appendix D.

<sup>41</sup> For the RDP phase, averages and medians are based only on those States that actually conducted enforcement activity during that phase.

**Table 12. Number of Enforcement Hours Worked and Citations Issued:  
2005 and 2006: RDP and CIOT Campaigns**

State	2005				2006			
	RDP		CIOT		RDP		CIOT	
	Hrs.	Cites	Hrs.	Cites	Hrs.	Cites	Hrs.	Cites
<b>IL</b>	4,774	9,247	14,064	31,419	8,819	11,340	30,154	46,996
<b>IN</b>	520	1,365	14,393	15,776	1,100	2,761	3,766	15,284
<b>MI</b>	-	-	44,708	17,113	-	-	24,708	25,631
<b>MN</b>	-	-	8,024	31,998	2,014	2,680	4,000	11,711
<b>OH</b>	1204	863	94,791	12,173	1,164	577	97,823	40,179
<b>WI</b>	-	-	32,397	11,012	1,957	2,220	23,277	11,130
<b>GLR</b>	<b>6,498</b>	<b>11,475</b>	<b>208,377</b>	<b>119,491</b>	<b>15,054</b>	<b>19,578</b>	<b>183,728</b>	<b>150,931</b>
Ave.	2,166	3,825	34,730	19,915	3,011	3,916	30,621	25,155

Notes: Michigan, Minnesota, and Ohio did not intensify enforcement during the 2005 RDP. Michigan added an extra week of enforcement in 2006 but it began after the end of the RDP; The hours and citations from that extra week are attributed to CIOT, rather than to the RDP. Citation totals include seat belt citations + child restraint citations.

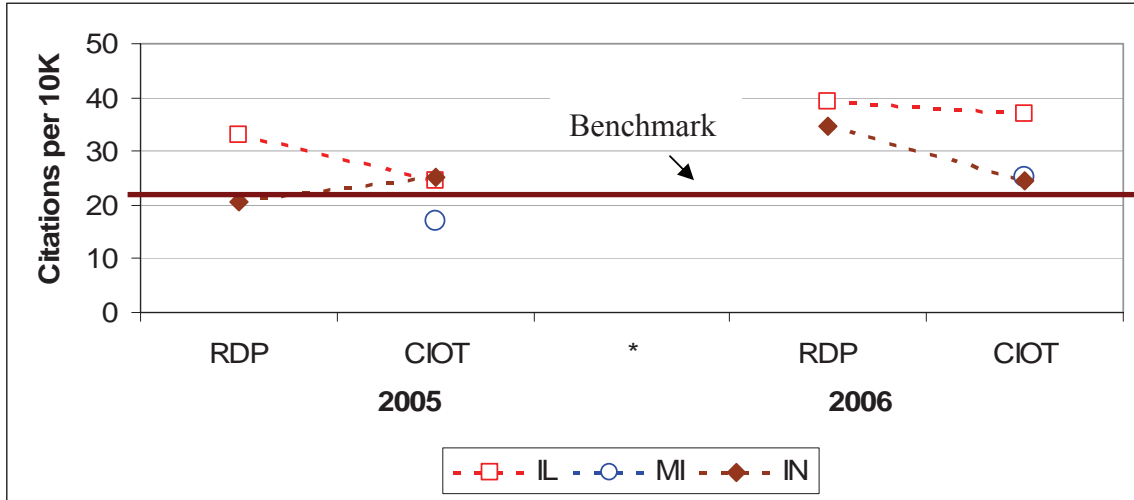
**Table 13. Normalized Indices of Enforcement Activity (Hours and Citations):  
2005 and 2006: RDP and CIOT Campaigns**

State	2005				2006			
	RDP		CIOT		RDP		CIOT	
	HRs/10K	Cites/10K	Hrs/10K	Cites/10K	HRs/10K	Cites/10K	Hrs/10K	Cites/10K
<b>IL</b>	16.5	32.9	11.0	24.6	30.4	39.1	23.6	36.8
<b>IN</b>	7.9	20.7	22.9	25.2	13.8	34.5	6.0	24.4
<b>MI</b>	-	-	44.2	16.9	-	-	24.4	25.3
<b>MN</b>	-	-	15.6	62.3	15.5	20.6	7.8	22.8
<b>OH</b>	18.2	13.1	82.7	10.6	16.6	8.2	85.3	35.0
<b>WI</b>	-	-	58.5	19.9	6.5	7.4	42.0	20.1
<b>Ave.</b>	<b>14.2</b>	<b>22.2</b>	<b>39.2</b>	<b>26.6</b>	<b>16.6</b>	<b>22.0</b>	<b>31.5</b>	<b>27.4</b>
Median	16.5	20.7	33.6	22.3	15.5	20.6	24.0	24.9

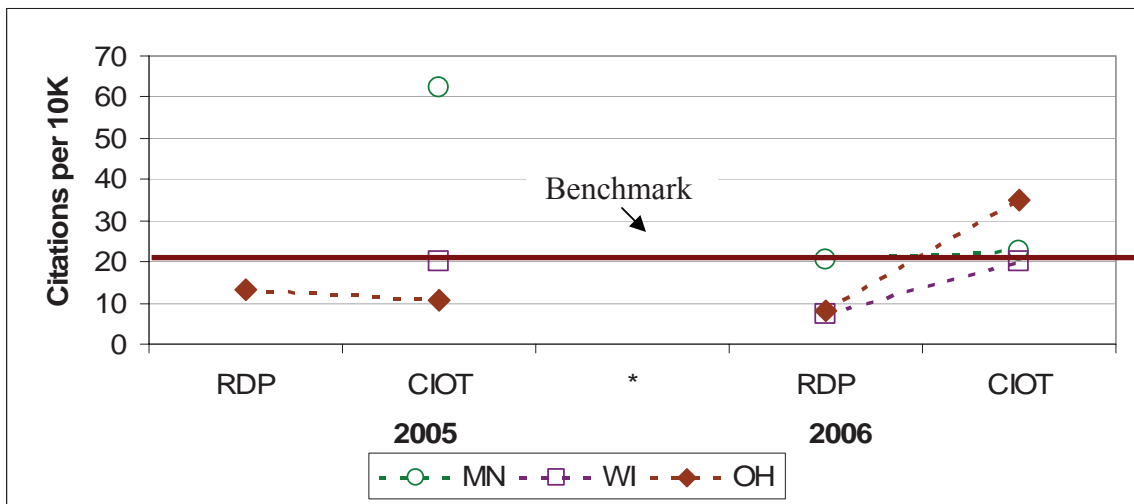
Averages and medians include only States with activity; averages are un-weighted (i.e., totals / # of States). The 2005 RDP rates are one-week rates; the 2006 RDP rates are one-week rates in Minnesota and Wisconsin and two-week rates in Illinois, Indiana, and Ohio. All CIOT rates are two-week rates. Thus, it could be argued that all 2005 RDP rates and the 2006 RDP rates in Minnesota and Wisconsin should be multiplied by 2 to be comparable with CIOT rates.

Figures 2 and 3 show change in citation rates for each phase of the two-year program, along with benchmarks based on a two-week CIOT mobilization.<sup>42</sup>

**Figure 2. Citation Rates During RDP and CIOT Phases: 2005 and 2006: Three Primary Law States in the GLR (Citations per 10,000 Residents)**



**Figure 3. Citation Rates During RDP and CIOT Phases: 2005 and 2006: Three Secondary Law States in the GLR (Citations per 10,000 Residents)**



<sup>42</sup> Citations, rather than enforcement hours, were chosen for this illustration because of the available benchmark, which was derived from CIOT programs conducted in the Southeast Region in 2001; in ten Model CIOT programs conducted across the nation in 2002; and from the 2003 National CIOT mobilization. These rates are documented in Nichols and Ledingham (2008).

In 2006, citation rates for all *three primary law States*, Illinois, Indiana, and Michigan, were at or above the two-week benchmark of 21 citations per 10,000 residents (see Figure 2). Illinois had the highest rates, which declined slightly from the RDP to CIOT (39.1 to 36.8, respectively). Indiana's 2006 RDP rate was comparable to the Illinois rate, but it declined sharply during CIOT (from 34.5 to 24.4). Michigan did not intensify enforcement during the RDP. Its CIOT rate was modestly above the benchmark (25.3). Thus, in addition to all 2006 rates being at or above benchmark levels, RDP rates were higher than CIOT rates in Illinois and Indiana, largely due to the RDPs' smaller target population.<sup>43</sup>

Figure 3 shows the citation rates for the *three secondary law States*, Minnesota, Ohio, and Wisconsin. The 2006 RDP rates were well below the benchmark in Ohio and Wisconsin (8.2 and 7.4, respectively), while Minnesota's rate (20.6) was at the benchmark level. Citation rates increased during CIOT in Ohio and Wisconsin (to 35.0 and 20.1, respectively) and remained relatively unchanged in Minnesota (at 22.8), just above the benchmark. Thus, in 2006, RDP rates in these secondary-law States were much lower than in the primary-law States and they were below benchmark levels in Ohio and Wisconsin. During the 2006 CIOT, citation rates were more comparable to those in primary law States, at benchmark levels in Minnesota and Wisconsin and at nearly twice the benchmark levels in Ohio.

*Comparison with 2005.* Citation rates in primary law States generally increased from 2005 to 2006, for both the RDP and CIOT. Nearly all rates for both years were comparable to (or higher than) benchmarks from past mobilizations.<sup>44</sup> Among the secondary law States, only Ohio intensified enforcement during the 2005 RDP and while its citation rate during that effort (13.1) was below the benchmark level, it declined even further in 2006 (to 8.2 citations per 10,000 residents). With regard to CIOT enforcement, the citation rate increased from 2005 to 2006 in Ohio, declined in Minnesota, and remained the same in Wisconsin.<sup>45</sup>

*Efficiency of Enforcement Efforts.* Citation and hours-worked data were used to estimate the number of citations issued per hour (and the number of minutes/hours of enforcement for each citation issued). These rates provide some indication of the *efficiency* of the enforcement efforts. Further, where estimates of hourly enforcement costs are available, costs per ticket can be estimated from these indices. Table 14 summarizes the number of *minutes per citation* and the number of *citations per hour* for the 2005 and 2006 mobilizations in the GLR (RDP and CIOT phases).

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<sup>43</sup> There was no RDP enforcement in Michigan.

<sup>44</sup> This benchmark is based on programs that are now 4-6 years old, when baselines were substantially lower than they are today and when the mobilizations were more novel. At the time (2001 to 2003), an enforcement rate of about 20 citations per 10,000 residents, combined with paid media of about 6¢ to 8¢ per capita, was associated with a 7- to 9-point increase in observed seat belt usage. In any case, these benchmarks should be viewed as representing "strong" enforcement programs.

<sup>45</sup> Adjusted (two-week) rates were calculated for MN and WI, where there was only one week of RDP enforcement. However, it was felt that the unadjusted rates provided a more valid comparison as they represented, in absolute terms, what the target populations were actually exposed to (over one week, rather than over two weeks).

**Table 14. Citation Rates per Hour of Enforcement:  
2005 and 2006 RDP and CIOT Campaigns**

States	2005				2006			
	RDP		CIOT		RDP		CIOT	
	Citations Per Hour	Minutes Per Citation	Citations Per Hour	Minutes Per Citation	Citations Per Hour	Minutes Per Citation	Citations Per Hour	Minutes Per Citation
<b>Illinois</b>	1.9	32	2.2	27	1.3	46	1.8	33
<b>Indiana</b>	2.6	23	1.1	55	2.5	24	4.1	15
<b>Michigan</b>	-	-	0.4	150	-	-	1.0	58
<b>Minnesota</b>	-	-	4.0	15	1.3	46	2.9	21
<b>Ohio</b>	0.7	84	0.1	600	0.5	120	0.4	150
<b>Wisconsin</b>	-	-	0.3	200	1.1	55	0.5	120
<b>Average</b>	<b>1.8</b>	<b>34</b>	<b>1.4</b>	<b>44</b>	<b>1.4</b>	<b>43</b>	<b>1.8</b>	<b>33</b>
Median	1.9	32	0.8	80	1.3	46	1.4	46

Note that minutes per citation are calculated directly from citations per hour.

This table shows much variability among the States with regard to the “*efficiency*” of their enforcement activity. The number of citations per hour ranged from 0.1 in the 2005 Ohio CIOT to 4.1 in the 2006 Indiana CIOT. The median was 1.2 citations per hour (for 20 entries). This rate translates to about 50 minutes per citation written, with a range of 15 minutes to 10 hours. Eleven of the 20 data points were between one and two citations per hour (rounded), providing some stability to the median estimate of 1.2 citations/hr.

*Estimating Cost per Ticket Issued.* Costs per hour of enforcement were not reported by the States as part of the RDP/CIOT demonstration. However, Illinois included such estimates in its final report on the 2006 CIOT (Illinois Department of Transportation, 2006). It estimated that about \$42.35 was spent per patrol hour. Thus, using the Illinois-specific estimate of citations per hour (1.8 for the 2006 CIOT phase), the estimated cost per citation in Illinois would be about \$23.50.<sup>46</sup>

<sup>46</sup> The estimated cost per citations provided in the Illinois Final Report (\$20.79 per citation) is slightly lower than the estimate of \$23.30 shown above. This is due to a slightly higher number of citations reported in the IL DOT report (52,516 citations), compared with what the State provided to NHTSA (46,996 citations). This likely reflects updated information in the Illinois DOT Report.



## C. Awareness of Media and Enforcement Activity

Telephone and motorist surveys were conducted to measure changes in awareness and perceptions regarding media and enforcement activity. Results across all six States are summarized for the following key issues:

### General Seat Belt Messages

- Awareness of recent messages that encourage people to buckle up.
- Perception that there were more than usual messages in the past 30 days.
- Recognition of the *Click It or Ticket* slogan.

### Enforcement-Related Messages and Activity

- Awareness of special efforts by police to ticket for seat belt violations
- Perception that police are issuing more tickets for seat belt violations
- Perceived risk of receiving a ticket (if ride unbuckled for six months)

### Source(s) and Formats of Messages Received

- Medium where seat belt and enforcement-related messages were seen or heard (television, radio, newsprint, and outdoor)
- Format of seat belt or enforcement-related messages (ads or news stories)

#### 1. State-by-State Results in 2006: Key Indices

The next series of tables and figures summarizes rural and statewide telephone survey results from each of the six GLR States, overall and for each phase of the mobilization.<sup>47</sup> In general, these data suggest that the RDP in Michigan was not associated with significant increases in awareness of media or enforcement. Three of the six indices either remained unchanged or declined in Michigan. In Illinois, Minnesota, and Wisconsin, however, there were increases in awareness during the RDP.

Overall, (from w1 to w3), there were significant increases for nearly every index, in every State. This was the case in *rural targeted areas* (shown on the left side of each table and figure) and *statewide* (shown on the right side of each table and figure). The only index with mixed results was the perceived *likelihood of receiving a ticket* for being unbuckled. Only Illinois experienced a significant rural increase in terms of this index.<sup>48</sup> Three States- Illinois, Michigan, and Ohio - experienced significant *statewide* increases in the perceived likelihood of getting a ticket. The indices that showed the greatest change across States were the perception of *more than usual messages* (average increase of 32 percentage points in rural areas and 27 points statewide) and awareness of *special enforcement efforts* (average increase of 31 points in rural areas and 29 points statewide).

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<sup>47</sup> Only four States conducted all three waves of telephone surveys in rural targeted areas, pre-RDP, post-RDP, and post-CIOT. They were Illinois, Michigan, Minnesota, and Wisconsin. Not every key question was included in each of these State's surveys. Thus, there are a couple of questions for which data were available for only three, rather than four, States. Only Michigan conducted three waves of statewide telephone surveys.

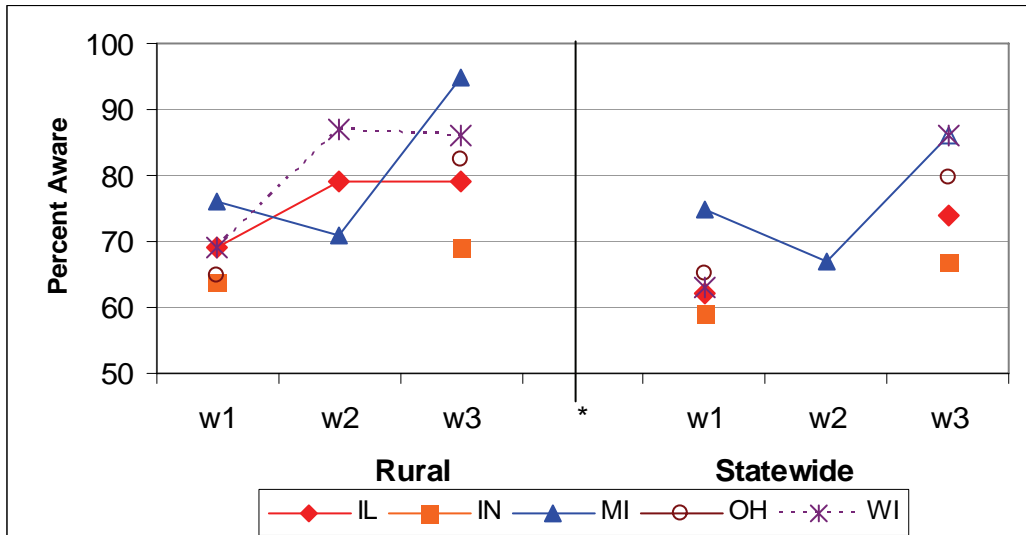
<sup>48</sup> This finding was not replicated in the results of motorist surveys.

**Table 15. Awareness of Recent Messages to Buckle Up: by Phase Levels and Change Based on 2006 Rural and Statewide Telephone Surveys**

State	Rural Targeted Areas						Statewide					
	Survey Wave			Change			Survey Wave			Change		
	w1 (%)	w2 (%)	w3 (%)	w2-w1 (RDP)	w3-w2 (CIOT)	w3-w1 (Sum)	w1 (%)	w2 (%)	w3 (%)	w2-w1 (RDP)	w3-w2 (CIOT)	w3-w1 (Sum)
IL	69	79	79	10*	0	10*	62	-	74	-	-	12*
IN	64	-	69	-	-	5	59	-	67	-	-	8*
MI	76	71	95	-5	24*	19*	75	67	86	-8*	19*	11*
MN	-	-	-	-	-	-	-	-	-	-	-	-
OH	65	-	82	-	-	18*	65	-	80	-	-	14*
WI	69	87	86	18*	-1	17*	63	-	86	-	-	23*
Average (n = 5)	69	-	82	-	-	14	65	-	79	-	-	14*
Subset (n = 3)	71	79	87	8	8	15	(MI) 75	(MI) 67	(MI) 86	(MI) -8	(MI) 19	(MI) 11
Primary (n = 3)	70	-	81	-	-	11	65	-	76	-	-	10
Secondary (n = 2)	67	-	84	-	-	17	64	-	83	-	-	19

Notes: MN survey did not ask this question; IN and OH did not conduct w2 rural survey; MI was only State to conduct w2 statewide survey; "Subset" includes 3 States conducting w2 rural surveys; IL, IN, and MI have primary enforcement laws; MN, OH, and WI have secondary laws; "w2-w1," "w3-w2," and "w3-w1" mean "w2 minus w1," "w3 minus w2," and "w3 minus w1," respectively, expressed as *percentage-point* changes. An asterisk denotes a significant result ( $p \leq 0.05$ ); <sup>n</sup> denotes a "near" significant result ( $p = 0.05$  to  $0.07$ ).

**Figure 4. Awareness of Recent Messages to Buckle Up: Baseline (w1), Post-RDP (w2), and Post-CIOT (w3) Levels, 2006 Rural and Statewide Telephone Surveys<sup>49</sup>**



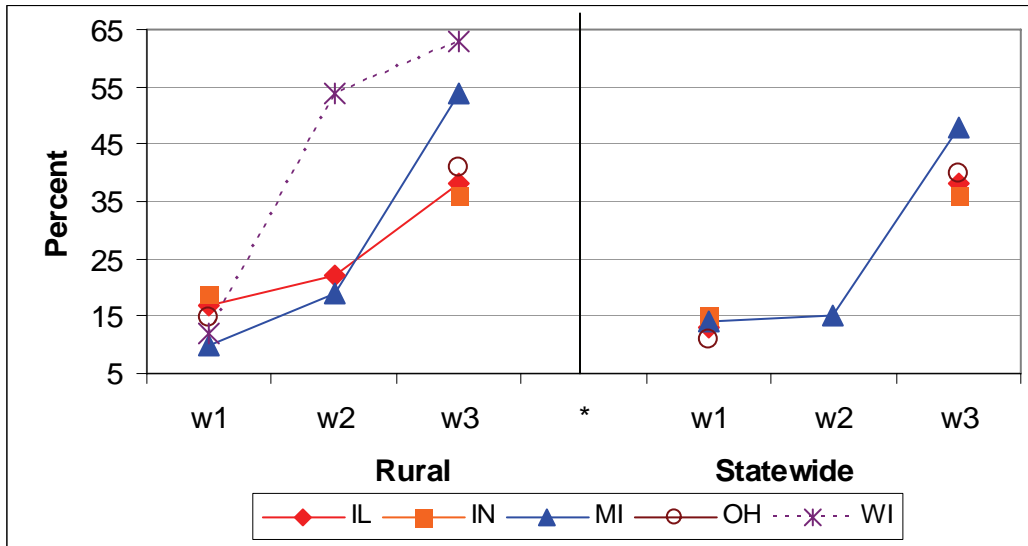
<sup>49</sup> Primary law States are shown with solid symbols and (where applicable) solid lines; Secondary law States are designated with outline symbols and (where applicable) dotted lines. Data points without connecting lines represent situations where post-RDP (w2) survey results were not available. In these cases, it is not known if (or how much of) the change (w3-w1) occurred during the RDP versus during CIOT.

**Table 16. Perception of More than Usual (SB) Messages: by Phase Levels and Change Based on 2006 Rural and Statewide Telephone Surveys**

State	Rural Targeted Areas						Statewide					
	Survey Wave			Change			Survey Wave			Change		
	w1 (%)	w2 (%)	w3 (%)	w2-w1 (RDP)	w3-w2 (CIOT)	w3-w1 (Sum)	w1 (%)	w2 (%)	w3 (%)	w2-w1 (RDP)	w3-w2 (CIOT)	w3-w1 (Sum)
IL	17	22	38	5	16*	21*	13	-	38	-	-	25*
IN	19	-	36	-	-	17*	15	-	36	-	-	21*
MI	10	19	54	9 <sup>n</sup>	35*	44*	14	15	48	1	33*	34*
MN	-	-	-	-	-	-	-	-	-	-	-	-
OH	15	-	41	-	-	26*	11	-	40	-	-	29*
WI	12	54	63	42*	9	51*	-	-	-	-	-	-
Average (n = 5)	15		46			32	13	-	41	-	-	27
Subset (n = 3)	13	32	52	19	20	39	(MI) 14	(MI) 15	(MI) 48	(MI) 1	(MI) 33*	(MI) 34*
Primary (n = 3)	15	-	43	-	-	27	14	-	41	-	-	27
Secondary (n = 2)	13	-	52	-	-	39	(OH) 11	-	(OH) 40	-	-	(OH) 29

Notes: MN survey did not ask this question; IN and OH did not conduct w2 rural survey; MI was only State to conduct w2 statewide survey; "Subset" includes 3 States conducting w2 rural surveys; IL, IN, and MI have primary enforcement laws; MN, OH, and WI have secondary laws; "w2-w1," "w3-w2," and "w3-w1" mean "w2 minus w1," "w3 minus w2," and "w3 minus w1," respectively, expressed as *percentage-point* changes. An asterisk denotes a significant result ( $p \leq 0.05$ ); <sup>n</sup> denotes a "near" significant result ( $p = 0.05$  to  $0.07$ ).

**Figure 5. Percent Perceiving More than Usual (SB) Messages: Baseline (w1), Post-RDP (w2), and Post-CIOT (w3) Levels, 2006 Rural and Statewide Telephone Surveys<sup>50</sup>**



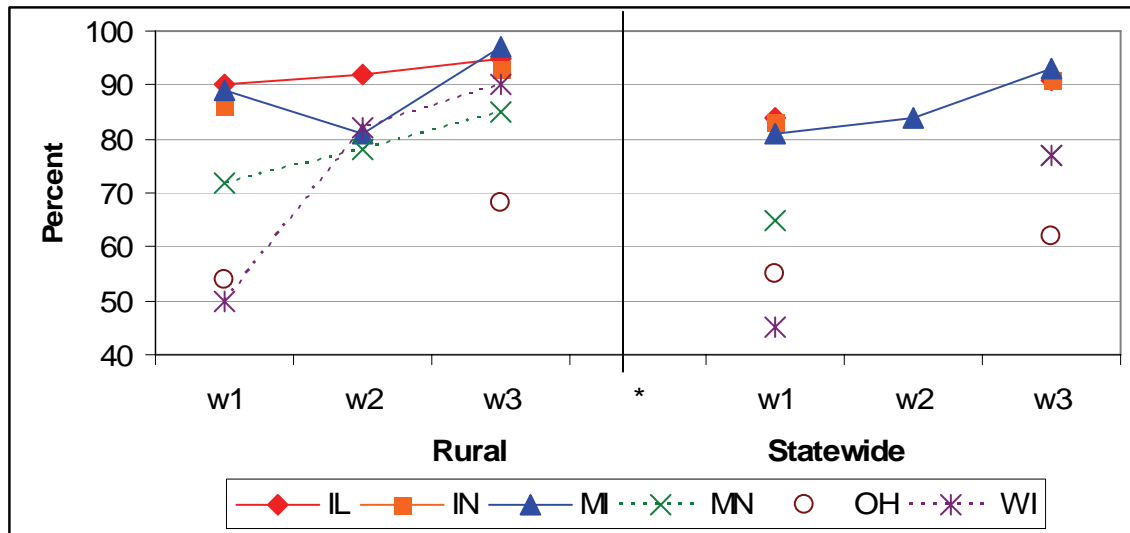
<sup>50</sup> Primary law States are shown with solid symbols and (where applicable) solid lines; Secondary law States are designated with outline symbols and (where applicable) dotted lines. Data points without connecting lines represent situations where post-RDP (w2) survey results were not available. In these cases, it is not known if (or how much of) the change (w3-w1) occurred during the RDP versus during CIOT.

**Table 17. Recognition of CIOT Slogan: by Phase Levels and Change Based on 2006 Rural and Statewide Telephone Surveys**

State	Rural Targeted Areas						Statewide					
	Survey Wave			Change			Survey Wave			Change		
	w1 (%)	w2 (%)	w3 (%)	w2-w1 (RDP)	w3-w2 (CIOT)	w3-w1 (Sum)	w1 (%)	w2 (%)	w3 (%)	w2-w1 (RDP)	w3-w2 (CIOT)	w3-w1 (Sum)
IL	90	92	95	2	3	5*	84	-	91	-	-	7*
IN	86	-	93	-	-	7*	83	-	91	-	-	8*
MI	89	81	97	-8 <sup>n</sup>	16*	8*	81	84	93	3	9*	12*
MN	72	78	85	6	7*	13*	65	-	77	-	-	12*
OH	54	-	68	-	-	14*	55	-	62	-	-	7*
WI	50	82	90	32*	8*	40*	45	-	77	-	-	32*
Average (n = 6)	74	-	88	-	-	15	69	-	82	-	-	13
Subset (n = 4)	75	83	92	8	9	17	(MI) 81	(MI) 84	(MI) 93	(MI) 3	(MI) 9	(MI) 12
Primary (n = 3)	88	-	95	-	-	7	83	-	92	-	-	9
Secondary (n = 3)	59	-	81	-	-	22	55	-	72	-	-	17

Notes: IN and OH did not conduct w2 rural survey; MI was only State to conduct w2 statewide survey; "Subset" total includes 4 States conducting w2 rural surveys; IL, IN, and MI have primary enforcement laws; MN, OH, and WI have secondary laws; "w2-w1," "w3-w2," and "w3-w1" mean "w2 minus w1," "w3 minus w2," and "w3 minus w1," respectively; these changes are expressed as *percentage-point* (not %) changes. An asterisk denotes a significant result ( $p \leq 0.05$ ); <sup>n</sup> denotes a "near" significant result ( $p = 0.05$  to  $0.07$ ).

**Figure 6. 2006 Percent Recognizing the CIOT Slogan: Baseline (w1), Post-RDP (w2), and Post-CIOT (w3) Levels, 2006 Rural and Statewide Telephone Surveys<sup>51</sup>**



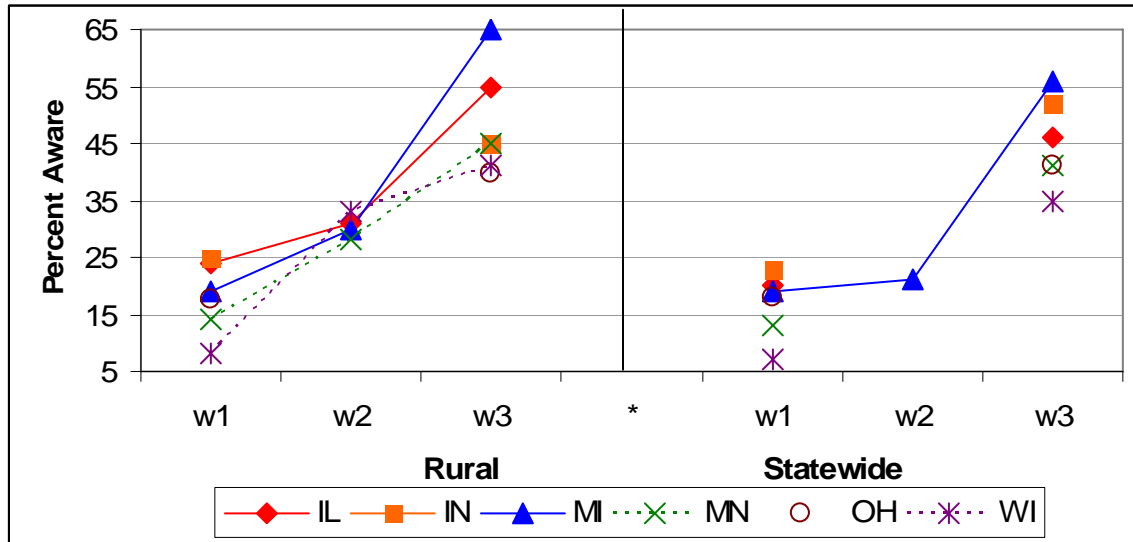
<sup>51</sup> Primary law States are shown with solid symbols and (where applicable) solid lines; Secondary law States are designated with outline symbols and (where applicable) dotted lines. Data points without connecting lines designate situations where post-RDP (w2) survey results were not available. In these cases, it is not known if (or how much of) the change (w3-w1) occurred during the RDP versus during CIOT.

**Table 18. Awareness of Special Enforcement Efforts: RDP, CIOT and Overall Levels and Change Based on 2006 Rural and Statewide Telephone Surveys**

State	Rural Targeted Areas						Statewide					
	Survey Wave			Change			Survey Wave			Change		
	w1 (%)	w2 (%)	w3 (%)	w2-w1 (RDP)	w3-w2 (CIOT)	w3-w1 (Sum)	w1 (%)	w2 (%)	w3 (%)	w2-w1 (RDP)	w3-w2 (CIOT)	w3-w1 (Sum)
IL	24	31	55	7 <sup>n</sup>	24*	31*	20	-	46	-	-	26*
IN	25	-	45	-	-	20*	23	-	52	-	-	29*
MI	19	30	65	11*	35*	46*	19	21	56	2	35*	37*
MN	14	28	45	14*	17*	31*	13	-	41	-	-	28*
OH	18	-	40	-	-	22*	18	-	41	-	-	23*
WI	8	33	41	25*	8 <sup>n</sup>	33*	7	-	35	-	-	28*
Average (n = 6)	18	-	48	-	-	31	17	-	45	-	-	29
Subset (n = 4)	16	31	52	14	21	35	(MI) 19	(MI) 21	(MI) 56	(MI) 2	(MI) 35*	(MI) 37
Primary (n = 3)	23	-	55	-	-	32	21	-	51	-	-	31
Secondary (n = 3)	13	-	42	-	-	29	13	-	39	-	-	26

Notes: IN and OH did not conduct w2 rural survey; MI was only State to conduct w2 statewide survey; "Subset" includes 4 States conducting w2 rural surveys; IL, IN, and MI have primary enforcement laws; MN, OH, and WI have secondary laws; "w2-w1," "w3-w2," and "w3-w1" mean "w2 minus w1," "w3 minus w2," and "w3 minus w1," respectively, expressed as *percentage-point* (not %) changes. An asterisk denotes a significant result ( $p \leq 0.05$ ); <sup>n</sup> denotes a "near" significant result ( $p = 0.05$  to  $0.07$ ).

**Figure 7. Awareness of Special Enforcement Efforts: Baseline (w1), Post-RDP (w2), and Post-CIOT (w3) Levels, 2006 Rural and Statewide Telephone Surveys<sup>52</sup>**



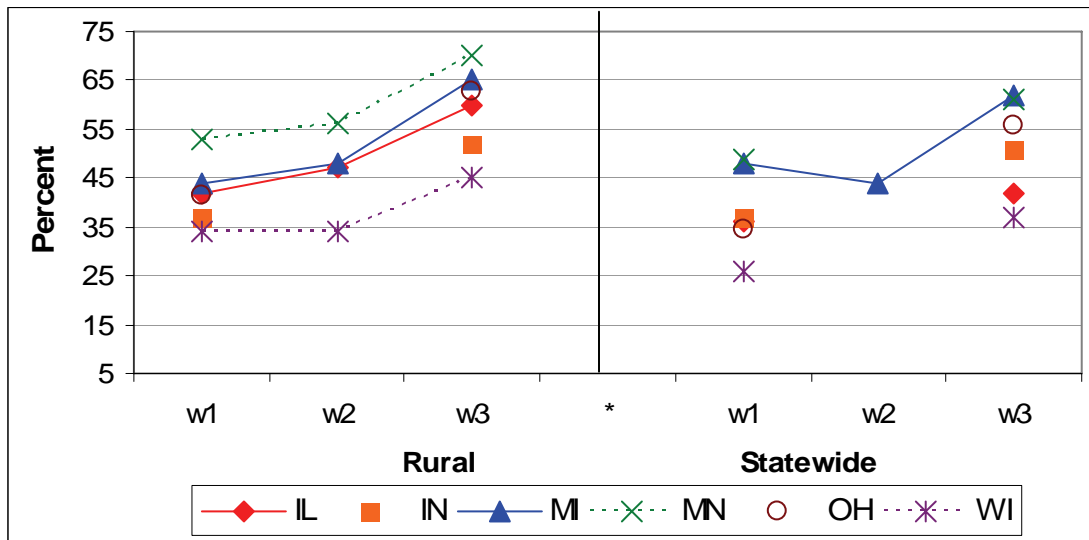
<sup>52</sup> Primary law States are shown with solid symbols and (where applicable) solid lines; Secondary law States are designated with outline symbols and (where applicable) dotted lines. Data points without connecting lines represent situations where post-RDP (w2) survey results were not available. In these cases, it is not known if (or how much of) the change (w3-w1) occurred during the RDP versus during CIOT.

**Table 19. Perception of Police Issuing More than Usual Tickets: by Phase Levels and Change Based on 2006 Rural and Statewide Telephone Surveys**

State	Rural Targeted Areas						Statewide					
	Survey Wave			Change			Survey Wave			Change		
	w1 (%)	w2 (%)	w3 (%)	w2-w1 (RDP)	w3-w2 (CIOT)	w3-w1 (Sum)	w1 (%)	w2 (%)	w3 (%)	w2-w1 (RDP)	w3-w2 (CIOT)	w3-w1 (Sum)
IL	42	47	60	5	13*	18*	36	-	42	-	-	6*
IN	37	-	52	-	-	15*	37	-	51	-	-	14*
MI	44	48	65	4	17*	21*	48	44	62	-4	18*	14*
MN	53	56	70	3	14*	17*	49	-	61	-	-	12*
OH	41	-	63	-	-	21*	34	-	56	-	-	22*
WI	34	34	45	0	11*	11*	26	-	37	-	-	11*
Average (n = 6)	42	-	59	-	-	17	38	-	51	-	-	13
Subset (n = 4)	43	46	60	3	14	17	(MI) 48	(MI) 44	(MI) 62	(MI) -4	(MI) 18*	(MI) 14*
Primary (n = 3)	41	-	59	-	-	18	40	-	52	-	-	11
Secondary (n = 3)	43	-	59	-	-	16	36	-	51	-	-	15

Notes: IN and OH did not conduct w2 rural survey; MI was only State to conduct w2 statewide survey; "Subset" includes 4 States conducting w2 rural surveys; IL, IN, and MI have primary enforcement laws; MN, OH, and WI have secondary laws; "w2-w1," "w3-w2," and "w3-w1" mean "w2 minus w1," "w3 minus w2," and "w3 minus w1," respectively, expressed as *percentage point* (not %) changes. An asterisk denotes a significant result ( $p \leq 0.05$ ); <sup>n</sup> denotes a "near" significant result ( $p = 0.05$  to  $0.07$ ).

**Figure 8. Percent Perceiving that Police are Issuing More than Usual Tickets: Baseline (w1), Post-RDP (w2), and Post-CIOT (w3) Levels, 2006 Rural and Statewide Telephone Surveys<sup>53</sup>**



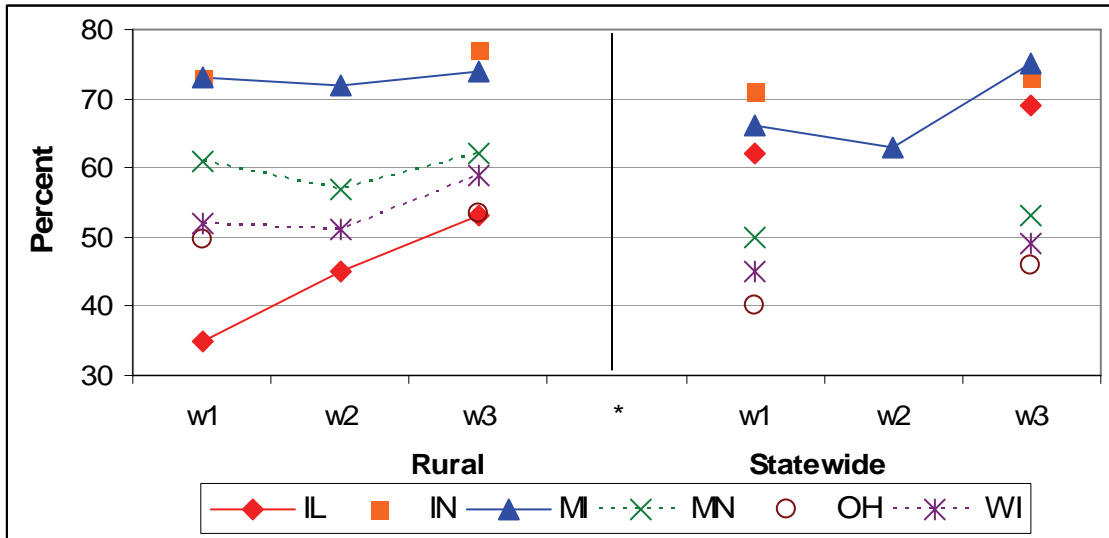
<sup>53</sup> Primary law States are shown with solid symbols and (where applicable) solid lines; Secondary law States are designated with outline symbols and (where applicable) dotted lines. Data points without connecting lines represent situations where post-RDP (w2) survey results were not available. In these cases, it is not known if (or how much of) the change (w3-w1) occurred during the RDP versus during CIOT.

**Table 20. Perception that Ticket is Likely if One Rides Unbuckled: by Phase Levels and Change Based on 2006 Rural and Statewide Telephone Surveys**

State	Rural Targeted Areas						Statewide					
	Survey Wave			Change			Survey Wave			Change		
	w1 (%)	w2 (%)	w3 (%)	w2-w1 (RDP)	w3-w2 (CIOT)	w3-w1 (Sum)	w1 (%)	w2 (%)	w3 (%)	w2-w1 (RDP)	w3-w2 (CIOT)	w3-w1 (Sum)
IL	35	45	53	10*	8*	18*	62	-	69	-	-	7*
IN	73	-	77	-	-	4	71	-	73	-	-	2
MI	73	72	74	-1	2	1	66	63	75	-3	12*	9*
MN	61	57	62	-4	5	1	50	-	53	-	-	3
OH	50	-	53	-	-	4	40	-	46	-	-	6*
WI	52	51	59	-1	8	7	45	-	49	-	-	4
Average (n = 6)	57	-	63	-	-	6	56	-	61	-	-	5
Subset (n = 4)	55	56	62	1	6	7	(MI) 66	(MI) 63	(MI) 75	(MI) -3	(MI) 12*	(MI) 9*
Primary (n = 3)	60	-	68	-	-	8	66	-	72	-	-	6
Secondary (n = 3)	54	-	58	-	-	4	45	-	49	-	-	4

Notes: IN and OH did not conduct w2 rural survey; MI was only State to conduct w2 statewide survey; "Subset" includes 4 States conducting w2 rural surveys; IL, IN, and MI have primary enforcement laws; MN, OH, and WI have secondary laws; "w2-w1," "w3-w2," and "w3-w1" mean "w2 minus w1," "w3 minus w2," and "w3 minus w1," respectively, expressed as *percentage point* (not %) changes. An asterisk denotes a significant result ( $p \leq 0.05$ ); "n" denotes a "near" significant result ( $p = 0.05$  to  $0.07$ ).

**Figure 9. Percent Perceiving that a Ticket is Likely if One Rides Unbuckled: Baseline (w1), Post-RDP (w2), and Post-CIOT (w3) Levels, 2006 Rural and Statewide Telephone Surveys<sup>54</sup>**



<sup>54</sup> Primary law States are shown with solid symbols and (where applicable) solid lines; Secondary law States are designated with outline symbols and (where applicable) dotted lines. Data points without connecting lines represent situations where post-RDP (w2) survey results were not available. In these cases, it is not known if (or how much of) the change (w3-w1) occurred during the RDP versus during CIOT.

## 2. Changes in Rural Targeted Areas in 2006 (4-State Averages)

Figure 10 shows the average increase in rural targeted areas, for each of three general awareness indices (i.e., recent seat belt messages, more messages than usual, and recognition of the CIOT slogan). There were modest, near-linear increases in awareness of *seat belt messages* and of the *CIOT slogan* across the RDP and CIOT phases, with increases of about 8 percentage points associated with each phase. Much larger increases were associated with the perception of *more than usual messages*, which increased by nearly 20 points during each phase. These findings suggest that both phases of the campaigns were similarly effective in creating general message awareness in rural areas (except in Michigan).

**Figure 10. Awareness of *Seat belt Messages*; Perception of *More than Usual Messages*; and Recognition of *CIOT Slogan*: Averages in Rural Targeted Areas.** <sup>55</sup>

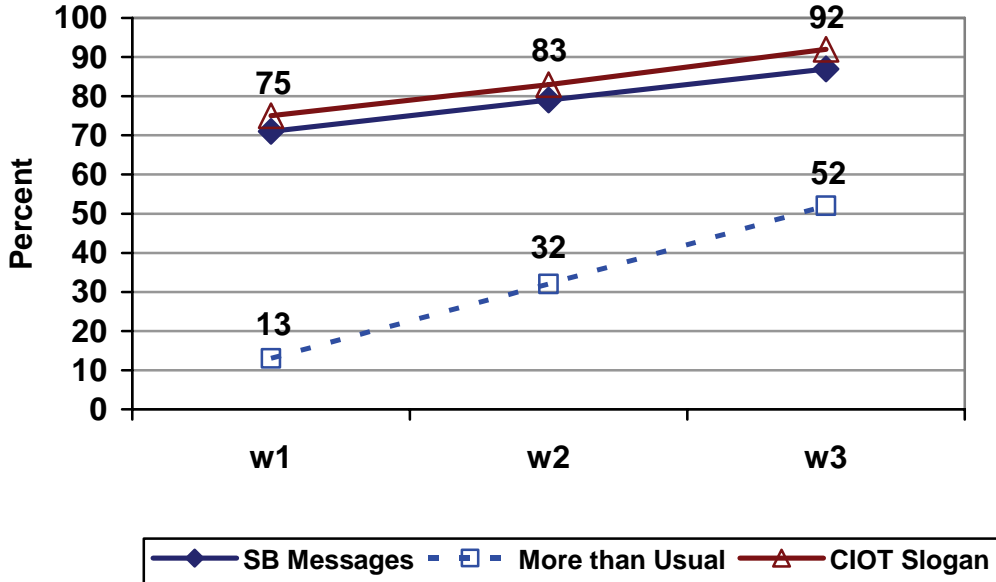


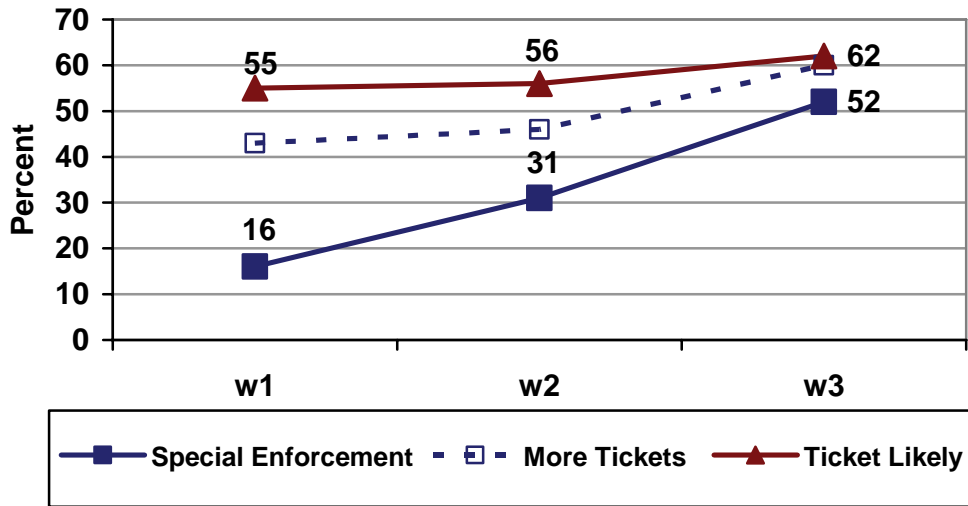
Figure 11 shows rural-area changes for three enforcement indices. It shows a 30- to 35-point overall increase in awareness of *special efforts by police*,<sup>56</sup> with slightly greater change during CIOT than during the RDP (21 points and 14 points, respectively). A perception of *more than usual tickets being issued* for seat belt violations also increased more during CIOT than during the RDP (14 points and 3 points, respectively). The perceived *likelihood of receiving a ticket* changed least (+7 points overall), but two States (Indiana and Michigan) already had very high baseline levels, limiting change in these States.

<sup>55</sup> These percentages are averages of the subset of 3 or 4 States that conducted post-RDP (w2) surveys and included these questions, generally IL, MI, MN, and WI (see Tables 15 to 17 for details).

<sup>56</sup> This increase was 31 points among all five States and 35 points among the four-state subset.



**Figure 11. Awareness of *Special Enforcement Efforts*; Perception That *More Than Usual Tickets* Were Being Issued; and Perceived *Likelihood of Receiving a Ticket*: Averages in Rural Targeted Areas.<sup>57</sup>**



### 3. Comparison of 2005 and 2006 Levels and Changes

#### a. Rural Targeted Areas

Figure 12 shows 2005 and 2006 rural-area increases for three *general awareness* indices. In 2006, there was a 15-point overall increase in *messages to buckle up* (compared with 21 points in 2005); a 39-point increase in the perception of *more than usual messages* (compared with 42 points in 2005), and a 17-point increase in recognition of the *CIOT slogan* (compared with 27 points in 2005). The 2006 data come from the four States that conducted post-RDP surveys (i.e., Illinois, Michigan, Minnesota, and Wisconsin). They do not include data from Indiana and Ohio, which conducted only pre-RDP and post-CIOT surveys. More detailed information can be found in Tables 15 to 17.

With regard to awareness of messages to buckle up and of the CIOT slogan, baselines were higher and changes were smaller in 2006 than in 2005. However, all increases for both phases were significant at the 0.05 level.

<sup>57</sup> These percentages are averages of the subset of four States that conducted post-RDP (w2) surveys and that asked these questions (IL, MI, MN, and WI; see Tables 18 to 20 for details).

**Figure 12. A Summary of Baselines and Changes in Awareness of General Seat Belt Messages: Results of Telephone Surveys in Rural Targeted Areas**

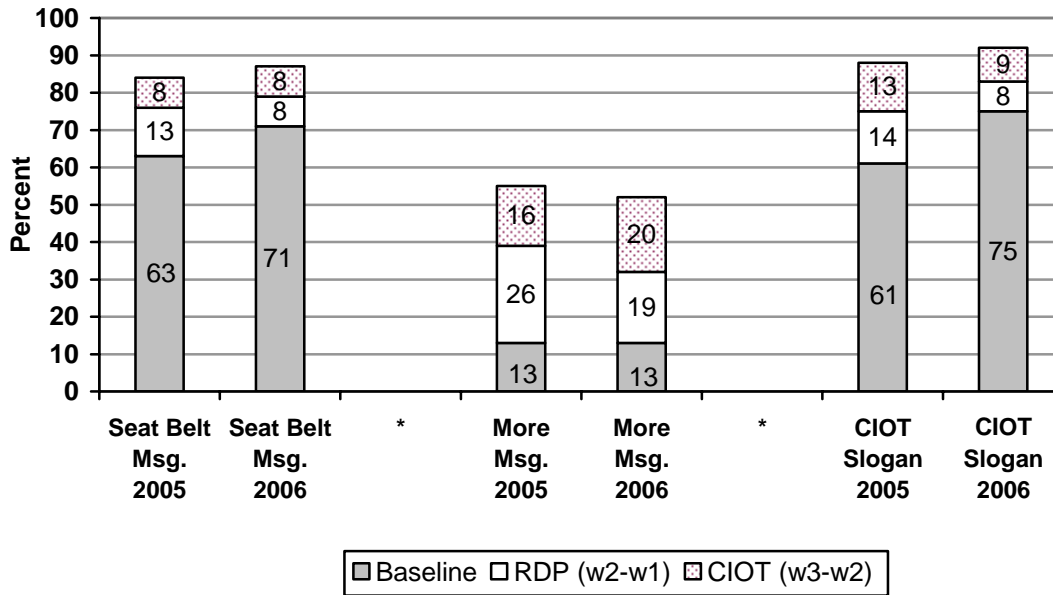
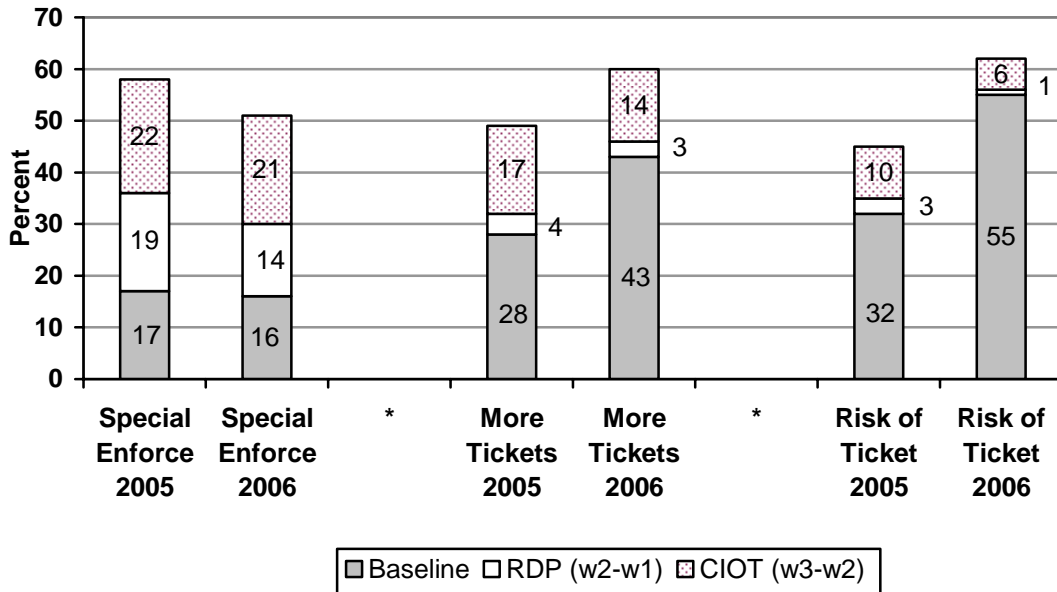


Figure 13 shows 2005 and 2006 rural-area increases for the three *enforcement-related* indices. In 2006, there was a 35-point increase in awareness of awareness of *special seat belt enforcement efforts* (compared with 41 points in 2005); a 17-point increase in the perception of *more than usual tickets issued* (compared with 21 points in 2005), and 7-point increase in the perceived *likelihood of receiving a ticket* (compared with 13 points in 2005). More detailed information can be found in Tables 18 to 20.

With regard to awareness of *special enforcement efforts*, baselines were nearly identical in 2005 and 2006. However, the baselines for the other two indices (i.e., *more than usual tickets being issued* and for the perceived *likelihood of receiving a ticket*) were significantly higher and increases were smaller in 2006 (compared with 2005). In all cases, and for both years, increases in enforcement awareness were greater during CIOT than during the RDP. With regard to awareness of general seat belt messages, however, increases associated with the RDP were often greater than those associated with CIOT.

**Figure 13. A Summary of Baselines and Changes in Awareness of Enforcement-Related Messages: Results of Telephone Surveys in Rural Areas**



*b. Statewide*

Figure 14 shows statewide increases (for 2005 and 2006) in the *general awareness* indices. Similar to the rural-area results, there was a 14-point overall increase in *messages to buckle up* in 2006 (compared with 16 points in 2005); a 27-point increase in the perception of *more than usual messages* (compared with 45 points in 2005), and a 13-point increase in recognition of the *CIOT slogan* (compared with 26 points in 2005).<sup>58</sup>

With regard to recognition of the CIOT slogan, the 2006 baseline was higher and the increase was smaller (by half) than in 2005. With regard to the other two general indices, the 2006 baselines were not significantly different than in 2005. As in the rural areas, the overall increases were statistically significant for all three indices.

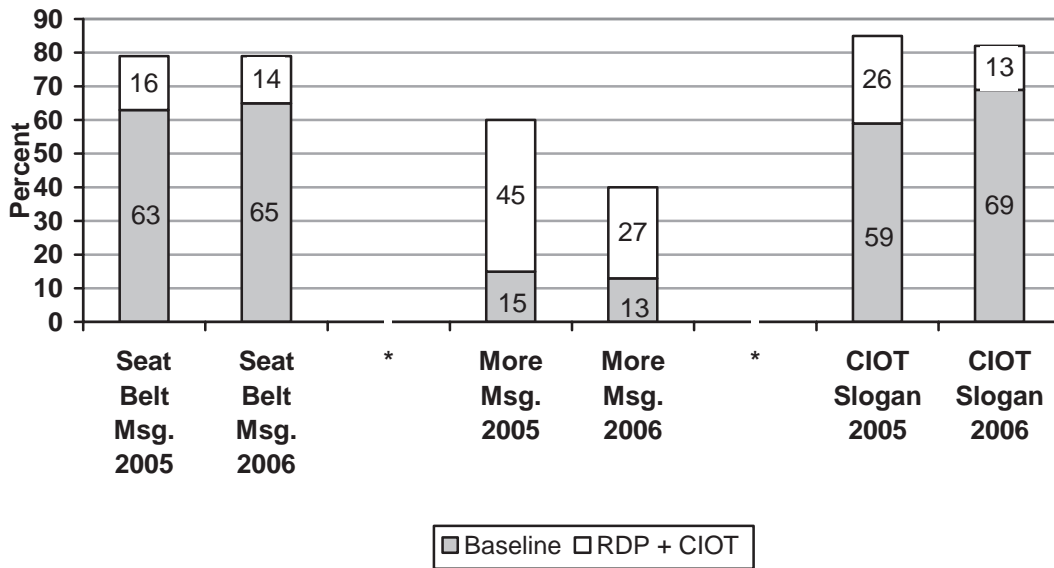
Finally, Figure 15 shows 2005 and 2006 statewide increases for *enforcement-related* indices. In 2006, there was a 28-point increase in awareness of *messages to buckle up* (compared with 41 points in 2005); a 13-point increase in the perception of *more than usual tickets being issued* (compared with 16 points in 2005), and 5-point increase in the perceived *likelihood of receiving a ticket* (compared with 9 points in 2005).

With regard to *awareness of special enforcement efforts*, baselines and increases were lower in 2006 than in 2005. However, as in rural areas, 2006 baselines for *more than usual tickets* and for *likelihood of receiving a ticket* were significantly higher in 2006 and subsequent increases were smaller (compared with 2005).

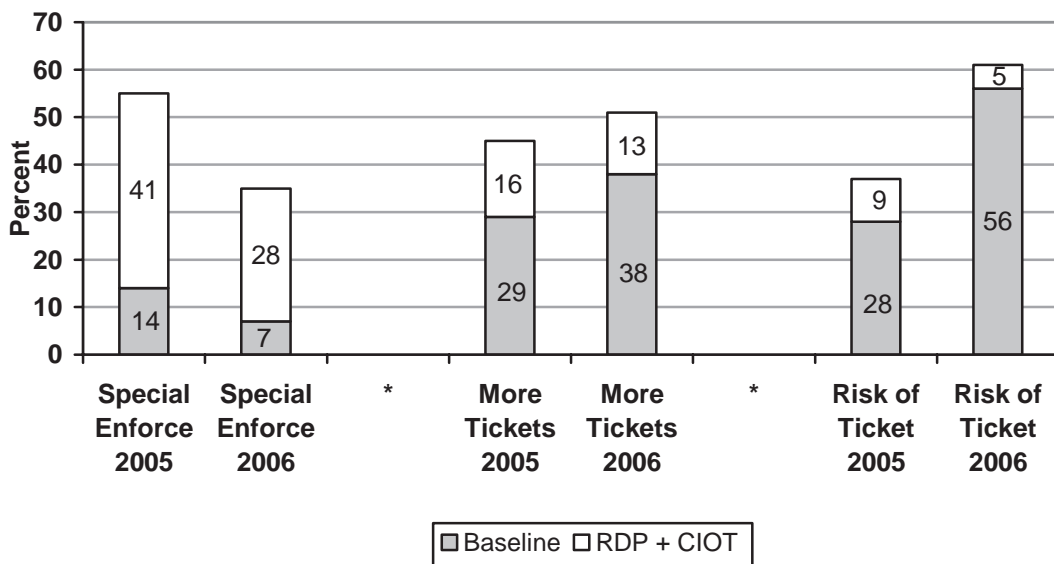
<sup>58</sup> More detailed information can be found in Tables 15 to 17.

Because most States did not conduct post-RDP statewide surveys, it is not known when the greatest changes in enforcement-related awareness occurred. However, based on 2005 findings, they likely occurred primarily during CIOT. Results from Michigan support this hypothesis.

**Figure 14. A Summary of Baselines and Changes in Awareness of General Seat Belt Messages: Results of Statewide Telephone Surveys**



**Figure 15. A Summary of Baselines and Changes in Awareness of Enforcement-Related Messages: Results of Statewide Telephone Surveys**



#### 4. Statewide versus Rural Targeted Areas

Overall (w3-w1), as the previous tables and figures have suggested, 2006 statewide *baselines* and *changes* were very similar to those measured in rural targeted areas. Table 21 summarizes these baselines and changes for 2006 and for 2005. Because all States implemented at least two waves of surveys., before the RDP and after CIOT, data from all States are shown in this summary, rather than just data from the subset of States that also conducted post-RDP surveys.<sup>59</sup>

**Table 21. A Comparison of Rural and Statewide Baselines and Changes in Awareness and Perceptions (2005 and 2006 Results)**

Awareness Index	Year	Rural Areas		Statewide	
		Ave. Base. (%)	Ave. Chg. (Pts)	Ave. Base. (%)	Ave. Chg. (Pts)
Seat Belt Messages	2006	69	+14*	65	+14*
	2005	63	+21*	63	+16*
More Than Usual Messages	2006	15	+32*	13	+27*
	2005	13	+42*	15	+45*
CIOT Slogan	2006	74	+15*	69	+13*
	2005	61	+27*	59	+26*
Special Enforcement Efforts	2006	18	+31*	17	+29*
	2005	17	+41*	14	+41*
More Than Usual Tickets	2006	42	+14*	38	+13*
	2005	28	+21*	29	+16*
Likelihood of a Ticket	2006	57	+6*	56	+5*
	2005	32	+13*	28	+9*
“Ave. Base.” Denotes “Average Baseline,” “Pts” denotes “percentage-point change.” * denotes a statistically significant change ( $p \leq 0.05$ ).					

Table 21 shows that 2006 *rural baselines* were at least as high as the statewide baselines. Because rural belt use is generally lower than urban usage, it was expected that baseline awareness of seat belt and enforcement-related issues in rural areas would be lower than statewide. But, that is not what these data suggest. Further, rural-area *increases* in awareness were at least as great as statewide increases. This was the case for both general and enforcement-related messages.<sup>60</sup> Comparing 2006 with 2005, the key difference was that 2006 baselines were generally higher than in 2005 and, likely because of these higher baselines, increases were smaller in 2006 than in 2005 (both rural and statewide).

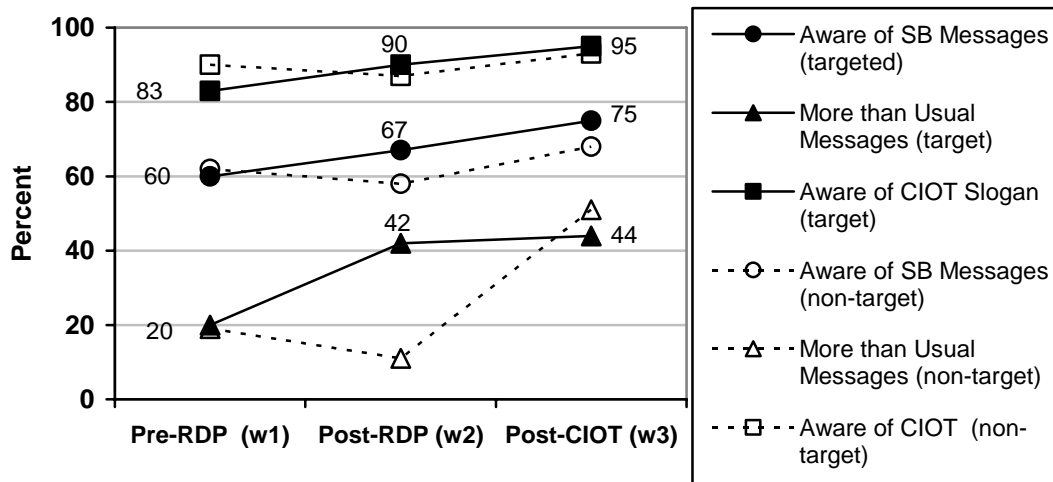
<sup>59</sup> The reason this use of data from all states is mentioned is that earlier summaries (for rural areas) used subset (4-state) data, as only those data could be used to show change specific to the RDP and CIOT.

<sup>60</sup> Slightly greater increases were expected in rural areas since these areas should have received greater exposure to seat belt messages and enforcement than was the case statewide. However, since this comparison is not between targeted and non-targeted areas and since the rural targeted areas were often quite large, this would not be a very powerful comparison in terms of measuring any *additional* impact associated with rural media and enforcement efforts.

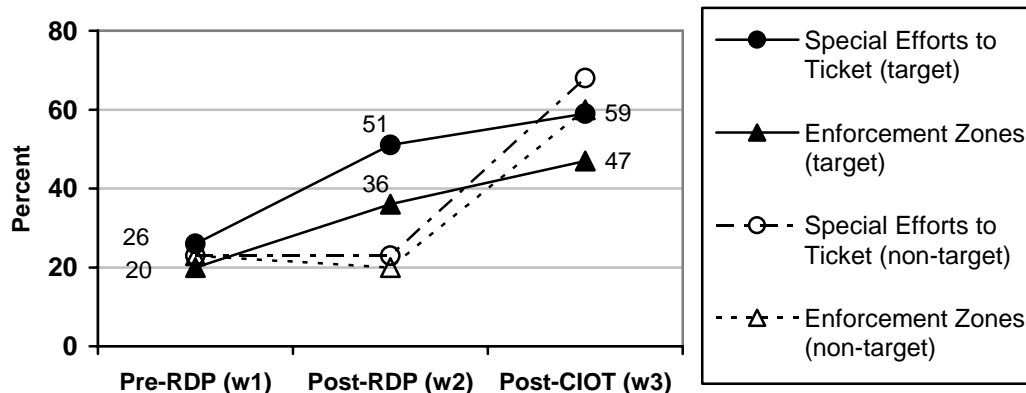
## 5. Targeted Versus Non-Targeted Rural Areas (in Indiana)

In 2005, the first year of the RDP, Indiana conducted three waves of *targeted* and *non-targeted* rural telephone surveys. Figures 16 and 17 show these results. There were significant increases in rural *targeted areas* associated with the RDP phase (at w2). Such changes were not found in *non-targeted (control) areas*. Following CIOT, however, awareness of seat belt messages, the CIOT slogan, and special enforcement had increased significantly in the *control areas* as well. In fact, there were few differences between the two groups in final awareness levels (post-CIOT). These were some of the strongest findings relative to the impact of the RDP media (and enforcement) efforts.

**Figure 16. Awareness of General Seat Belt Messages: Results of 2005 Telephone Surveys in Indiana in Targeted and Non-Targeted Rural Areas**  
(from Nichols & Ledingham, 2007).



**Figure 17. Awareness of Enforcement Efforts: Results of 2005 Telephone Surveys in Indiana in Targeted and Non-Targeted Rural Areas**  
(from Nichols & Ledingham, 2007).



In 2006, Indiana conducted only two waves of rural awareness surveys (telephone and motorist surveys). Because there were no post-RDP measurements, only overall changes

in awareness could be estimated.<sup>61</sup> As Table 22 shows, both the telephone and motorist surveys found consistent evidence of change in both the targeted and control areas. The only exception was with regard to perceived likelihood of receiving a ticket, where neither survey found a significant change for either group. These data show that the change was frequently greater in the non-targeted (control) areas than in the targeted (RDP) areas, but it is not known when the changes occurred (whether they were associated with the RDP, CIOT, or both).<sup>62</sup>

**Table 22. Changes in Rural Targeted and Non-Targeted Areas in Indiana: Results of 2006 Telephone and Motorist Surveys**

Awareness Index	Survey Type	Rural Targeted			Rural Non-Targeted		
		w1 %	w3 %	Chg. Pts.	w1 %	w3 %	Chg. Pts.
Aware of SB Messages	Ph	64	69	+5 <sup>n</sup>	54	65	+10*
	M	64	77	+13*	58	77	+19*
Recognize CIOT Slogan	Ph	86	93	+7*	81	91	+9*
	M	84	85	+2	81	85	+5 <sup>n</sup>
Perceive Strict Enforcement	Ph	n/a	n/a	n/a	n/a	n/a	n/a
	M	26	83	+57*	27	75	+48*
Aware of Special Enforcement	Ph	25	45	+20*	22	57	+35*
	M	n/a	n/a	n/a	n/a	n/a	n/a
Perceive More Tickets Issued	Ph	37	52	+15*	34	50	+17*
	M	n/a	n/a	n/a	n/a	n/a	n/a
Aware of Enforcement Zones	Ph	n/a	n/a	n/a	n/a	n/a	n/a
	M	38	60	+22*	38	68	+31*
Perceive that Ticket is Likely	Ph	73	77	+4	70	73	+3
	M	66	67	+1	63	64	+1
“Ph” and “M” indicate “phone surveys” and “motorist surveys,” respectively; “Pts.” designates “percentage point” change; * indicates significance ( $p \leq 0.05$ ).							

## 6. Sources of General and Enforcement

### a. Source of Information by Medium

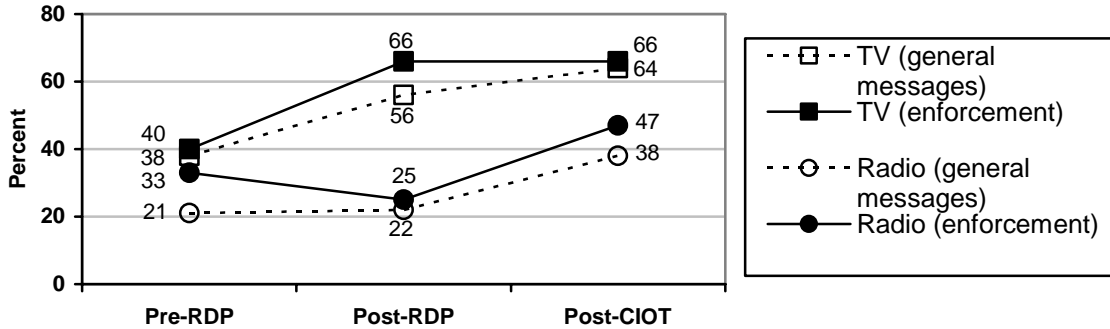
In 2005, telephone surveys in Illinois, Minnesota, and Wisconsin found television to be the dominant message source statewide and in rural areas, followed by radio and newspapers. The prevalence of television as a source of information in rural areas increased during the RDP; then did not change much during CIOT. This was particularly the case for enforcement-related indices; somewhat less for general messages. The prevalence of *radio* as an information source, on the other hand, changed little during the

<sup>61</sup> The terms “targeted” and “non-targeted” refer to the RDP phase only. All areas of the State were exposed to media and enforcement efforts during the CIOT phase of the mobilization.

<sup>62</sup> A more complete summary of motorist survey results (including data on sources of awareness) can be found in Appendix E.

RDP but increased significantly during CIOT. These rural trends from 2005 are shown in Figure 18. Again, similar trends were found statewide.

**Figure 18. Source of Message Awareness: General and Enforcement Issues; Results From 2005 Telephone Surveys in Targeted Rural Areas (IL, MN and WI)**



In 2006, Illinois, Indiana, Michigan, and Ohio included *source of awareness* questions in their telephone surveys. However, only Illinois and Michigan conducted post-RDP *rural* surveys and only Michigan conducted a post-RDP *statewide* survey. Thus, less information was available in 2006, regarding source of information that was specific to the RDP and CIOT phases.

Table 23 summarizes the *overall results* from pre-RDP to post-CIOT from the four States that reported *source of awareness* data. As in 2005, television was the primary source of information for *general seat belt messages*. This was the case at baseline and after the CIOT phase, rural and statewide. With regard to *enforcement-related messages*, television, radio, newspapers, and outdoor advertising were all frequently mentioned as sources of information at baseline, but the greatest *increases* were associated with television (+15 points; rural and statewide). In general, baselines and changes were similar, statewide and in rural areas. More detailed results can be found in Appendix F.

With regard to the timing of changes in source of information, data from the two States that provided post-RDP results, indicated that, *in rural areas*, there was a slightly greater increase in television as a source of *general seat belt messages* during the RDP (+6 points) than during CIOT (+4 points). In these rural areas, there was a substantially greater increase in television as a source of *enforcement-related messages* during the RDP (+14 points) than during CIOT (+7 points). Only Michigan provided *statewide* post-RDP results regarding this issue. Here, statewide, the increase in television as a primary source of information occurred primarily during CIOT, not during the RDP.

*In summary*, television was the most frequent source of awareness for *general seat belt messages* prior to the start of the 2006 mobilization, whereas *enforcement-related information* was obtained relatively uniformly from television, radio, newspapers, and outdoor advertising. During the mobilization, however, television became the dominant source of both general and enforcement-related messages. From the standpoint of the distribution of funding, this is not an unexpected result as proportionately more funds were spent on television advertising than on any other medium.



**Table 23. Sources of Awareness Information: Results of 2006 Rural and Statewide Telephone Surveys in Illinois, Indiana, Michigan, and Ohio.**

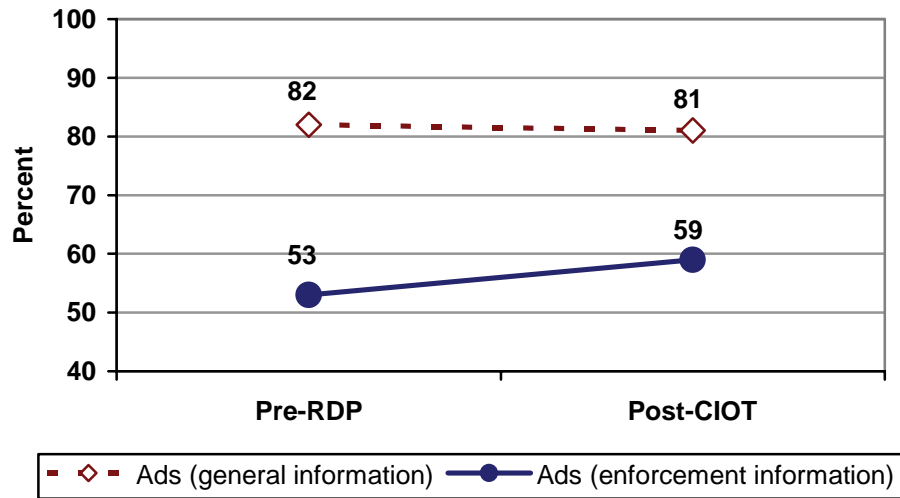
Information Source (Medium)	Sample Frame	General Messages			Enforcement Messages		
		w1 (%)	w3 (%)	w3-w1 (Pts)	w1 (%)	w3 (%)	w3-w1 (Pts)
Television	Rural	61	69	+9	32	48	+15
	State	52	64	+13	33	48	+15
Radio	Rural	21	29	+8	30	30	-1
	State	17	25	+8	22	26	+4
Newspaper	Rural	16	16	0	35	31	-4
	State	18	17	-1	32	23	-9
Outdoor	Rural	13	16	+3	27	28	+1
	State	17	14	-1	27	22	-6
<i>(Format)</i>							
Advertisement	Rural	82	81	-2	53	59	+6
	State	80	78	-2	56	62	+6

Percentages are averages of surveys conducted in IL, IN, MI, and OH; "Pts" designates "percentage points" change (*w3 minus w1*).

*b. Format: Advertisements as a Source of Information*

In 2005 and in 2006, *advertisements* were key components of paid and public service media efforts. In addition, however, thousands of news stories were generated by *earned media* efforts in the States (see Table 11). In 2005, telephone survey data from four States indicated that ads were the primary source of *general messages* for about 80% of all respondents pre-RDP and post-CIOT, rural and statewide. This was the case in 2006 as well, when just over 80% of respondents in two States reported that their awareness of general seat belt information came primarily from ads pre-RDP and post-CIOT. With regard to *enforcement-related information*, however, 50 to 60% of 2006 respondents reported that ads were their primary source of information at baseline. This suggests that 40 to 50% saw, read, or heard about enforcement from news stories. There was a 6% increase from baseline to post-program in the percentage that reported seeing or hearing about enforcement via advertisements. Trends were similar statewide and in rural areas (see Appendix F).

**Figure 19. Percent Reporting Ads as Primary Source of Information in Rural Areas: Averages From IN and MI (General) and From IL, IN, MI, and MN (Enforcement) in 2006**



### 7. Motorist Surveys Versus Telephone Surveys

Motorist surveys were conducted at licensing centers in three States: Illinois, Indiana, and Wisconsin. Although the wording of questions in these surveys was slightly different than in telephone surveys, there were many similarities in the two survey types. Questions that were most similar included: awareness of *recent messages* to buckle up; *source of messages*; recognition of the *CIOT slogan*, and perceived *likelihood of receiving a ticket* for not buckling up. The key enforcement question asked in telephone surveys (i.e., awareness of *special enforcement* efforts) was not asked in the motorist surveys. Instead, respondents were asked about the *strictness by which State and local police enforced* the seat belt law.

In general, the results of both survey approaches found significant increases in awareness for nearly every index, rural and statewide. However, as Table 24 shows, there were some variations. While nearly all results reflected increases, several would have been significant by one survey approach, but not by the other. In general, there was more variation in the outcomes of rural surveys (motorist versus telephone) than in the outcomes of statewide surveys.<sup>63</sup>

<sup>63</sup> A summary of the results of these motorist surveys can be found in Appendix E. Results of motorist and phone surveys were similar. Comparisons of *baseline data* resulted in correlations of  $r = 0.82$  (statewide) to  $r = .89$  (rural). With regard to *changes* in awareness or perceptions, correlations ranged from  $r = .59$  (rural changes) to  $r = .87$  (statewide changes). Thus, with the exception of rural *changes*, correlations were high. In some cases, the motorist survey *may* have provided the more accurate estimate. In Illinois, for example, the 18-point increase in likelihood of getting a ticket (from the rural phone survey) is extreme by comparison with results from other States, and the baseline seems low in comparison with other baselines. The motorist survey outcome (no change) appears less in contrast to the results in other States. Eliminating Illinois data for this index results in a stronger correlation ( $r = 0.70$ ) for rural *changes*.

**Table 24. A Comparison of Results From 2006 Telephone and Motorist Surveys On Three Key Indices of Awareness in Illinois, Indiana, and Wisconsin**

Index	State	Survey Type	Rural Areas			Statewide		
			w1 (%)	w3 (%)	w3-w1 (Pts)	w1 (%)	w3 (%)	w3-w1 (Pts)
SB Messages	IL	Motorist	68	74	6*	62	76	14*
		Phone	69	79	10*	62	74	12*
	IN	Motorist	64	77	13*	61	75	14*
		Phone	64	69	5 <sup>n</sup>	59	67	8*
	WI	Motorist	57	88	31*	58	87	29*
		Phone	69	86	17*	63	86	23*
	<b>Ave.</b>	<b>Motorist</b>	<b>63</b>	<b>80</b>	<b>17</b>	<b>60</b>	<b>79</b>	<b>19</b>
	<b>Phone</b>	<b>67</b>	<b>78</b>	<b>11</b>	<b>61</b>	<b>76</b>	<b>14</b>	
CIOT Slogan	IL	Motorist	89	90	2	84	85	1
		Phone	90	95	5*	84	91	7*
	IN	Motorist	84	85	2	80	83	3
		Phone	86	93	7*	83	91	8*
	WI	Motorist	59	83	24*	58	82	24*
		Phone	50	90	40*	45	77	32*
	<b>Ave.</b>	<b>Motorist</b>	<b>77</b>	<b>86</b>	<b>9</b>	<b>74</b>	<b>83</b>	<b>9</b>
	<b>Phone</b>	<b>75</b>	<b>93</b>	<b>17</b>	<b>71</b>	<b>86</b>	<b>16</b>	
Ticket Likely	IL	Motorist	52	52	0	50	50	0
		Phone	35	53	18*	62	69	7*
	IN	Motorist	66	67	1	65	61	-4
		Phone	73	77	4	71	73	2
	<b>Ave.</b>	<b>Motorist</b>	<b>59</b>	<b>60</b>	<b>1</b>	<b>58</b>	<b>56</b>	<b>-2</b>
	<b>Phone</b>	<b>54</b>	<b>65</b>	<b>11</b>	<b>67</b>	<b>71</b>	<b>5</b>	

Notes: "Pct" denotes percentage-point change from w1 to w3.  
\* denotes significant result ( $p \leq 0.05$ ); n denotes near significant result ( $0.05 < p \leq 0.10$ )

## 8. Changes in Awareness Over Five Years of Mobilizations

High-visibility seat belt mobilizations began in the fall of 1997 as *Operation ABC* mobilizations. By 2002, all States within the Great Lakes Region were participating in such mobilizations and most were conducting statewide telephone surveys before and after each effort. These surveys provide an opportunity to examine awareness and perception levels in May of 2005 and 2006 in the context of approximately five years of data.<sup>64</sup> The following four figures show these trends for two general message indices and for two enforcement-related indices.<sup>65</sup>

<sup>64</sup> Some caution is advised in examining these data, particularly in the first and last years (2002 and 2007) since data were missing for several States during these years. Relatively complete data sets were available for all years from 2003 through 2006.

<sup>65</sup> Data used to construct these figures are provided in Appendix G.

**Figure 20. Percent of Respondents *Aware of Recent Messages to Buckle Up*: Average Results of Telephone Surveys Before and After May Mobilizations**

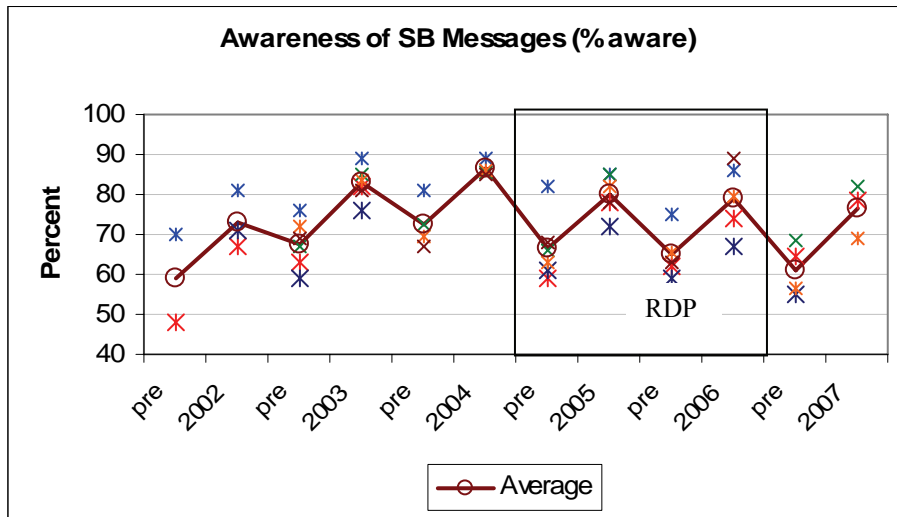


Figure 20 shows the trends for awareness of *recent messages to buckle up*. It shows a significant increase associated with every mobilization and increasing awareness levels (pre- and post-mobilization) from 2002 through 2004, after which there was a slight decline. There were no consistent differences between primary and secondary law States.

**Figure 21. Percent of Respondents Who *Recognized the CIOT Slogan*: Average Results of Telephone Surveys Before and After May Mobilizations (2002-2007)**

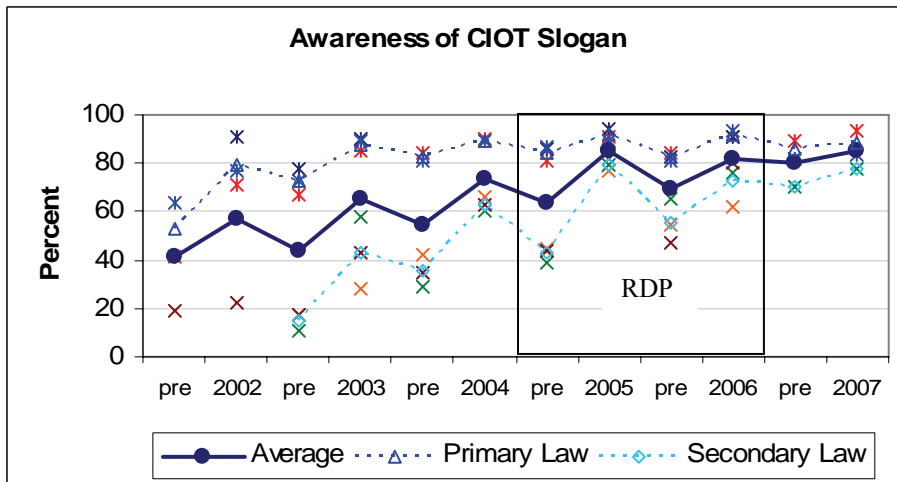


Figure 21 shows the trend for recognition of the CIOT slogan. It shows increases associated with each mobilization, from 2002 through 2005, after which there was an apparent leveling-off. There was a substantial difference between primary and secondary law States in 2003, when all of the secondary law States were not using the CIOT slogan, but that difference diminished over time as it was adopted in all of the GLR States.

**Figure 22. Percent of Respondents Aware of *Special Enforcement Efforts*: Average Results of Telephone Surveys Before and After May Mobilizations (2002-2007)**

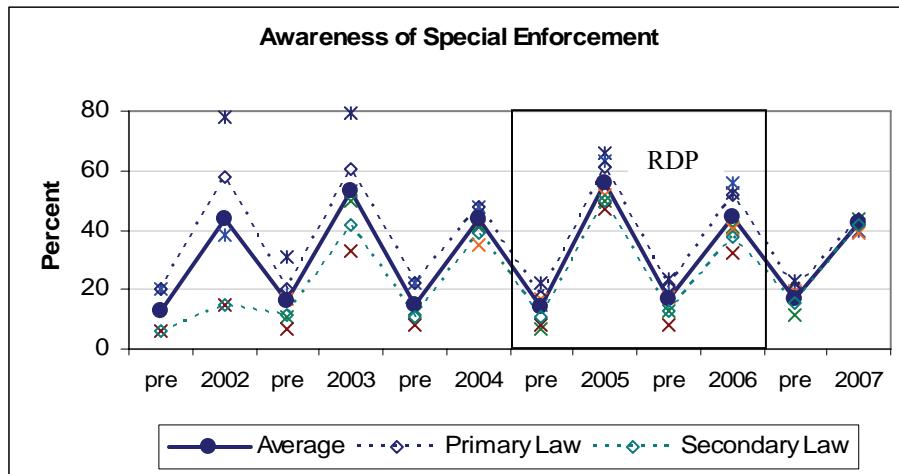


Figure 22 shows the trend in awareness of *special seat belt enforcement efforts*. It shows post-mobilization rates between 40% and 60%.<sup>66</sup> The peak awareness of special enforcement (56%) was in 2005, followed by a decline in 2006. The pre-mobilization (baseline) rates were less than 20% awareness (for the most part due to the wording of the question) and there was little difference between primary and secondary law States.<sup>67 68</sup>

**Figure 23. Percent of Respondents Perceiving That a *Ticket for Nonuse Is Likely*: Results of Telephone Surveys Before and After May Mobilizations (2002-2007)**

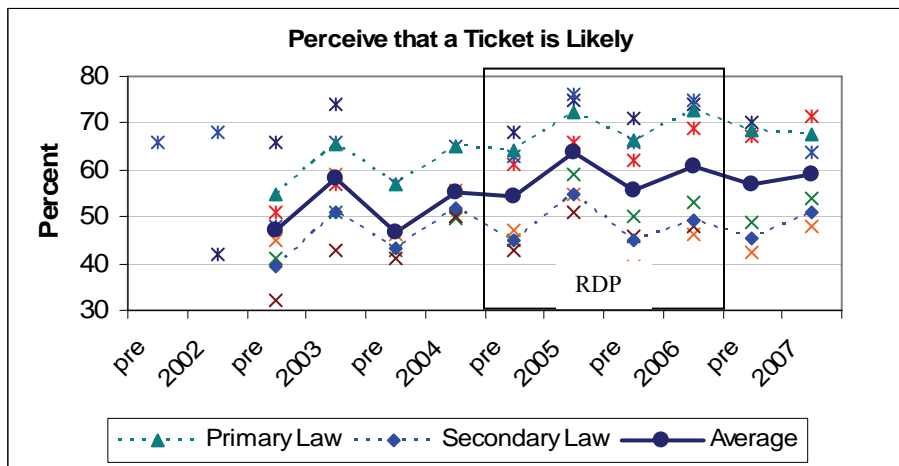


Figure 23 shows the perceived risk of getting a ticket. It also shows increases through 2005, followed by a slight decline, but with substantial differences between primary and

<sup>66</sup> The benchmark rate is about 40% aware of special enforcement efforts. This benchmark was obtained from the 2003 and 2004 national CIOT reports (see Solomon et al. 2004 and Solomon and Chaffee, 2005)

<sup>67</sup> 2002 and 2007 rates include only a few States.

<sup>68</sup> The pre-mobilization responses were related to how the question was worded (i.e., in the past 30 days are you aware of any special police activity to ticket for nonuse of seat belts?). Still, they reflect the fact that, other than during a mobilization, there is little enforcement of seat belt laws.

secondary law States (+20 points). Also, in primary law States, perceived risk did not decline until after 2006 while there was a decline after 2005 in secondary law States.

#### D. Observed Seat Belt Usage

##### 1. Rural-Targeted Areas: Rates and Changes

Table 25 shows that all States, with the exception of Minnesota, experienced significant overall increases in observed usage in their rural targeted areas. The median overall increase was about 4 percentage points (compared with a median 6.5-point increase in 2005). Changes ranged from no change in Minnesota to 10.2 points in Michigan. In the subset of five States with post-RDP and post-CIOT surveys, the median increase was about 2 points during each phase of the program. Two States (Illinois and Michigan) showed significant increases during the RDP phase and three States (Illinois, Michigan, and Wisconsin) experienced increases during the CIOT phase. The timing of the three-point increase in Ohio is unknown and Minnesota did not experience a significant increase associated with either phase.<sup>69</sup>

**Table 25. Observed Seat Belt Usage in 2006: Results of *Rural* Surveys**

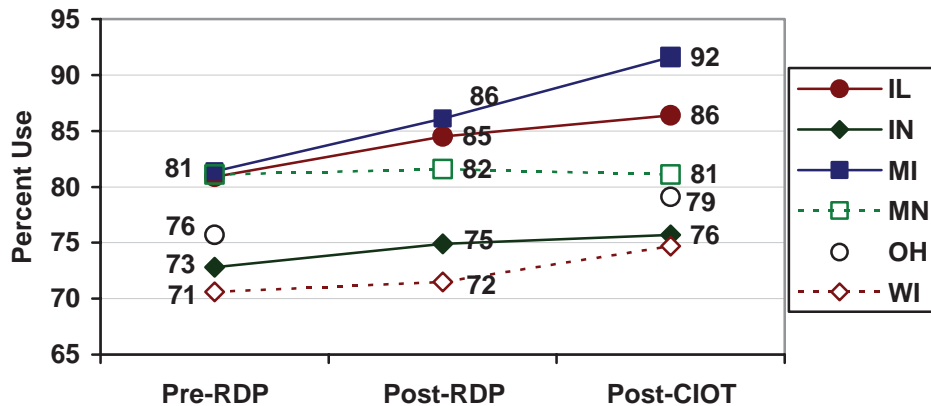
State	Usage Rates (%)			Absolute Change (pts)		
	w1	w2	w3	RDP w2-w1	CIOT w3-w2	Overall w3-w1
<b>Illinois</b> n = Usage	6,686 <b>80.9</b>	6,616 <b>84.5</b>	7,070 <b>86.4</b>	p ≤ 0.001 <b>+3.6</b>	p = 0.002 <b>+1.9</b>	p ≤ 0.001 <b>+5.5</b>
<b>Indiana</b> n = Usage	3,554 <b>72.8</b>	2,576 <b>74.9</b>	3,720 <b>75.7</b>	p = 0.07 <b>+2.1</b>	n.s. <b>+0.8</b>	p ≤ 0.001 <b>+2.9</b>
<b>Michigan</b> n = Usage	7,083 <b>81.4</b>	7,560 <b>86.1</b>	7,133 <b>91.6</b>	p ≤ 0.001 <b>+4.7</b>	p ≤ 0.001 <b>+5.5</b>	p ≤ 0.001 <b>+10.2</b>
<b>Minnesota</b> n = Usage	1,214 <b>81.1</b>	1,266 <b>81.6</b>	1,526 <b>81.1</b>	n.s. <b>+0.5</b>	n.s. <b>-0.5</b>	n.s. <b>0.0</b>
<b>Ohio</b> n = Usage	2,646 <b>75.7</b>	- -	2,993 <b>79.1</b>	- -	- -	p = 0.002 <b>+3.4</b>
<b>Wisconsin</b> n = Usage	3,791 <b>70.6</b>	3,275 <b>71.5</b>	4,241 <b>74.7</b>	n.s. <b>0.9</b>	p = 0.002 <b>+3.2</b>	p ≤ 0.001 <b>+4.1</b>
<b>5-State Median</b> <sup>70</sup>	<b>80.9</b>	<b>81.6</b>	<b>81.1</b>	<b>+2.1</b>	<b>+1.9</b>	<b>+4.1</b>
Ohio	75.7	-	79.1	-	-	+3.4
<b>All-Entry Median</b>	<b>78.3</b>	<b>81.6</b>	<b>80.1</b>	<b>+2.1</b>	<b>+1.9</b>	<b>+3.8</b>

Notes: All p-values are from 2 x 2, chi-square tests; df=1.  
 Absolute changes are expressed as percentage point changes.  
 Medians are based on data in columns above each entry.  
 MI data are for *total rural sample* (75 sites) due to RDP media in non-targeted area.

<sup>69</sup> It is relevant to note, however, that Minnesota was essentially tied with Illinois and Michigan for the highest baseline usage (81%) and, among these three States, it was the only one with a secondary law.

<sup>70</sup> Because of differences in mini survey designs, results are summarized in terms of medians.

Figure 24. Observed 2006 Seat Belt Use Rates in Rural Targeted Areas: by Phase



## 2. Statewide: Usage Rates and Changes

Statewide results are shown in Table 26. Here again, all States except Minnesota experienced significant overall increases in usage. The median statewide gain was 4.1 points, compared with 4.8 points in 2005. The largest increase was 7.3 points (in Wisconsin), compared with 12 points in 2005 (in Ohio).

Table 26. Observed Seat Belt Usage in 2006: Results of *Statewide* Surveys

State	Usage Rates (%)			Absolute Change (pts)		
	w1	w2	w3	RDP w2-w1	CIOT W3-w2	Overall w3-w1
Illinois	n = 36,025 Usage <b>84.6</b>	37,813 <b>86.5</b>	43,817 <b>90.5</b>	p ≤ 0.001 <b>+1.9</b>	p ≤ 0.001 <b>+4.0</b>	p ≤ 0.001 <b>+5.9</b>
Indiana	n = 19,077 Usage <b>79.7</b>	- -	19,938 <b>83.8</b>	- -	- -	p ≤ 0.001 <b>+4.1</b>
Michigan	n = n/a <sup>71</sup> Usage	18,262 <b>89.9</b>	20,472 <b>94.0</b>	- -	p ≤ 0.001 <b>+4.1</b>	p ≤ 0.001 <b>(+4.1)</b>
Minnesota	n = 4,696 Usage <b>83.2</b>	5,008 <b>83.0</b>	6,156 <b>84.0</b>	n.s. <b>-0.2</b>	n.s. <b>+1.0</b>	n.s. <b>+0.8</b>
Ohio	n = 23,580 Usage <b>79.6</b>	- -	23,668 <b>81.7</b>	- -	- -	p ≤ 0.001 <b>+2.1</b>
Wisconsin	n = 6,225 Usage <b>68.7</b>	6,278 <b>72.8</b>	6,421 <b>76.0</b>	p ≤ 0.001 <b>4.1</b>	p ≤ 0.001 <b>+3.2</b>	p ≤ 0.001 <b>+7.3</b>
<b>Three-State Median</b> <sup>72</sup>	<b>83.2</b>	<b>83.0</b>	<b>84.0</b>	<b>+1.9</b>	<b>+3.2</b>	<b>+5.9</b>
Indiana	79.7	-	83.8	-	-	+4.1
Michigan	-	89.9	94.0	-	+4.1	(+4.1)
Ohio	79.6	-	81.7	-	-	+2.1
<b>Median of all Entries</b>	<b>79.7</b>	<b>84.8</b>	<b>83.9</b>	<b>+1.9</b>	<b>+3.6</b>	<b>+4.1</b>

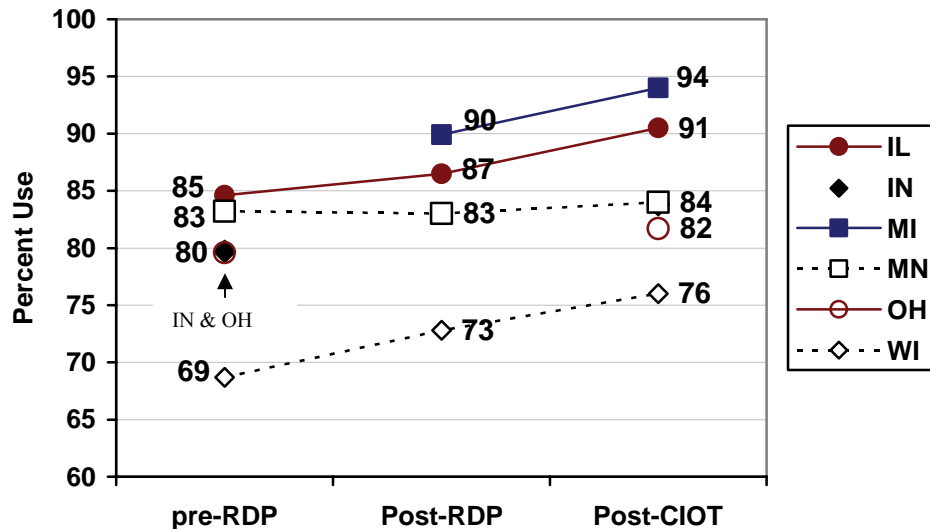
Note that w3 results for IL, MN, MI, and WI are from mini-surveys; w3 results from IN, and OH are from full statewide surveys.

<sup>71</sup> Michigan did not conduct a statewide survey prior to the start of the RDP (w1).

<sup>72</sup> Because of differences in mini survey designs, results are summarized in terms of medians.

Illinois and Wisconsin experienced significant increases associated with the RDP and with CIOT. Michigan measured usage only before and after the CIOT and found a significant increase of 4.1 points.<sup>73</sup> Indiana had a 4-point gain and Ohio had a 2-point gain but, because there were no post-RDP surveys, it is not known when these increases occurred. Minnesota did not experience any significant gains.

**Figure 25. Statewide 2006 Observed Use Rates, by Phase**



### 3. A Comparison of Full Statewide and Mini-Survey Results

As was pointed out in the Methods section (see Table 5), the evaluation design called for using the most comparable surveys to measure impact at each measurement point, but particularly at w1 (baseline) and w3 (post-program). In Indiana, Michigan, and Ohio, two large-sample surveys were used to measure change. In Illinois, Minnesota, and Wisconsin, results from smaller mini-surveys were used at all three measurement periods (i.e., at w1, w2, and w3). In these States, the results of full statewide surveys were also available to estimate post-program usage levels. The results of the mini-surveys and the full statewide surveys were 90.5% and 87.8%, respectively in Illinois (2.7 points difference) and 84.0% and 83.3%, respectively, in Minnesota (0.7 points difference). The results of the mini and full surveys were nearly identical in Michigan (94.0% versus 94.3%, respectively) and in Wisconsin (76.0% and 75.7%, respectively). *Overall, in these four States, the post-program usage rates found in the full statewide surveys were 0.6 points lower than the rates found in the post-CIOT mini surveys.*

### 4. Two-Year Changes in Usage: Rural and Statewide

Over the course of the 2005 and 2006 demonstration program, there was a median 9.2-percentage-point increase in observed usage in the *rural targeted areas*. Statewide, the

<sup>73</sup> Again, Minnesota’s baseline rate was quite high for a secondary law State (83%), very close to that of Illinois (85%), although both were considerably lower than the baseline rate in Michigan (90%).



median increase was 6.6 points (average = 6.9 points). These overall gains include inter-year declines (i.e., from w3 in 2005 to w1 in 2006) that averaged 2.9 points in rural areas and 1.9 points statewide. Table 27 shows the observed rates and changes for each phase of the program, as well as the overall changes for each year and for the two-year effort.<sup>74</sup>

**Table 27. Levels and Changes in Seat Belt Usage in 2005 and 2006:  
Results of *Statewide* and *Rural* Observational Surveys**

		2005					2006							
State		w1	w2	w3	RDP	CIOT	2005 TTL	w1	w2	w3	RDP	CIOT	2006 TTL	2 yr TTL
<b>IL</b>	<b>R</b>	78.5	81.5	85.5	3.0 **	4.0 **	<b>7.0</b> **	80.9	84.5	86.4	3.6 **	1.9 **	<b>5.5</b> **	<b>7.9</b> **
<b>IL</b>	<b>S</b>	83.5	85.5	88.3	2.0 **	2.8 **	<b>4.8</b> **	84.6	86.5	90.5	1.9 **	4.0 **	<b>5.9</b> **	<b>7.0</b> **
<b>IN</b>	<b>R</b>	64.7	67.2	73.7	2.5 *	6.5 **	<b>9.0</b> **	72.8	74.9	75.7	2.1 *	0.8 ns	<b>2.9</b> **	<b>11.0</b> **
<b>IN</b>	<b>S</b>	76.3	77.0	81.2	0.7 ns	4.2 **	<b>4.9</b> **	79.7	-	83.8	-	-	<b>4.1</b> **	<b>7.5</b> **
<b>MI</b>	<b>R</b>	88.9	89.0	91.2	0.1 ns	2.2 **	<b>2.3</b> **	81.4	86.1	91.6	4.7 **	5.5 **	<b>10.2</b> **	<b>2.7</b> **
<b>MI</b>	<b>S</b>	-	89.4	93.2	-	3.8 **	(3.8) **	-	89.9	94.0	-	4.1 **	(4.1) **	(4.6) **
<b>MN</b>	<b>R</b>	76.5	78.8	79.4	2.3 ns	0.6 ns	<b>2.9</b> ns	81.1	81.6	81.1	0.5 ns	-0.5 ns	<b>0.0</b> ns	<b>4.6</b> **
<b>MN</b>	<b>S</b>	78.1	81.3	82.6	3.2 **	1.3 *	<b>4.5</b> **	83.2	83.0	84.0	-0.2 ns	1.0 ns	<b>0.8</b> ns	<b>5.9</b> **
<b>OH</b>	<b>R</b>	68.7	76.7	80.6	8.0 **	3.9 **	<b>11.9</b> **	75.7	-	79.1	-	-	<b>3.4</b> **	<b>10.4</b> **
<b>OH</b>	<b>S</b>	75.5	78.7	78.7	3.2 **	0.0 ns	<b>3.2</b> **	79.6	-	81.7	-	-	<b>2.1</b> **	<b>6.2</b> **
<b>WI</b>	<b>R</b>	63.5	61.8	69.4	-1.7 ns	7.6 **	<b>5.9</b> **	70.6	71.5	74.7	2.1 ns	3.2 **	<b>4.1</b> **	<b>11.2</b> **
<b>WI</b>	<b>S</b>	65.6	64.2	73.3	-1.4 ns	9.1 **	<b>7.7</b> **	68.7	72.8	76.0	4.1 **	3.2 **	<b>7.3</b> **	<b>10.4</b> **
<b>Med.</b>	<b>R</b>	<b>72.6</b>	<b>77.8</b>	<b>80.0</b>	<b>2.4</b>	<b>4.0</b>	<b>6.5</b>	<b>78.3</b>	<b>81.6</b>	<b>80.1</b>	<b>2.1</b>	<b>1.9</b>	<b>3.8</b>	<b>9.2</b>
	<b>S</b>	<b>76.3</b>	<b>80.0</b>	<b>81.9</b>	<b>2.0</b>	<b>3.3</b>	<b>4.7</b>	<b>79.7</b>	<b>84.8</b>	<b>83.9</b>	<b>1.9</b>	<b>3.6</b>	<b>4.1</b>	<b>6.6</b>
<b>Ave.</b>	<b>S</b>	<b>75.8</b>	<b>79.4</b>	<b>82.9</b>	<b>1.5</b>	<b>3.5</b>	<b>4.8</b>	<b>79.2</b>	<b>83.1</b>	<b>85.0</b>	<b>1.9</b>	<b>3.1</b>	<b>4.1</b>	<b>6.9</b>
	<b>#</b>	6/5	6/6	6/6	6/5	6/6	6/6	6/5	5/4	6/6	5/3	5/4	6/6	6/6

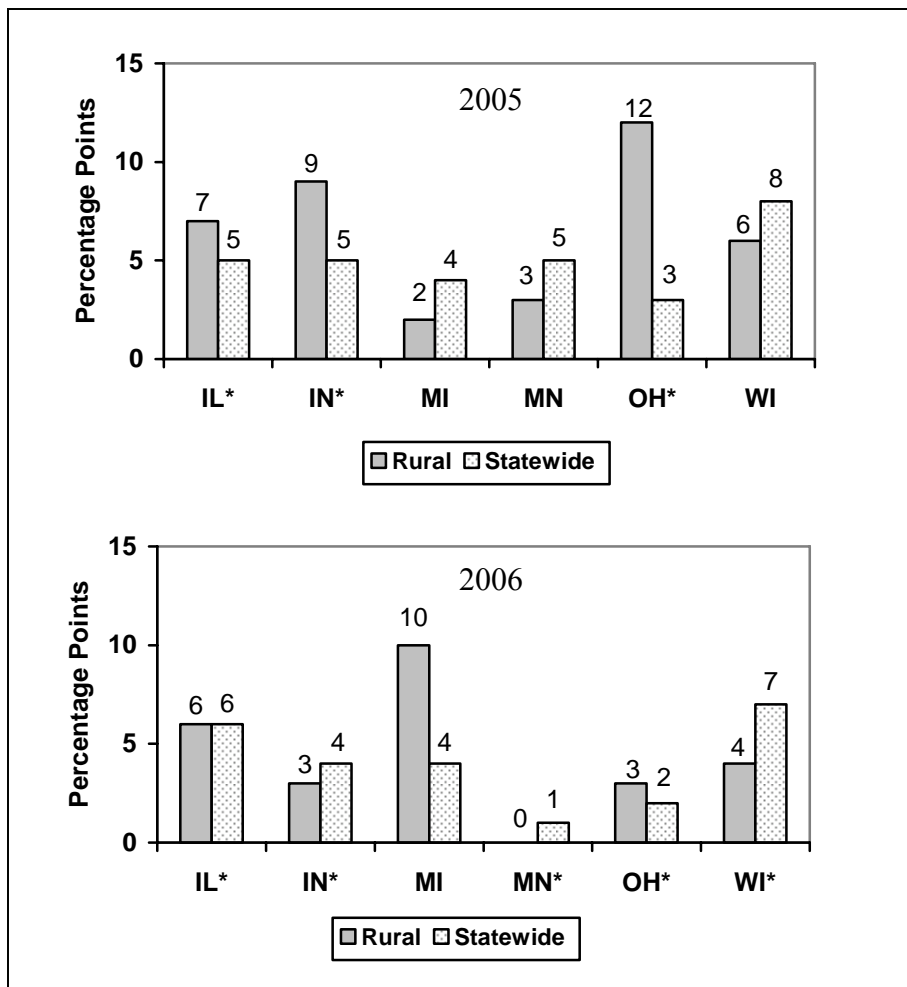
Notes: only medians provided for rural results; Medians and averages are provided for statewide results; # refers to number of States with data (Rural/Statewide); CIOT change is used as overall change for MI; \* denotes  $p \leq 0.05$ ; \*\* denotes  $p \leq 0.01$  (nearly all were  $\leq 0.001$ ) based on 2 x 2 Chi Square; Averages and medians are based on varying number of total State entries.

In addition to median values, averages are shown for statewide usage. In general, these two estimates were very similar. The median increase in seat belt use in rural targeted areas was 9.2 percentage points; the median statewide increase was 6.6 points. The largest rural increases were measured in Indiana, Ohio, and Wisconsin.

<sup>74</sup> The two-year total includes the sum of the gains in each year plus any inter-year change.

Figure 26 shows the *overall* increases (w3-w1) in rural targeted areas and statewide, for each State, and for both years of the RDP/CIOT program. In 2005, the median gain was 6.5 points in rural areas and 4.7 points statewide (see table 27). In States that enforced during the 2005 RDP (States marked with an asterisk in Figure 26) the median increase was 9 points in targeted rural areas and 5 points statewide. In 2006, the overall median gain was about 4 points, rural and statewide. All States except Michigan intensified enforcement during the RDP.<sup>75</sup>

**Figure 26. Increases in Observed Seat Belt Usage: Statewide and in Rural Areas in 2005 and 2006<sup>76</sup>**



*In Illinois*, rural increases were slightly larger than statewide increases in 2005 (7 points and 4.8 points, respectively) but were nearly identical to statewide increases in 2006 (5.5

<sup>75</sup> While Michigan did not intensify enforcement during the RDP media period, it did so immediately after it (for 3 consecutive weeks). Some of the large (12-point) rural gain shown in Michigan (in 2006) likely resulted from a large (10-point) decline in observed usage from 2005 to the 2006 pre-RDP survey.

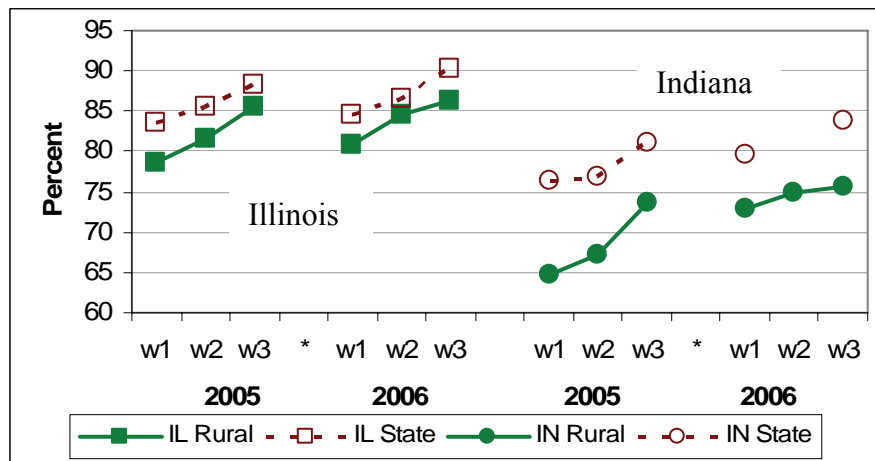
<sup>76</sup> States that intensified enforcement during the RDP are identified with an asterisk.

points and 5.9 points, respectively).<sup>77</sup> Over the two-year period, rural usage increased by 7.9 points (from 78.5% to 86.4%, including a 4.6-point decline between the two mobilizations) and statewide usage increased by 6.9 points (from 83.5% to 90.4%, including a 3.7-point inter-year decline).<sup>78</sup>

*In Indiana*, rural increases were substantially larger than statewide increases in 2005 (9.0 points and 4.9 points, respectively), but slightly smaller than statewide increases in 2006 (2.9 points and 4.1 points, respectively). Over the two-year period, rural usage increased by 11 points (64.7% to 75.7%, including a 0.9-point inter-year decline) and statewide usage increased by 7.5 points (from 76.3% to 83.8%, including a 1.7-point decline).<sup>79</sup>

Both of these States intensified enforcement during the RDP (as well as during CIOT) in 2005 and in 2006, but it was only in 2005 that such additional HVE appeared to be associated with greater increases in rural areas than statewide. In 2005, however, greater increases appeared to be associated with CIOT than with the RDP, particularly in Indiana. This suggests that, while the CIOT may have had the greatest impact, the RDP activity in rural areas *may have* enhanced the impact of CIOT in those areas.

**Figure 27. Usage Trends in Illinois and Indiana: Statewide Versus Rural Areas in 2005 and 2006**



*In Michigan*, rural increases appeared to be smaller than statewide increases in 2005 (measured at 2.3 points and 3.8 points, respectively).<sup>80</sup> In 2006, following a 9.8-point inter-year decline, rural increases were much larger (10.2 points) than statewide gains (4.1 points). Some portion of this gain in rural areas was very likely related to the large decline from 2005 to 2006. Over the two-year period, rural usage increased by 2.7 points

<sup>77</sup> The IL w3 survey in 2006 is based on the mini-survey results (90.4% usage). The full statewide survey found similar results (87.8% usage).

<sup>78</sup> All changes in Illinois were measured by means of comparable mini-surveys.

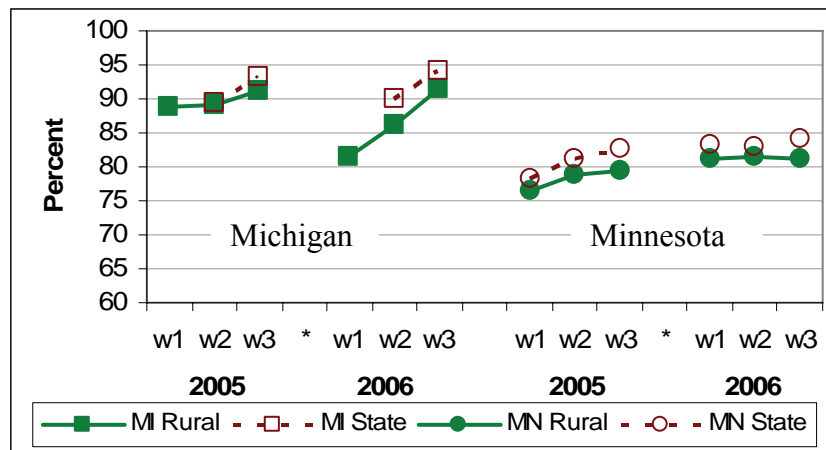
<sup>79</sup> Rural changes in Indiana were measured by mini surveys; statewide changes were measured by means of mini-surveys at baseline and a full statewide survey following each CIOT phase.

<sup>80</sup> Statewide, only the gains associated with CIOT could be measured in Michigan (no pre-RDP survey).

(from 88.9% to 91.6%, including the near 10-point inter-year decline). Statewide usage increased by 4.6 points (from 89.4% to 94.0%, including a 3.3-point inter-year decline).<sup>81</sup>

In Minnesota, rural increases during the 2005 mobilization were slightly smaller than statewide gains (2.9 points and 4.5 points, respectively) and there were virtually no changes in 2006 ((no measured change in rural areas and a non-significant 0.8-point increase statewide). However, including a slight 1.7-point increase in usage between the 2005 and 2006 mobilizations, there was an overall two-year gain of 4.6 points in rural areas (from 76.5% to 81.1%). Statewide, usage increased by 5.9 points (from 78.1% to 84%, including a slight 0.6-point inter-year increase).<sup>82</sup> Minnesota may have reached a plateau in 2006, at relatively high usage for a secondary law State.

**Figure 28. Usage Trends in Michigan and Minnesota: Statewide Versus Rural Areas in 2005 and 2006**



Being a secondary law State, Minnesota provides an interesting comparison with Michigan, a primary law State. Both States may have been struggling with “ceiling effects,” but at usage levels that were approximately 10 points higher in Michigan than in Minnesota.

In Ohio, rural increases were much larger than statewide increases in 2005 (11.9 points and 3.2 points, respectively) and the large rural increase was clearly associated with the RDP (8.0-point increase). In 2006, rural and statewide increases were similar (3.4 points and 2.1 points, respectively). Over the two-year period, rural usage increased by 10.4 points (68.7% to 79.1%, including a 4.9-point inter-year decline) and statewide usage increased by 6.2 points (from 75.5% to 81.7% including a slight 0.9-point increase between the two mobilizations).<sup>83</sup>

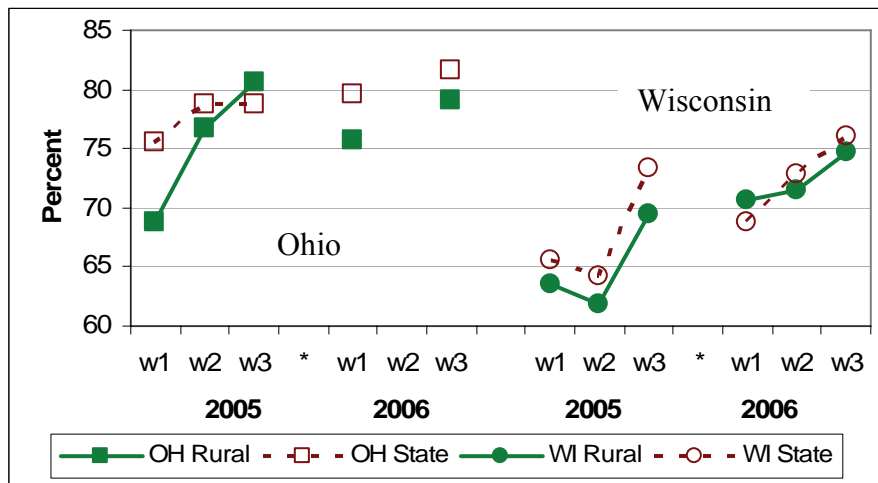
<sup>81</sup> In Michigan, rural changes were measured by mini-surveys at baseline and at post-CIOT in each year; statewide changes resulted from large (192-site) mini-surveys conducted before and after CIOT each year.

<sup>82</sup> The w3 rate for MN (84%) is from a mini-survey that was comparable to surveys conducted at w1 and w2. Minnesota’s official statewide survey, conducted several months after the mobilization, found a usage rate of 83.3%.

<sup>83</sup> Rural usage in Ohio was measured by means of mini-surveys at all measurement points; statewide usage was measured by full statewide surveys (pre- and post-mobilization).

In Wisconsin, overall rural and statewide increases in observed usage were relatively similar in 2005 (5.9 points and 7.7 points, respectively), but the 2006 rural increase was smaller than the statewide gain (4.1 points and 7.3 points, respectively). Over the two years of the demonstration program, both rural and statewide increases were large and significant, with rural usage increasing by 11.2 points (from 63.5% to 74.7%, including a slight 1.2-point inter-year increase) and statewide usage increasing by 10.4 points (from 65.6% to 76.0%, including a modest 4.6 decrease in usage between mobilizations).<sup>84</sup> There were modest overall gains each year (4-8 points), rural and statewide.

**Figure 29. Usage Trends in Ohio and Wisconsin: Statewide Versus Rural Areas in 2005 and 2006**



In summary of these comparisons, the largest and most significant *rural* increases were found in Indiana (+11 points); Ohio (+10 points); and Wisconsin (+11 points). In both Indiana and Ohio, relatively small rural areas were targeted by the RDP (12% and 6% of the States' population, respectively). This focused approach may have been a factor associated with the larger two-year gains in these two States. If so, however, that effect was limited primarily to the 2005 RDP effort.

### 5. Targeted Areas Versus Non-Targeted Rural Areas

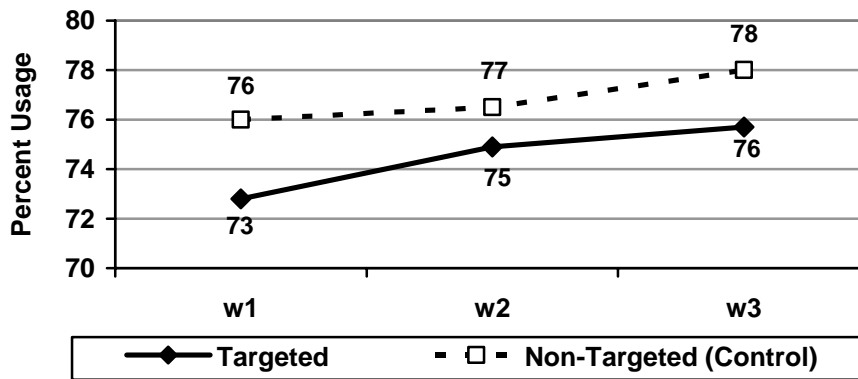
Indiana conducted observational surveys in rural *targeted* areas and in *non-targeted* (control) areas where there was no RDP media or enforcement activity planned.<sup>85</sup> These surveys found an overall 2.9-percentage-point increase in usage in targeted areas, from

<sup>84</sup> Rural usage in Wisconsin was measured by a series of mini-surveys. Statewide usage was also measured by mini-surveys pre- and post mobilization. However, there also was a full statewide survey at the end of the CIOT phase. The results of the 2006 statewide survey in Wisconsin were nearly identical to the results of the post-CIOT mini-survey.

<sup>85</sup> Michigan also attempted to establish non-targeted rural areas. However, as indicated in the enforcement and media sections, no enforcement was implemented during the RDP phase and the non-targeted areas were within the markets targeted for RDP media. Michigan did not conduct awareness surveys specific to these *non-targeted* areas.

72.8% to 75.7% ( $X^2 = 7.7$ ;  $p = 0.005$ ;  $df = 1$ ). Most of this increase occurred during the RDP (2.1 points) but the change only approached significance. ( $X^2 = 3.2$ ;  $p = 0.07$ ;  $df = 1$ ). In the control areas, there was an overall increase of 2.0 points, from 76.0% to 78.0% ( $X^2 = 3.2$ ;  $p = 0.07$ ;  $df = 1$ ). Here, there was little change indicated in the control area during the RDP. While neither of these increases associated with the RDP or CIOT reached statistical significance (due to relatively small numbers), the measured increase that followed CIOT (in the control area) was three times the measured change associated with the RDP (1.5 points and 0.5 points, respectively). This pattern of results *suggested* that the targeted areas were affected by the RDP and the control areas were affected by CIOT. The 2005 results from Indiana were similar. Overall results from both targeted and non-targeted areas indicated that usage among males and occupants of pickup trucks increased more than among other groups.<sup>86</sup>

**Figure 30. Observed Usage in Targeted and Non-Targeted Rural Areas of Indiana**

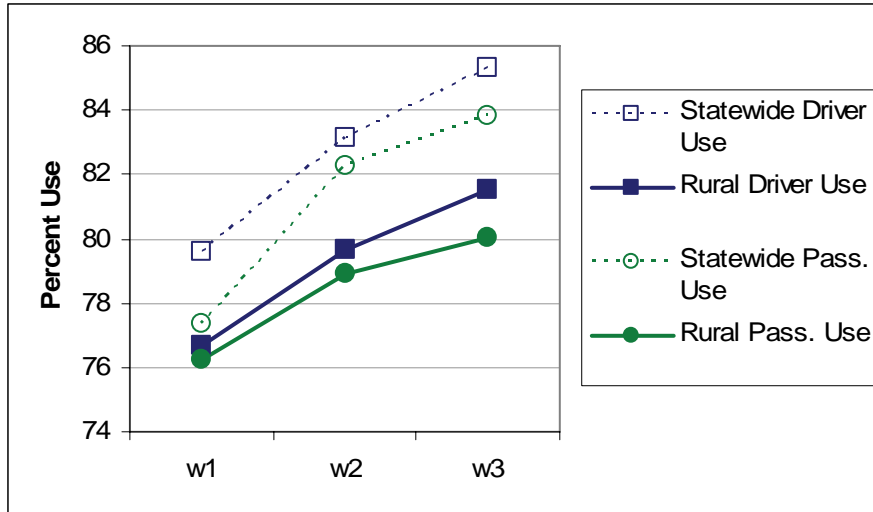


#### 6. Rates and Changes in Usage Among Subgroups in 2006: Rural Versus Statewide

The following figures show trends in 2006 usage among various sub-groups, statewide and in rural areas. Figure 31 shows higher usage rates *statewide* than in *rural* areas. It also shows higher use among drivers than among passengers. However, increases among these four groups were relatively similar over time. Some of the initial increase shown from w1 to w2 in the statewide trends was due to the fact that Michigan, with a very high statewide usage rate, did not conduct a baseline (w1) survey. As a result, Michigan's relatively high rate of use is not reflected in the w1 (baseline) average but is included in the w2 average (post-RDP) and the w3 average (post-CIOT).

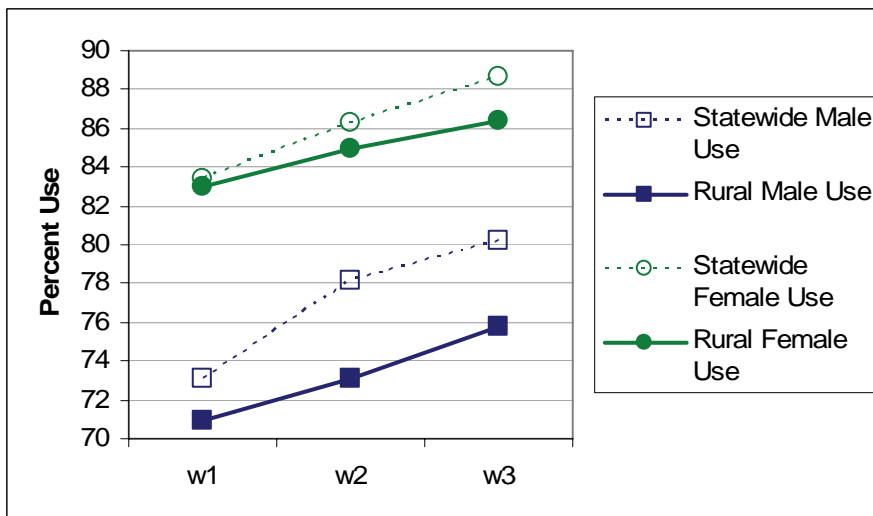
<sup>86</sup> As noted earlier, surveys were also conducted in targeted and non-targeted rural areas of Michigan. However, RDP ads were aired in the non-targeted areas (Grand Rapids market) and enforcement, which did not begin until the first week of CIOT was directed at both areas. As a result of this contamination, observations from the two areas were aggregated into a combined rural sample for this report.

**Figure 31. Usage Among Drivers and Passengers:  
Averages From 2006 Statewide and Rural Surveys**  
(data from all six States: IL, IN, MI, MN, OH, and WI)



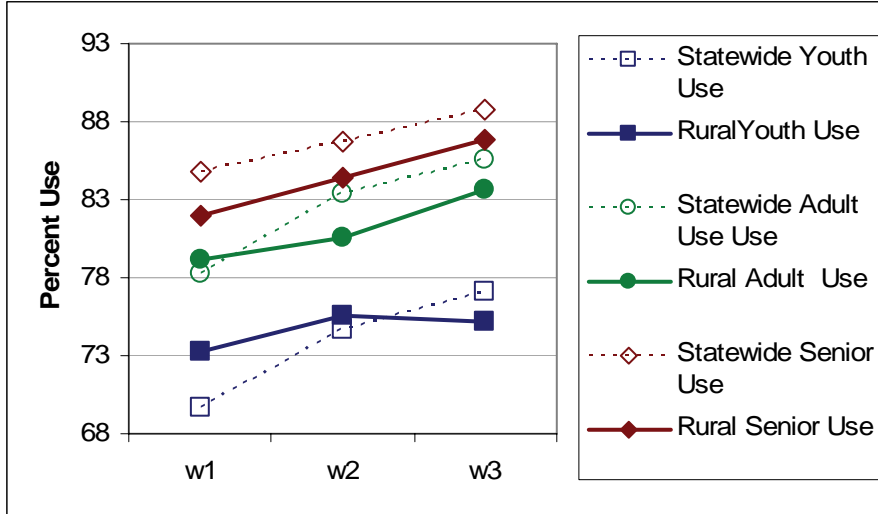
*Male Versus Female.* The next figure shows changes in usage among males and females, statewide and in rural targeted areas. This figure shows much higher usage among females than among males (more than 10 percentage points higher) and it again shows modestly higher usage statewide than in the rural areas, particularly among males.<sup>87</sup> In rural areas, there is a near linear increase over time, among both genders.

**Figure 32. Usage Among Drivers and Passengers:  
Averages From 2006 Statewide and Rural Surveys**  
(data from five States: IN, MI, MN, OH, and WI)

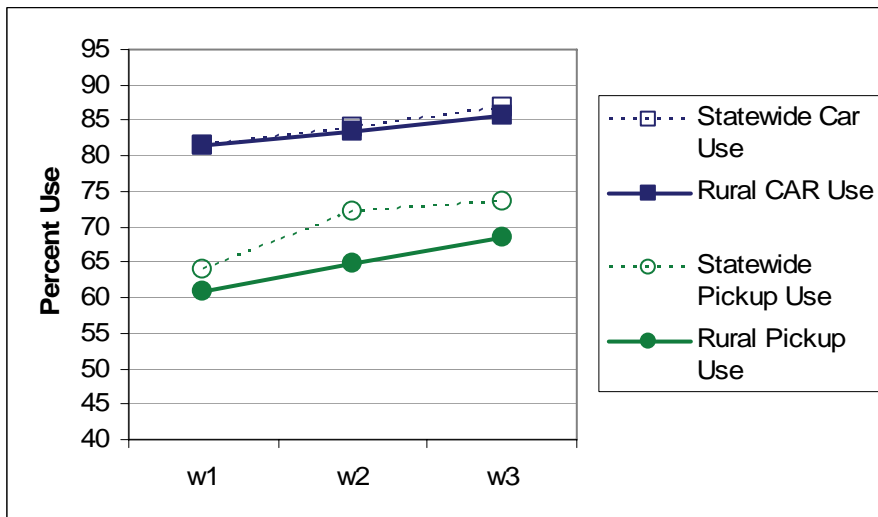


<sup>87</sup> Again, statewide baselines (w1) are slightly lower than they would be if data for Michigan had been available for inclusion in the baseline (w1).

**Figure 33. Usage Among Youth, Adults, and Older Drivers:  
Averages From 2006 Statewide and Rural Surveys**  
(data from four States: MI, MN, OH, and WI)



**Figure 34. Usage Among Occupants of Passenger Cars and Pickup Trucks:  
Averages From 2006 Statewide and Rural Surveys**  
(data from six States: IL, IN, MI, MN, OH, and WI)



*Age Groups.* Figure 33 shows usage among young occupants, adults, and older drivers. Older drivers had the highest average usage rate, statewide and in rural areas, and they had similar, near-linear increases in usage over the two phases of the 2006 mobilization, with overall gains of 5 to 6 percentage points. Usage among rural youth increased during the RDP but did not increase during CIOT. This was not the case in the statewide



surveys, where usage among the younger age group increased primarily during the RDP, then continued to increase during CIOT.

*Vehicle Type.* The final comparison is of usage among occupants of passenger cars and pickup trucks, statewide and in rural areas (Figure 34). In cars, rural use rates were very similar to statewide use rates, increasing modestly over time (by 4-5 points in both groups). In pickup trucks, however, rural use was generally lower than in statewide samples, and it was as much as 20 percentage points lower than usage in cars. However, usage in pickup trucks increased linearly across the mobilization, resulting in among the largest gains among any group (6 to 7 points).<sup>88</sup> There was a slight narrowing of the gap between usage in pickup trucks and usage in passenger cars, from w1 through w3.

*In summary,* there were increases in usage among nearly all sub-groups in 2006, but particularly among groups considered to be high-risk, low-use groups, such as males, young occupants (in statewide samples) and occupants of pickup truck occupants. While there was a modest increase among *young rural occupants* following the 2006 RDP, this trend did not continue during CIOT in these rural areas, as it did statewide.<sup>89 90</sup> In general, the greatest rural gains in 2006 were among occupants of pickup trucks (+7 points) followed by drivers, males, adults, and older drivers (all +5 points).<sup>91</sup>

## 7. Two-Year Trends in Usage Among Various Target Groups.

The 2006 results from rural targeted areas were similar to the 2005 results reported by Nichols, Ledingham, and Preusser (2007). In both years, there were significant overall increases among most sub-groups, particularly among drivers, males, adults, older drivers, occupants of passenger cars, and occupants of pickup trucks. However, observed increases in 2006 were generally smaller than those in 2005. In addition, the 2005 results showed significant increases in usage for three high-risk subgroups (males, youth, and occupants of pickup trucks) while the 2006 results showed significant increases for only two of these groups (males and occupants of pickup trucks).<sup>92</sup> Table 28 shows the observed rates and changes at each measurement point for targeted rural subgroups.

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<sup>88</sup> The absence of Michigan data for the statewide pickup baseline was likely a factor in the increase in statewide pickup truck usage from w1 to w2. That is because, pickup trucks in Michigan have a relatively high usage rate and Michigan data were missing from at w1 but present at w2.

<sup>89</sup> Only four of the six States provided data for the age-related trends. Gains among young occupants continued through CIOT in Michigan, but not in Wisconsin. Minnesota showed no gains during either phase and the timing of Ohio's four-point increase (among rural youth) could not be determined.

<sup>90</sup> Note that regional samples varied substantially from one State to another. Thus, medians perhaps should have been used here. However, it was felt that averages better represented the available data.

<sup>91</sup> Changes in the "other-than-White" category showed the greatest change of all (+8 points). These data were from only one State (Ohio) and the numbers were quite small. However, a similar trend was seen in the statewide data from Ohio where the number of non-Whites observed was greater than 1,000.

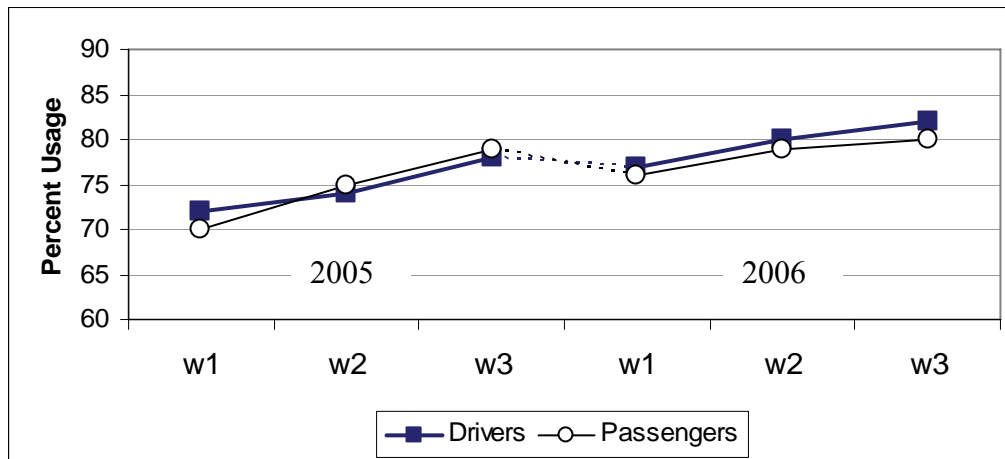
<sup>92</sup> This lack of change among rural youth was primarily due to the results from Wisconsin that showed a decline in usage among youth associated with CIOT (-8 points). The Michigan data, on the other hand, showed increases among youth associated with the RDP and with CIOT (+5 points and +7 points, respectively). The CIOT decline among youth was not reflected in Wisconsin's statewide results.

**Table 28. Two-Year Trends in Seat Belt Usage (2005 and 2006):  
Among Various Subgroups in Rural-Targeted Areas**

Sub-group Sample Size (2005 / 2006)	2005						2006						2 yr Pct. Pts.
	w1 %	w2 %	w3 %	RDP Pct. Pts.	CIOT Pct. Pts.	TTL Pct. Pts.	w1 %	w2 %	w3 %	RDP Pct. Pts.	CIOT Pct. Pts.	TTL Pct. Pts.	
<b>Drivers</b> (3588 / 3220)	72	74	78	2 <sup>n</sup>	4*	6*	77	80	82	3*	2*	5*	10*
<b>Passengers</b> (840 / 813)	70	75	79	5*	4*	9*	76	79	80	3	1	4*	10 <sup>n</sup>
<b>Males</b> (2111 / 1954)	64	67	68	3*	1	4*	71	73	76	2	3*	5*	12*
<b>Females</b> (1599 / 1544)	77	79	85	2	6*	8*	83	85	86	2	1	3*	9*
<b>Youth</b> (698 / 978)	64	67	71	3	4	7*	73	76	75	3	-1	2	11*
<b>Adults</b> (1988 / 2109)	72	75	79	3*	4*	7*	79	81	84	2	3*	5*	12*
<b>Seniors</b> (681 / 612)	76	80	84	4 <sup>n</sup>	4 <sup>n</sup>	8*	82	84	87	2	3	5*	11*
<b>Cars</b> (2415 / 2301)	76	80	84	4*	4*	8*	81	83	86	2 <sup>n</sup>	3*	5*	10*
<b>SUVs</b> (607 / 619)	74	73	79	-1	6*	5	80	84	83	4 <sup>n</sup>	-1	3	9*
<b>Vans</b> (489 / 464)	81	79	87	-2	8*	6*	86	85	87	-1	2	1	6*
<b>Pickups</b> (1091 / 1003)	56	64	65	8*	1	9*	61	65	68	4 <sup>n</sup>	3	7*	12*

Average sample sizes for each group for 2005/2006 are shown in column 1; "Pct. Pts." denotes percentage point change; "TTL" denotes Total; \* denotes significance ( $p \leq 0.05$ ) of change for a sample of size indicated in column 1; <sup>n</sup> denotes near-significant change ( $0.05 < p < 0.10$ ).<sup>93</sup>

**Figure 35. Usage Among Rural Drivers and Passengers in Six GLR States:  
Averages From 2006 Observational Surveys in IL, IN, MI, MN, OH, and WI**



<sup>93</sup> Significance was calculated on proportions that were based on the average percentages ("used" and "not used") and average sample sizes at each measurement point. Thus, these indicators should be interpreted as representing significance or non-significance in samples of size shown in column 1.

Figure 35 shows the two-year trend for rural drivers and passengers, including declines in usage from the end of the 2005 mobilization to the beginning of the 2006 effort (-1 point for drivers; -3 points for passengers). Overall, there is a cumulative overall increase of about 10 percentage points for both groups.

Figure 36 shows the two-year trend for males and females, including inter-year changes (+3 points for males; - 2 points for females). Overall, there is a steady increase in usage among males, with a cumulative increase of about 12 points. There is also large increase among females (+9 points), particularly in conjunction with the 2005 CIOT (+6 points). This increase is followed by a decline prior to the start of the 2006 effort.<sup>94</sup>

**Figure 36. Rural Usage among Males and Females in Five GLR States: Averages From 2006 Observational Surveys in IN, MI, MN, OH, and WI**

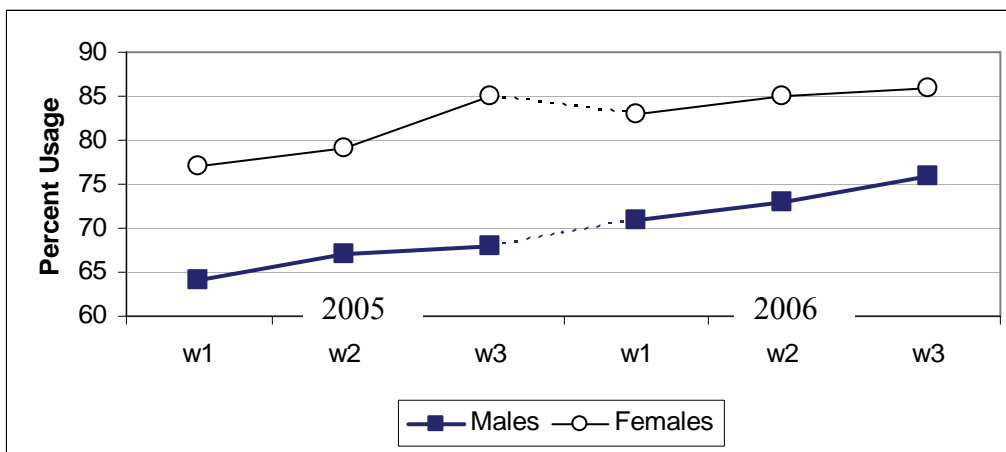


Figure 37 shows the trends for three age groups: youth (16 to 24 in most States); adults (30 to 64); and older drivers (65 and older). These data were collected in Michigan, Minnesota, Ohio, and Wisconsin. They also show steady increases from the first measurement period in 2005 through the last measurement period in 2006. The senior group had the highest rates of seat belt usage, which increased by a total of 11 percentage points, with a two-point decline between the two programs. Usage among adults increased by 12 points, with no change measured between the two mobilizations.

Usage among youth also increased steadily through the end of the 2006 RDP, after which this average from four States showed a decline that resulted primarily from a significant decline measured in Wisconsin’s post-CIOT rural survey ( $X^2 = 8.66$ ;  $p = 0.003$ ;  $df = 1$ ). This decline was not found in the Wisconsin’s statewide survey. Michigan had the largest sample of youth among the four States, with an average of 1,800 measured during each of its three rural surveys. Michigan reported a significant 5-point increase in usage among youth associated with the 2006 RDP ( $X^2 = 12.83$ ;  $p < 0.001$ ;  $df = 1$ ) and a significant seven-point increase associated with CIOT ( $X^2 = 35.8$ ;  $p < 0.001$ ;

<sup>94</sup> On average, about 3,400 drivers, 820 passengers, 2,100 males and 1,575 females were observed, in each State, during each wave of these rural surveys (i.e., at w1, w2, and w3 in each year).

df = 1). Ohio observed an average of 1,000 youth in each of its two waves of surveys and found a significant 4-point increase in usage among young occupants associated with the 2006 mobilization ( $X^2 = 6.13$ ;  $p = .013$ ;  $df = 1$ ). Because Ohio did not conduct a post-RDP survey, it could not be determined at what point the increase occurred. Minnesota showed no significant changes among any age group in 2006.

**Figure 37. Rural Usage Among Three Age Groups in Four GLR States: Averages From 2006 Observational Surveys in MI, MN, OH, and WI**

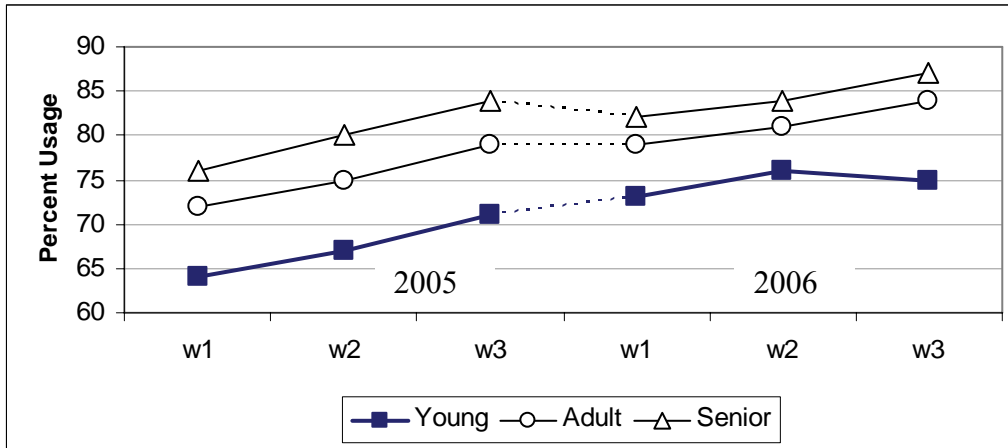
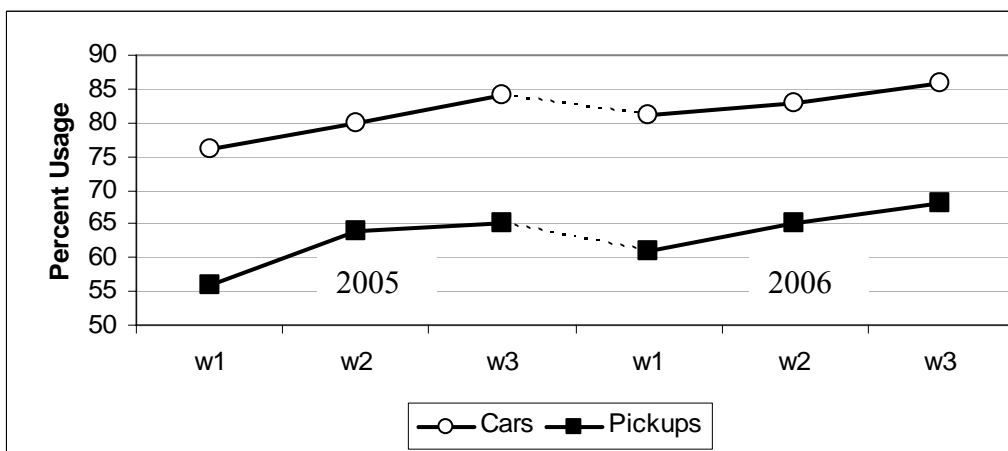


Figure 38 shows changes in usage among occupants of *passenger cars* and *pickup trucks* in rural targeted areas of all six States. Over the two-year period, usage in pickup trucks increased by 12 percentage points, in spite of a 4-point inter-year decline. Usage in passenger cars increased by 10 points, including a three-point inter-year decline.

**Figure 38. Rural Usage Among Occupants of Passenger Cars and Pickup Trucks: Averages From 2006 Observational Surveys in All Six GLR States**



Throughout the two-year period, average usage in pickup trucks was about 20 points lower than in cars. This gap in declined by about 4 points following the 2005 RDP;

increased again between mobilizations; then decreased to about 18 points throughout the 2006 mobilization. Every State reported an increase in usage among occupants of pickup trucks and, over the two years these increases were generally more strongly associated with the RDP than with CIOT.

#### 8. Longer-Term Trends in Usage: (Observed and Among Crash Victims)

Just as multi-year trends in awareness of messages were useful to understand the potential impact of the 2005 and 2006 RDP/CIOT mobilizations, longer term trends in usage provide additional understanding of the potential impact of the RDP/CIOT program. Table 29 provides a summary of *observed* and *FARS usage* rates in the GLR and across the United States, from 2000 through 2007.<sup>95 96</sup>

**Table 29. Trends in GLR (R5) and U.S. Seat Belt Use Rates: Observed and Among Crash Victims (FARS) From 2000 through 2007**

Index	State/ U.S.	2000 (%)	2001 (%)	2002 (%)	2003 (%)	2004 (%)	2005 (%)	2006 (%)	2007 (%)
Observed Rate	GLR	70	72	74	79	81	84	85	87
	U.S.	71	73	75	79	80	82	81	82
		(pts.)	(pts.)	(pts.)	(pts.)	(pts.)	(pts.)	(pts.)	(pts.)
Change in Obs. rate	GLR	4	1	3	5	2	2	2	1
	U.S.	4	2	2	4	1	2	-1	1
		(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
FARS Rate	GLR	41.9	40.9	42.9	45.2	46.5	47.6	47.6	n/a
	U.S.	39.8	40.5	41.3	43.6	44.6	44.6	44.8	n/a
		(pts.)	(pts.)	(pts.)	(pts.)	(pts.)	(pts.)	(pts.)	(pts.)
Change in FARS Rate	GLR	1.8	-0.9	2.3	2.3	2.0	1.4	-0.6	n/a
	U.S.	1.9	0.7	0.8	2.3	1.0	0.0	0.2	n/a
Rates exclude "unknowns" and are expressed as percent (%); Change is expressed as percentage points (pts.); U.S. observed rate is from NOPUS.									

##### a. Observed Usage

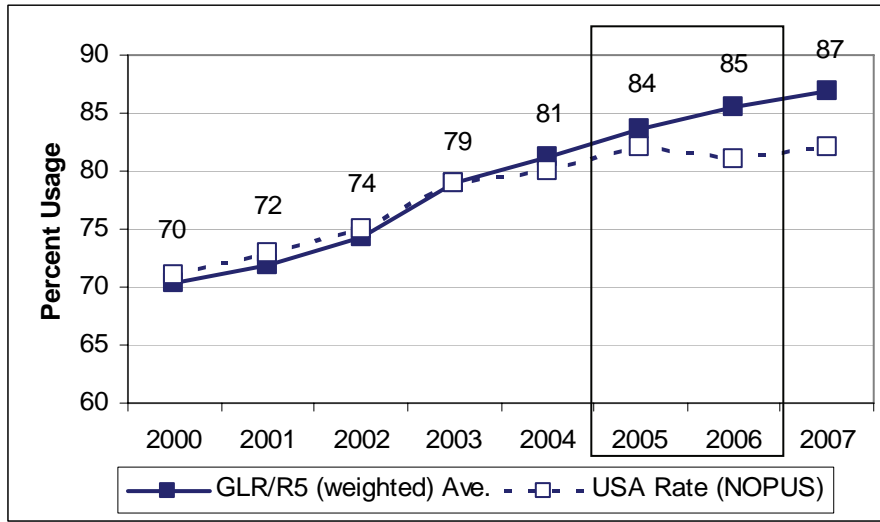
Background. There was little change in observed usage in the GLR States from 1994 through 1998, when the *Operation ABC* mobilizations were initiated (and when Indiana enacted its primary law upgrade). However, there was a significant (10-point) increase in regional usage from 1998 through 2002, when Operation ABC mobilizations were implemented nationally. Average usage in the six GLR States increased from 64% to 74% during that period. After the launch of the Regional CIOT mobilization in 2002, there was another 13-point increase, from 74% (in 2002) to 87% (in 2007).

<sup>95</sup> FARS rates are currently available only through 2006.

<sup>96</sup> For GLR/Region 5 observed rates, population-weighted averages of annual Statewide surveys were used. Statewide observed rates (through 2006) were obtained from the 2007 NHTSA Report: *Seat Belt Use in 2006 – Use Rates in the States and Territories* (DOT HS 810 690). Observed rates for 2007 were obtained from NHTSA Region 5. U.S. observational rates were NOPUS results, obtained from Glassbrenner and Jianqiang Ye (2007) *Seat Belt Use in 2007* (DOT HS 810 841).

Figure 39 shows that both GLR and U.S. *observed usage* increased similarly from 2000 through 2003, after which usage in the GLR continued a steady upward trend and national usage began to level off. By 2006, there was a 4- to 5-point difference between the GLR rate and the national rate. Thus, it appears that increases in the GLR continued after the national rate leveled off.

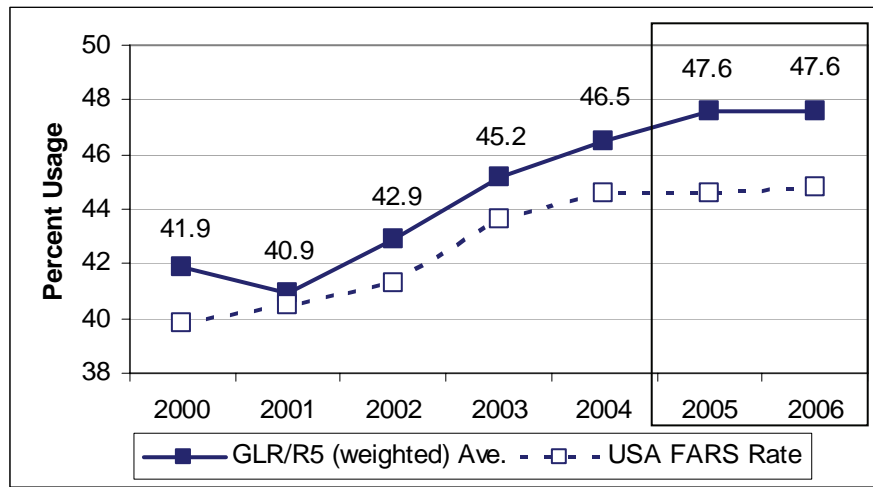
**Figure 39. Trends in GLR and U.S. Observed Seat Belt Use Rates;**  
**Sources: State Observational Surveys and NOPUS, 2000 through 2007**



*b. Usage Among Crash Victims*

Figure 40 shows usage among crash victims from 2000 through 2006. These are annual rates, as in the previous figure, but these rates were obtained from NHTSA's Fatality Analysis Reporting System (FARS).

**Figure 40. Trends in GLR and U.S. Seat Belt Use Rates Among Passenger Vehicle Occupants Killed (Source: FARS) 2000 - 2006**

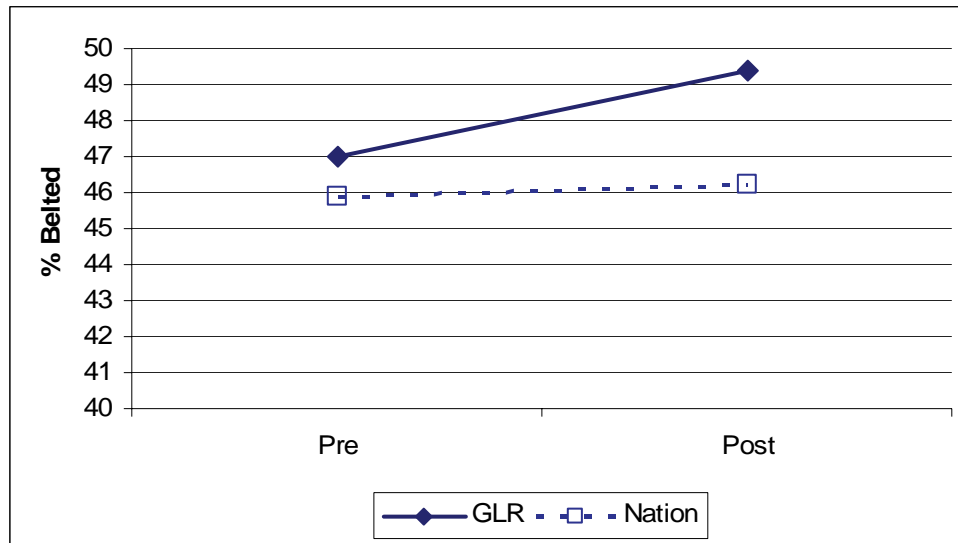


The GLR implemented its first CIOT mobilization in 2002. Starting that year, belt use among occupants killed in the region increased at a greater rate than was the case nationally. Further, usage in the GLR continued to increase through 2005, while national gains leveled off after 2004. The difference between the GLR rate and the national rate was greatest in 2005 and 2006, during the period of the RDP/CIOT mobilization.

This finding is supported by the results of a binary logistic regression.<sup>97</sup> The proportion of belted fatalities was compared between the GLR and the rest of the Nation, before and after the implementation of the RDP program. The period from May 2005 to December 2006 was defined as post-RDP whereas the period from January 2003 to April 2005 was defined as pre-RDP. The results indicated a significant main effect of pre-post RDP (Wald (1) = 6.154,  $p < .05$ ). That is, overall belt use was higher in the post period than the pre period. There was also a significant interaction between region (i.e., GLR versus rest of the Nation) and pre-post RDP (Wald (1) = 5.53,  $p < .05$ ). This significant interaction indicates that the change in proportion of belted fatalities from pre to post was greater for the GLR than it was for the rest of the Nation (see Figure 41).

<sup>97</sup> Month of crash was used as a covariate to account for an unequal number of any given month in the pre period versus the post period. There was a significant main effect of month but the results indicate that it does not account for the effects described above.

**Figure 41. Percent Belted Fatalities in the GLR and the U.S.: Pre- and Post-RDP**



Source: FARS 2003-2006

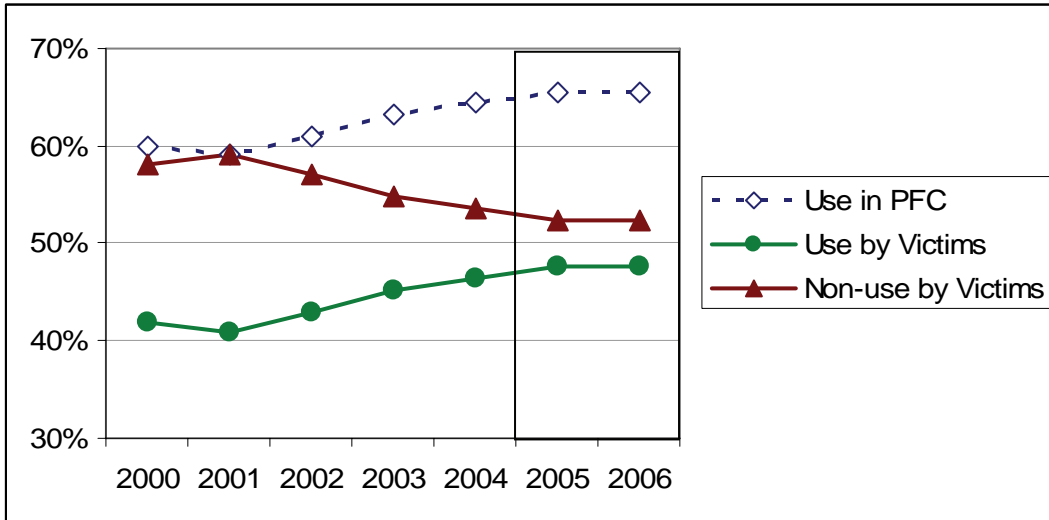
Figures 42 and 43 show belt use and non-use among victims, as well as an estimate of usage among occupants involved in potentially fatal crashes (UPFC).<sup>98 99</sup> Usage among victims in the *GLR* increased by about 6.7 points from 2001 through 2006 (from 40.9% to 47.6%). Usage increased by about 4.3 points nationally (from 40.5% to 44.8%). Usage among crash victims (and in potentially fatal crashes) increased through 2005 in the *GLR*, while there was little change in the U.S. rate after 2004.

<sup>98</sup> UPFC is a hypothetical rate based on *number of restrained fatalities* (F), number of unrestrained fatalities, and the known effectiveness of *seat belts in preventing fatalities* (E).

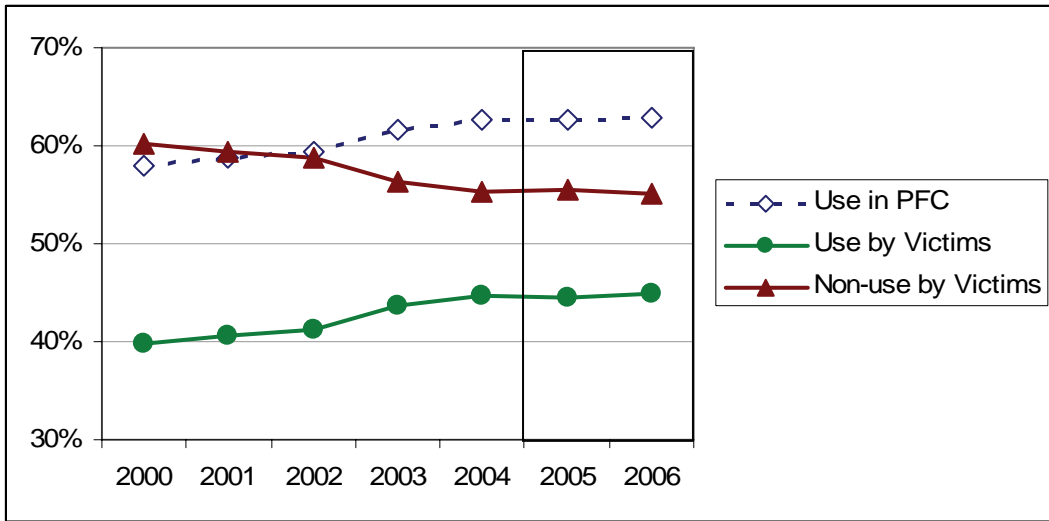
<sup>99</sup> For Table 29 and Figures 36 and 37, E was estimated to be 0.52, from 2000 through 2006. That rate was calculated using the distribution of deaths among passenger cars, light trucks and vans in both front and rear seating positions for 2005. Ideally, a separate E would have been calculated for each year, based on the distribution of fatalities for each year. Thus, this estimate of UPFC and of Lives Saved should be viewed as an estimate.



**Figure 42. GLR Belt Use Among Crash Victims and in Potentially Fatal Crashes**



**Figure 43. U.S. Belt Use Among Crash Victims and in Potentially Fatal Crashes**



**Table 30. Trends in GLR (R5) and U.S. Seat Belt Use Rates Among Crash Victims And Among Occupants Involved in Potentially Fatal Crashes (UPFC)**

Source: FARS data, 2000 - 2006

Area	Year	Total Killed	% Belt Use	# Belt Used	% Not Used	# Not Used	# Saved (est.)	# Involved In PFC (est.)	Use Among Involved (UPFC) (est.)
GLR	2000	5,048	41.9%	2,113	58.1%	2,935	2,289	7,337	60.0%
	2001	4,953	40.9%	2,025	59.1%	2,928	2,194	7,147	59.0%
	2002	4,971	42.9%	2,135	57.1%	2,836	2,313	7,284	61.1%
	2003	4,828	45.2%	2,180	54.8%	2,648	2,362	7,190	63.2%
	2004	4,625	46.5%	2,150	53.5%	2,475	2,329	6,954	64.4%
	2005	4,557	47.6%	2,168	52.4%	2,389	2,349	6,906	65.4%
	2006	4,160	47.6%	1,981	52.4%	2,179	2,146	6,306	65.4%
	<b>Totals</b>	<b>64,336</b>	-	<b>26,377</b>	-	<b>37,959</b>	<b>28,575</b>	<b>92,911</b>	-
U.S.	2000	32,225	39.8%	12,834	60.2%	19,391	13,903	46,128	58.0%
	2001	32,043	40.5%	12,992	59.5%	19,051	14,075	46,118	58.7%
	2002	32,843	41.3%	13,571	58.7%	19,272	14,702	47,545	59.5%
	2003	32,271	43.6%	14,075	56.4%	18,196	15,248	47,519	61.7%
	2004	31,866	44.6%	14,225	55.4%	17,641	15,410	47,276	62.7%
	2005	31,549	44.6%	14,061	55.4%	17,488	15,233	46,782	62.6%
	2006	30,521	44.8%	13,685	55.2%	16,836	14,826	45,347	62.9%
	<b>Totals</b>	-	-	<b>95,443</b>	-	<b>127,875</b>	<b>103,397</b>	<b>326,715</b>	-

Notes: Victims with unknown belt use are distributed among “Used” and “Not Used” categories according to the percentages of “used” and “not used” among those with known use.  
*Number Saved* is estimated based on number killed and restrained (F) and estimated *effectiveness* of seat belts ( $E = .52$ ) by the formula [ $Saved = FE / (1-E)$ ]. E was estimated to be 0.52, based on the 2005 distribution of victims across various vehicle types (cars and LTVs) and seating positions (front/back).  
*Involved in PFC* refers to occupants involved in *potentially fatal crashes*. It is a hypothetical population that is estimated based on the total number persons killed (restrained and unrestrained) plus the estimated number of occupants saved (because they were restrained).  
*UPFC* represents *Use in Potentially Fatal Crashes* and can be estimated as follows:  
 $UPFC = (\# \text{ restrained killed} + \# \text{ restrained saved}) / (\text{total} \# \text{ killed} + \# \text{ restrained saved})$

#### IV. Discussion

There are several indicators that progress has slowed in terms of increasing seat belt use and decreasing unbuckled deaths. This slowdown is likely due to a combination of higher baseline usage rates, diminishing gains associated with repeated mobilizations, budget issues in some States, increasing demands placed on enforcement agencies, and possibly less training and incentives to motivate police agencies and officers. The net result is that gains associated with CIOT mobilizations have declined since 2003.

##### *Targeting High-Risk, Low-Use Groups*

Recent demonstration programs have been implemented to increase the effectiveness of HVE efforts among higher risk, lower use individuals. During the 2005 and 2006 RDP, focus was on *rural motorists* but *young males* and *occupants of pickup trucks* were targeted as well. This targeting occurred as part of *media placement strategies* and *media*

*content*. Further, in order to maximize the potential of the RDP, it was paired with May CIOT mobilizations. Thus, any evaluation of the RDP must examine the impact of the combined RDP/CIOT effort in rural areas.

### *Evidence of Overall Impact*

The two-year RDP/CIOT program was associated with significant increases in seat belt usage, statewide and in rural targeted areas, in every State in the GLR. Overall, there was a median 9.2-point increase in rural targeted areas and a median 6.6-point increase statewide. While some rural gains were associated primarily with RDP efforts (e.g., 2005 gains in Minnesota and Ohio), most rural and statewide gains occurred across both phases of the mobilization (as in the 2005 Illinois program and the 2006 programs in Michigan and Wisconsin) or they occurred primarily during the CIOT phase (as in the 2005 efforts in Indiana and Wisconsin in 2005). In general, gains were greater during CIOT than during the RDP. Thus, the pairing of the RDP with CIOT likely enhanced its impact.

### *Two States Accounted for Much of the Rural Impact*

Compared with statewide changes, the greater median increase in rural areas was primarily due to increases in Indiana and Ohio in 2005, although Illinois had smaller but significant rural increases in both years and Michigan had a large rural increase in 2006. Both Indiana and Ohio implemented focused RDP efforts, concentrating on only a small proportion of the statewide population (6-13%), while other States targeted much larger rural populations, ranging from about 25% to over 50% of the total population. That *focused strategy* in Indiana and Ohio, combined with enforcement, had a greater rural than statewide impact in 2005, but not in 2006.

### *An Examination of Factors Associated With the Indiana and Ohio Programs*

*Indiana.* Compared with 2006, the more effective 2005 RDP was characterized by modest *spending on outdoor advertising* (no such advertising in 2006); about the same number of total ads, but many *more news stories in 2005*;<sup>100</sup> a *lower citation rate*, but *greater use of enforcement zones in 2005*; and *higher post-program levels of public awareness in 2005*, particularly with regard to awareness of special enforcement efforts (66% in 2005; 53% in 2006).<sup>101</sup>

*RDP versus CIOT.* Because the 2005 rural impact occurred primarily in conjunction with CIOT, differences between the RDP and CIOT phases in that year are relevant as well. In 2005, there was less per capita spending on media for CIOT than for the RDP, due to the much larger population covered by CIOT. However, more emphasis was placed on television than on radio during CIOT and there was more spending on outdoor

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<sup>100</sup> The number of GRPs was not reported for Indiana's 2005 RDP. Thus, no comparison of that index can be made for the two years.

<sup>101</sup> Six-year pre- and post-mobilization awareness levels for each State (for which data were available) can be found in Appendix G. Although lower in 2006 than in 2005, Indiana's awareness level is high in both years, compared with benchmarks of 40-50%.

advertising (40% for CIOT; 12% for the RDP). With regard to enforcement, there was a similar citation rate during both phases and, in spite of seven times as many EZs during CIOT, a similar *rate* of EZs (per capita).<sup>102</sup> Finally, there were higher levels of public awareness during CIOT, as measured by every index, including awareness of special enforcement efforts. Taking all of these similarities and differences into account, the greater gain in *rural areas* during CIOT was likely related to the *cumulative exposure* from two waves of enforcement and media activity and possibly to the fact that there were seven times as many *enforcement zones* during CIOT as during the RDP.

*Ohio.* The 2005 Ohio RDP was associated with the *largest rural impact* in either year of the demonstration program (+8 points associated with the RDP alone; +12-point increase in rural usage by the end of CIOT). The 2006 rural impact was much more modest (+3.4 points associated with the overall effort). Comparing the RDP programs in these two years, the more effective 2005 effort was characterized by more per capita spending on media (44¢ in 2005; 28¢ in 2006); a higher TV/radio funding ratio (23/60% in 2005; 3/88% in 2006); more spending on outdoor advertising (17% in 2005; 9% in 2006); a substantially higher citation rate (13.1 in 2005; 8.2 in 2006);<sup>103</sup> and higher post-program levels of public awareness, particularly with regard to special enforcement efforts (52% in 2005; 41% in 2006).<sup>104</sup> Factors that likely contributed to the larger impact associated with the 2005 RDP were a 7-point lower baseline rate in 2005 and the combination of more media, more television, more outdoor advertising and more enforcement in 2005,<sup>105</sup> resulting in higher awareness levels, especially of enforcement.

#### *Evidence of an Enforcement Effect*

In 2005, there was reasonably clear evidence of an *enforcement effect* in that the three States that intensified enforcement during the RDP experienced significant increases in rural usage during that phase while the other three States did not. In addition, compared with non-enforcement States, these three States experienced greater increases in rural usage associated with the overall RDP/CIOT effort. These results suggest that enforcement was an essential ingredient for significant change during the RDP and they suggest that, in 2005, there was a cumulative effect of two waves of enforcement in rural areas of the three enforcement States. Unfortunately, there was no evidence of such an effect in 2006, in part because five of the six States intensified enforcement during both the RDP and CIOT, thus eliminating much of the comparison group.<sup>106</sup>

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<sup>102</sup> While per capita rates were comparable, there were seven times as many enforcement zones during CIOT as during the RDP. Because each of such zones would be expected to have high visibility in the immediate surrounding areas, it is *possible* that this was an important factor contributing to the greater impact during CIOT.

<sup>103</sup> Both of the RDP citation rates in Ohio were well below benchmark levels.

<sup>104</sup> The 2006 awareness of enforcement rate in Ohio, while lower than in 2005 and much lower than in the 1993 North Carolina program, was not lower than benchmark levels from recent CIOT mobilizations.

<sup>105</sup> While the one-week 2005 RDP enforcement rate in Ohio (13.1) was higher than the rate in 2006 (8.2), both were below the two-week benchmark rate (20).

<sup>106</sup> Michigan was the only State that did not enforce during the RDP. Instead, it added an extra week of CIOT enforcement. While it had the largest gain during the RDP of any state in 2006, this gain was likely associated with the large decline in rural usage between the 2005 and 2006 mobilizations.

### *The Effect of Baseline Levels of Usage*

The lack of impact in Minnesota in 2006, rural or statewide, is puzzling. Minnesota had a relatively high level of spending for paid media in 2006, a strong earned media and outreach effort, and it had citation rates that were well above benchmark levels. Like Indiana and Ohio, there were some reductions in awareness levels from 2005 to 2006, particularly with regard to special enforcement, but these rates remained at or above benchmark levels. One factor that may explain some of the lack of impact is the relatively *high baseline rate of seat belt use* in 2006. Prior to the 2006 mobilization, statewide usage was 83% and usage in rural areas was 81%, 5 to 10 points higher than in the other two secondary law States and about the same as in the three primary law States.

The large increases in Wisconsin, both rural (11 points) and statewide (10 points), showed significant impact in a secondary law State with low baseline usage rates. Wisconsin's 2005 and 2006 rural baselines were 64% and 71%, respectively. Statewide, rates were 66% and 69%, respectively. These low rates facilitated the substantial gains made each year. In 2005, when Wisconsin did not enforce during the RDP, gains were associated exclusively with the CIOT phase, when enforcement was intensified. In 2006, when Wisconsin enforced during the RDP and CIOT, increases were distributed relatively evenly across both phases.

### *Impact on High-Risk, Low-Use Groups*

One of the most important findings associated with the two-year RDP/CIOT effort was that it was associated with significant increases in usage among higher risk, lower use target groups, statewide and in rural areas, and in nearly every State.<sup>107</sup> Males and occupants of pickup trucks experienced the largest gains (+12 points for both groups over the two-year program). In addition, youth (ages 16-24) experienced one of the largest gains of any group (+11 points overall, including a modest inter-year increase). The gains among youth likely would have been greater except for a low survey result in the 2006 rural post-CIOT survey in Wisconsin that was not reflected in the statewide data.

### *Sustained Momentum During a Period of Reduced Gains*

Perhaps the most important result is that there were significant increases in observed seat belt usage and in usage among crash victims in the GLR, in spite of halting progress nationwide. These findings, along with reductions in the population and VMT *rates* of unbuckled crash victims suggest that the two-year RDP/CIOT program sustained momentum in the GLR at a time when few gains were being made elsewhere.

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<sup>107</sup> These gains were seen in the results of statewide surveys as well.

### *Obstacles to Future Programs*

As a result of the number of HVE programs implemented over the past 5 to 7 years, usage rates have increased substantially in most States and, as a result, it has become increasingly difficult to achieve even modest additional gains. In addition, some States have reported that there has been a decline in motivation on the part of enforcement agencies to participate in CIOT mobilizations and that there has been some decline in public and media interest in these events.<sup>108</sup>

For future mobilizations to be effective, it may be necessary to reexamine ways to motivate police, possibly by means of a more effective combination of regular and special grants, equipment incentives, training, rewards, recognition, and improved communication through law enforcement liaisons. It may also be necessary to find innovative approaches and messages to more effectively generate interest in the program. Increasing efforts to focus on nighttime enforcement may help in this regard while, at the same time, affecting proportionately more high-risk, low-use motorists.

### *Importance of Fully Implemented, Highly Visible Enforcement Approaches*

Just as novelty and innovation are likely to be important for future gains, increased intensity of enforcement and media should also be considered. While motivation and awareness may be waning, few programs have even approached the intensity and visibility of the 1993 North Carolina CIOT program. One factor in the lower level of visibility is the fact that few States conduct highly visible tactics (i.e., checkpoints) and no State implements such events with the intensity and organization documented in the 1993 benchmark program.<sup>109</sup>

In States where checkpoints cannot be used or where there is resistance to such use, additional emphasis should also be placed on the use of *enforcement zones* as a core enforcement approach. These *zones* have been important components of past successes in Illinois, Indiana, and Michigan. However, there appears to be less evidence of their use in recent years. Obstacles to the use of EZs, as well as potential enhancements to their use, should be investigated. The currently predominant practice of using *regular patrols* and/or *saturation patrols* may not be sufficiently noticed by the public, at least not in the manner that such efforts are currently being implemented.

### *Availability of Paid Media*

Finally, with regard to media, it seems clear that the availability of funds for paid media has been an important component contributing to the large and significant impact of

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<sup>108</sup> This information resulted from personal communications with State Highway Safety Offices in the Great Lakes Region.

<sup>109</sup> Checkpoints were highly organized in that they were planned and implemented on a regular schedule on a county by county basis, with either a county sheriff, a municipal chief of police, or a State Patrol representative in charge of each wave of activity at the county level. This resulted in a high level of saturation of a highly visible enforcement approach.

CIOT mobilizations over the past decade. However, there is evidence from the GLR States that such funds are not as available as they were from 2002 through 2006 when Section 157 Grants were available. In fact, one State in the GLR lost all of its paid media funds in 2007, due to budget shortfalls. The fact that innovative grant funds are no longer available to the States for use in mobilizations is clearly becoming a factor in the use of paid media. While earned media is an essential component of any HVE program, it likely cannot replace paid media as a means for targeting high-risk, low-use drivers and passengers.

### *Conclusions*

In conclusion, the 2005-2006 Great Lakes RDP was a “strong” program in all six States, with some indication that the 2005 effort was the more impacting of the two efforts. Clearly rural targeted populations were affected by the program, although not always to a greater degree than statewide population. Much of the impact of the program, in all States and in both years, derived from the CIOT phase that followed the RDP. This suggests that, wherever possible, targeted programs will likely benefit from being paired with a CIOT mobilization. There was some evidence from the first year that a focused approach that targets a smaller proportion of the population is likely to have a greater impact than a more broadly focused program. This was not as apparent in the second year, but higher baseline rates prior to that mobilization likely were a factor in producing slightly smaller gains in the second year. One of the more important results was that, within the rural areas, higher risk, lower use groups, such as males, youth, and occupants of pickup trucks, were generally affected at least to the same extent as other groups.

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## **Appendix A:**

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Reporting Forms  
2006 RDP and CIOT Mobilization  
Data Collection Effort

**MAY 2006 GLR RDP/CIOT EVALUATION SURVEY RESULTS**  
**REPORTING FORMS**

**PLEASE READ BEFORE USING THESE FORMS:**

**GENERAL INSTRUCTIONS FOR COMPLETION OF ALL SURVEY RESULTS FORMS:**

The following forms are to be used by evaluators for the GLR States to submit the results of the State's phone, observational and DMV/BMV survey results for the May 2006 RDP and CIOT campaigns. There is a separate form for each survey type. There are additional specific instructions at the top of each form.

The form for each survey type should be completed and submitted after each applicable wave: Wave 1 (pre-RDP), Wave 3 (post-RDP), Wave 3 (post-CIOT).

WAVE 1: Complete a form for each type of survey conducted (phone, observational and DMV/BMV) and for each survey scope (statewide, rural targeted or rural non-targeted) to report the results of the State's pre-RDP surveys. Submit the Wave 1 reports by: July 1, 2006.

WAVE 2: IF the State completes optional post-RDP surveys, complete the applicable set of forms for each type of survey and for each survey scope. Submit the Wave 2 forms by: July 15, 2006.

WAVE 3: Complete a form for each type of survey and for each survey scope conducted for Wave 3. Submit the Wave 3 forms by: September 1, 2006.

**SUBMIT COMPLETED FORMS TO:**

Jim Nichols: [apnichols@att.net](mailto:apnichols@att.net)

**QUESTIONS:**

If you have any questions regarding the completion of these forms, please contact \_\_\_\_\_ (PRG) at \_\_\_\_\_@\_\_\_\_\_. or call xxx-xxx-xxxx.

State \_\_\_\_\_  
 2006 RDP/CIOT Mobilization  
Results of Telephone Awareness Surveys  
**Use a separate form for each Wave and each type of survey.**

**Please check or circle one:**    [Statewide]    [Rural Targeted]    [Rural Non-targeted]

**Please check or circle one:**    Wave 1 (pre-RDP)    Wave 2 (post-RDP)    Wave 3 (post CIOT)

INSTRUCTIONS: Also see General Instructions.

- This form is intended to simplify reporting and to ensure that essential data are reported. If the State's contractor provides a *Telephone Survey Summary Report* that includes the below data and a copy of that full report is submitted for the RDP evaluation, the State does not need to complete this form.
- Please do not alter the survey to limit it to these questions. This report focuses only on the questions for the RDP evaluation. The full telephone survey protocol is required for the CIOT mobilization with appropriate modifications for State-specific information.

<b>Sample</b>	In past 30 days, have you seen/heard messages that encourage people to wear seat belts?			
	Yes (#)	No (#)	Unknown (#)	Other? (#)
<b>N</b>	If you saw/heard such messages, were more than usual, the same, or fewer than usual?			
	More (#)	Same (#)	Fewer (#)	Unknown (#)
<b>N</b>	If you saw/heard seat belt messages, where did you see or hear them?			
	TV (#)	Radio (#)	Newspaper (#)	Outdoor (#)
<b>N</b>	If you saw/heard seat belt messages, were they ads or news stories?			
	Ads (#)	News (#)	Unknown (#)	Other (#)
<b>N</b>	Do you recall seeing or hearing the <i>Click It or Ticket</i> slogan in the past 30 days?			
	CIOT (#)	Friends (#)	Other Slogan (please specify)	Other Slogan (please specify)
<b>N</b>	In past 30 days, have you seen/heard of special efforts by police to ticket for SB violations?			
	Yes (#)	No (#)	Unknown (#)	Other (#)
<b>N</b>	If saw/heard about special police efforts, where did you see or hear about them?			
	TV (#)	Radio (#)	Newspaper (#)	Outdoor (#)
<b>N</b>	If saw/heard about special police efforts in the media, were the sources ads or news stories?			
	Ads (#)	News (#)	Unknown (#)	Other (#)
<b>N</b>	Do you agree that police in your community are writing more tickets for SB violations?			
	Strongly agree (#)	Agree (#)	Other (#)	Don't Know (#)
<b>N</b>	If you didn't wear your SB for 6 months, how likely would it be that you would get a ticket?			
	Very likely (#)	Somewhat likely	Other (#)	Don't Know (#)
<b>N</b>	In past 30 days, have you seen/heard of efforts by police to ticket for SB violations at night? <sup>110</sup>			
	Yes (#)	No (#)	Unknown (#)	Other (#)

<sup>110</sup> It was requested that this last question be added to the survey. You may have worded it differently in your State.

State \_\_\_\_\_  
 2006 RDP/CIOT Mobilization  
Results of Seat belt Observational Surveys

**Please check or circle one:** Wave 1(pre-RDP) Wave 2 (post-RDP) Wave 3 (post-CIOT)

INSTRUCTIONS: Also see General Instructions.

- This form should be completed for each wave and each survey type conducted (e.g. statewide and rural).
- Please enter the appropriate values to calculate usage rates (e.g. full statewide surveys likely weight the numbers while mini-surveys do not).
- Please check one of the following to identify this specific report type and fill in the number (#) of sites.

1. Statewide (full) survey \_\_\_\_\_;# sites = \_\_\_\_\_
2. Statewide (mini) survey \_\_\_\_\_;# sites = \_\_\_\_\_
3. Rural targeted (mini) \_\_\_\_\_;# sites = \_\_\_\_\_
4. Rural non-targeted (mini) \_\_\_\_\_;# sites = \_\_\_\_\_

Comments:

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	Total # Observed	SB Used (#)	SB Not Used (#)	Use Unknown (#)	Usage (%) (State's Estimate)
Overall					
Driver					
Passenger					
Male					
Female					
Young: (16-29)					
Adult: (30-64)					
Senior: (65+)					
White					
Black					
Other					
Car					
SUV					
Van					
Pickup					

State \_\_\_\_\_  
 2006 RDP/CIOT Mobilization  
 Results of DMV/BMV Motorist Awareness Surveys

Please check or circle one:    [Statewide]    [Rural Targeted]    [Rural Non-targeted]

INSTRUCTIONS: Also see General Instructions.

- Please do not limit the State's standard DMV/BMV survey protocol to cover only these key questions. These are the focus questions from the full protocol for the RDP evaluation only.
- This form is intended to simplify reporting and ensure that essential data are available. If the State's contractor provides a DMV/BMV survey Summary Report that includes the below data and a copy of that full report is submitted for the RDP evaluation, the State does not need to complete this form.
- Please also provide a copy of the 2006 survey protocol, wave 1 only.

Comments:

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Total Sample (N)	Have you recently seen or heard any messages that encourage people to wear seat belts?			
	Yes (#)	No (#)	Unknown (#)	Other? (#)
N	If you saw/heard seat belt messages, where did you see or hear these messages?			
	TV (#)	Radio (#)	Newspaper (#)	Outdoor (#)
N	If you saw/heard seat belt messages, were they ads or news stories?			
	Ads (#)	News (#)	Unknown (#)	Other (#)
N	Have you heard of <i>Click It or Ticket</i> (or other slogans on questionnaire)?			
	CIOT (#)	Friends (#)	Other Slogan (specify below)	Other Slogan (specify below)
N	How strictly do you think your <u>State</u> police enforce the seat belt law?			
	Very strictly (#)	Somewhat strictly	Other (#)	Don't Know (#)
N	How strictly do you think your <u>local</u> police enforce the seat belt law?			
	TV (#)	Radio (#)	Newspaper (#)	Outdoor (#)
N	Have you heard about enforcement zones/ checkpoints/road checks? (for States using such procedures)			
	Yes (#)	No (#)	Unknown (#)	Other? (#)
N	If you didn't wear your SB for 6 months, how likely would it be that you would get a ticket?			
	Very likely (#)	Somewhat likely	Other (#)	Don't Know (#)
N	Have you heard about any recent efforts by police to enforce the seat belt law at night? <sup>111</sup>			
	Yes (#)	No (#)	Other (#)	Don't Know (#)

Name of person submitting this report: \_\_\_\_\_  
 Phone: (    ) \_\_\_\_\_ - \_\_\_\_\_ E-mail: \_\_\_\_\_

<sup>111</sup> It was requested that this last question be added to the survey. You may have worded it differently in your State.

## **Appendix B:**

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Examples of Telephone and Motorist Survey Instruments

**NHTSA COMBINED BELTS AND ALCOHOL SURVEY, 2006  
(As adapted by Minnesota – Occupant Protection portion only)**

State: \_\_\_\_\_ County: \_\_\_\_\_ Metro Status: \_\_\_\_\_

Date: \_\_\_\_\_ CATI ID: \_\_\_\_\_

Interviewer: \_\_\_\_\_

Telephone \_\_\_\_\_ Number: \_\_\_\_\_

Time Start: \_\_\_\_\_ Time End: \_\_\_\_\_ TOTAL TIME: \_\_\_\_\_

---

**INTRODUCTION**

Hello, I'm \_\_\_\_\_ calling for the Minnesota Department of Public Safety. We are conducting a study of Minnesotans' driving habits and attitudes. The interview is voluntary and completely confidential. It only takes about 10 minutes to complete.

**DUMMY QUESTION FOR BIRTHDAY QUESTIONS**

Has had the most recent.....1  
Will have the next.....2

- A. In order to select just one person to interview, could I speak to the person in your household, 16 or older, who (has had the most recent/will have the next) birthday?  
Respondent is the person.....1 **SKIP TO Q1**  
Other respondent comes to phone.....2  
Respondent is not available.....3 **ARRANGE CALLBACK**  
Refused.....4
- B. Hello, I'm \_\_\_\_\_ calling for the Minnesota Department of Public Safety. We are conducting a study of Minnesotans' driving habits and attitudes. The interview is voluntary and completely confidential. It only takes about 10 minutes to complete. Could we begin now?

**CONTINUE INTERVIEW**.....1  
Arrange Callback.....2  
Refused.....3

Note: Text in brackets is not read, but available if asked.

**\* Contractor may add screening questions here for over sampling.\***



Q.1 How often do you drive a motor vehicle? Almost every day, a few days a week, a few days a month, a few days a year, or do you never drive?

- Almost every day.....1
- Few days a week.....2
- Few days a month.....3
- Few days a year.....4
- Never.....5 **SKIP TO Q7**
- Other (SPECIFY) .....6
- (VOL) Don't know.....7
- (VOL) Refused.....8

Q.2 Is the vehicle you drive most often a car, van, motorcycle, sport utility vehicle, pickup truck, or other type of truck? (NOTE: IF RESPONDENT DRIVES MORE THAN ONE VEHICLE OFTEN, ASK:) "What kind of vehicle did you LAST drive?"

- Car.....1
- Van or minivan.....2
- Motorcycle.....3 **SKIP TO Q7**
- Pickup truck.....4
- Sport Utility Vehicle.....5
- Other.....10
- Other truck (SPECIFY)....11
- (VOL) Don't know.....12
- (VOL) Refused.....13

For the next series of questions, please answer only for the vehicle you said you USUALLY drive.

Q.3 When driving this vehicle, how often do you wear your seat belt?... (READ LIST)

- ALL OF THE TIME.....1
- MOST OF THE TIME.....2
- SOME OF THE TIME.....3
- RARELY OR.....4
- NEVER.....5
- (VOL) Don't know.....6
- (VOL) Refused.....7

Q.4 When was the last time you did NOT wear your seat belt when driving?

- Within the past day.....1
- Within the past week.....2
- Within the past month.....3
- Within the past year.....4
- A year or more ago/I always wear it.....5

(VOL) Don't know.....6  
(VOL) Refused.....7

Q.5 In the past 30 days, has your use of seat belts when driving this vehicle increased, decreased, or stayed the same?

Increased.....1  
Decreased.....2 **SKIP TO Q7**  
Stayed the same.....3 **SKIP TO Q7**  
New driver.....4 **SKIP TO Q7**  
(VOL) Don't know.....5 **SKIP TO Q7**  
(VOL) Refused.....6 **SKIP TO Q7**

Q.6 What caused your use of seat belts to increase?  
**(DO NOT READ LIST - MULTIPLE RECORD)**

Increased awareness of safety.....1  
Seat belt law.....2  
Don't want to get a ticket.....3  
Was in a crash.....4  
New car with automatic belt.....5  
Influence/pressure from others.....6  
More long distance driving.....7  
Remember more/more in the habit.....8  
The weather.....9  
The holidays.....10  
Driving faster.....11  
Know someone who was in a crash 12  
Observed more law enforcement 13  
Other (SPECIFY\_\_\_\_).....27  
(VOL) Don't know.....28  
(VOL) Refused.....29

Q.7 To the best of your knowledge, does Minnesota have a law requiring seat belt use by adults?

Yes.....1  
No.....2 **SKIP TO Q10**  
(VOL) Don't know.....3 **SKIP TO Q10**  
(VOL) Refused.....4 **SKIP TO Q10**

**IF Q1=5 AND Q7=1, SKIP TO Q9**  
**IF Q2 = 3 AND Q7 = 1, SKIP TO Q9**

Q.8 Assume that you do not use your seat belt AT ALL while driving over the next six months. How likely do you think you will be to receive a ticket for not wearing a seat belt? READ

- Very likely.....1
- Somewhat likely.....2
- Somewhat unlikely.....3
- Very unlikely.....4
- (VOL) Don't know.....5
- (VOL) Refused.....6

Q.9 To the best of your knowledge, according to your state law, can police stop a vehicle if they observe a seat belt violation or do they have to observe some other offense first in order to stop the vehicle?

- Can stop just for seat belt violation.....1
- Must observe another offense first.....2
- (VOL) Don't know.....3
- (VOL) Refused.....4

Q.10 In your opinion, SHOULD police be allowed to stop a vehicle if they observe a seat belt violation when no other traffic laws are being broken?

- Should be allowed to stop.....1
- Should not.....2
- (VOL) Don't know.....3
- (VOL) Refused.....4

Q.11 Please tell me whether you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the following statements?

**ROTATE**

- a) Seat belts are just as likely to harm you as help you.
- b) If I was in an accident, I would want to have my seat belt on.
- c) Police in my community generally will not bother to write tickets for seat belt violations.
- d) It is important for police to enforce the seat belt laws.
- e) Putting on a seat belt makes me worry more about being in an accident.
- f) Police in my community are writing more seat belt tickets now than they were a few months ago.

Q.12 Yes or No--in the past 30 days, have you seen or heard of any special effort by police to ticket drivers in your community for seat belt violations?

- Yes.....1
- No.....2 **SKIP TO Q15**
- (Vol) Don't know...3 **SKIP TO Q15**
- (Vol) Refused.....4 **SKIP TO Q15**

Q.13 Where did you read, see, or hear that message?  
**[DO NOT READ--MULTIPLE RESPONSE]**

- TV.....1
- Radio.....2
- Friend/Relative.....3 **SKIP TO Q15**
- Newspaper.....4 **SKIP TO Q15**
- Personal observation/on the road....5 **SKIP TO Q15**
- Billboard/signs.....7 **SKIP TO Q15**
- I'm a police officer/judge.....9 **SKIP TO Q15**
- Other (specify \_\_\_\_\_)..... 17 **SKIP TO Q15**
- Don't know.....18 **SKIP TO Q15**
- Refused.....19 **SKIP TO Q15**

Q.14 Was the (TV/radio) message a commercial (or advertisement), was it part of a news program, or was it something else? **MULTIPLE RECORD**

- Commercial/Advertisement/  
Public Service Announcement.....1
- News story/news program.....2
- Something else (specify): \_\_\_\_\_3
- Don't know.....4
- Refused.....5

Q.15 In the past 30 days, have you seen or heard of any special effort by police to ticket drivers in your community if children in their vehicles are not wearing seat belts or are not in car seats or booster seats?

- Yes.....1
- No.....2
- Don't know.....3
- Refused.....4

Q 16 Now, I would like to ask you a few questions about educational or other types of activities.

In the past 30 days, have you seen or heard any messages that encourage people to wear their seat belts. This could be public service announcements on TV, messages on the radio, signs on the road, news stories, or something else.

- Yes.....1
- No.....2 **SKIP TO Q20**
- Don't know.....3 **SKIP TO Q20**
- Refused.....4 **SKIP TO Q20**

Q.17 Where did you see or hear these messages?  
**[DO NOT READ--MULTIPLE RESPONSE]**

- TV.....1
- Radio.....2
- Friend/Relative.....3 **SKIP TO Q19**
- Newspaper.....4 **SKIP TO Q19**
- Personal observation/on the road....5 **SKIP TO Q19**
- Billboard/signs.....7 **SKIP TO Q19**
- I'm a police officer/judge.....9 **SKIP TO Q19**
- Other (specify \_\_\_\_\_)..... 17 **SKIP TO Q19**
- Don't know.....18 **SKIP TO Q19**
- Refused.....19 **SKIP TO Q19**

Q 18 Was the (TV/radio) message a commercial (or advertisement), was it part of a news program, or was it something else? **MULTIPLE RECORD**

- Commercial/Advertisement/  
Public Service Announcement.....1
- News story/news program.....2
- Something else (specify): \_\_\_\_\_.....3
- Don't know.....4
- Refused.....5

Q.19 Would you say that the number of these messages you have seen or heard in the past 30 days is more than usual, fewer than usual, or about the same as usual?

- More than usual.....1
- Fewer than usual.....2
- About the same.....3
- Don't know.....4
- Refused.....5

Q.20 Are there any advertisements or activities that you have seen or heard in the past 30 days that encouraged adults to make sure that children use car seats, booster seats, or seat belts? This could be public service announcements on TV, messages on the radio, signs on the road, news stories, or something else.

- Yes.....1
  - No.....2
  - Don't know.....3
  - Refused.....4
- SKIP TO Q22**  
**SKIP TO Q22**  
**SKIP TO Q22**

Q21 What did you see or hear?

---

Q22 Thinking about everything you have heard, how important do you think it is for Minnesota to enforce seat belt laws for ADULTS more strictly . . . . very important, fairly important, just somewhat important, or not that important?

- Very important.....1
- Fairly important.....2
- Just somewhat important.....3
- Not that important.....4
- Don't know.....5
- Refused.....6

Q.23 In the past 30 days, have you seen or heard of any special effort by police to ticket drivers in your community for speed violations?

- Yes.....1
- No.....2
- Don't know.....3
- Refused.....4

Q.24 Do you recall hearing or seeing the following slogans in the past 30 days? **READ LIST AND MULTIPLE RECORD**

**ROTATE PUNCHES 1-?**

- Friends don't let friends drive drunk.....1
- Click it or ticket.....2
- Buckle Up America.....3
- Children In Back.....4
- You drink and drive, you lose.....5
- Didn't see it coming? No one ever does.....6
- Make a pact, make a plan.....7
- 14 Deadliest Counties (ACE).....8
- Buckle Up or Pay the Price .....9
- None of these.....
- Don't know.....88
- Refused.....99

**Q25.** Do you recall seeing or hearing Traffic Safety messages from any of the following sources? Read list and multiple record:

## Driver License Office Survey

### SUMMARY

This overview is for states in that are participating in efforts to increase seat belt use among occupants of passenger vehicles. These surveys will measure awareness, attitudes and perceptions with regard to these (rural and pickup) program efforts.

We are requesting that a minimum of XX DL Offices be used to collect driver surveys, with a minimum of XXX surveys completed, per office, per survey wave. Clearly, more respondents will be available in some offices and fewer respondents will be available in others. No more than XXX responses per office need be collected.

DL offices should be selected in counties where observational surveys are also being collected.

We are asking that the survey be conducted according to the directions below.

### SURVEY DIRECTIONS

- Who      This survey is for all persons who qualify for a driver license including new drivers, license reinstatements, transfers from other states and license renewals.
- How      We want to be very careful to minimize disrupting any operations of the DL Office. Thus, we would appreciate it if the DL Office Manager would help determine when and where it would be best to ask drivers to fill out the survey (usually, this occurs while a photo license is being processed).

For more information or answers to your questions, call X-XXX-XXX-XXXX, and ask for XXXXX .

Your answers to the following questions are voluntary and anonymous.

---

1. Your sex:     Male             Female
2. Your age:     Under 21     21-25     26-39     40-49             50-59             60 Plus
3. Your race:     White             Black             Asian             Native American             Other
4. Are you of Spanish/Hispanic origin?  Yes     No
5. Your Zip Code: \_\_\_\_\_
6. About how many miles did you drive last year?  
     Under 5,000     5,000 to 10,000     10,001 to 15,000     Over 15,000
7. What type of vehicle do you drive most often?  
     Passenger car     Pickup     SUV     Mini-van     Full-van     Other
8. How often do you use seat belts when you drive or ride in a (answer for each of the following):  
    **Car:**             Always     Nearly always     Sometimes     Seldom     Never     Don't drive/ride in one  
    **Pickup:**         Always     Nearly always     Sometimes     Seldom     Never     Don't drive/ride in one  
    **SUV/Van:**       Always     Nearly always     Sometimes     Seldom     Never     Don't drive/ride in one
9. Do you think that it is important for police to enforce the seat belt law?  
 Yes  No
10. What do you think the chances are of getting a ticket if you don't wear your seat belt?  
     Always             Nearly always             Sometimes             Seldom             Never
11. Do you think the seat belt law in *State Name* is enforced:  
     Very strictly     Somewhat strictly     Not very strictly     Rarely             Not at all
12. Have you ever received a ticket for not wearing your seat belt?  
 Yes  No
13. In the past month, have you seen or heard about police enforcement focused on seat belt use?  
 Yes  No
14. In the past month, have you experienced police enforcement activities looking at seat belt use?  
 Yes  No
15. Have you recently read, seen or heard anything about seat belts in *State Name*?  
 Yes  No  
    If yes, where did you see or hear about it? (check all that apply):  
         Newspaper     Radio     TV     Billboards     Brochure     Police Enforcement     Other
16. Have you recently read, seen or heard anything about wearing a seat belt and riding in a pickup truck?  
 Yes  No
17. If you are in a crash and your vehicle rolls over, you will be better off if (check only one):  
     You are wearing a seat belt  
     You are not wearing a seat belt  
     You are not wearing a seat belt and you are ejected
18. Do you know the name of any seat belt program(s) *State Name*? (check all that apply):  
     Buckle Up *State Name*     Buckle Up in Your Truck     Click It or Ticket     Other
19. In the past month, have you seen or heard anything about police working at night to enforce the seat belt law?  
     Yes     No



## QUESTIONS THAT MIGHT BE ASKED BY DRIVERS FILLING OUT THE SURVEY

What is this for?

The DL office is helping to collect information on drivers':

- use of seat belts
- perception and attitudes concerning seat belt use;
- recent exposure to seat belt information.

Could this affect my license?

No. It will not affect your license in any way whether you decide to complete the survey or decide not to complete the survey.

Will anyone ever know my answers?

No. Your participation is strictly anonymous. Your answers will be tabulated along with hundreds of other drivers from locations throughout the state.

What if I don't know the answer to any question?

Make your best estimate or leave the question blank and go on to the next question.

What do I do when I have completed the survey?

As soon as you have completed the survey, please hand the survey back. It will be combined with surveys from all the other drivers.

Do I have to fill out the survey?

No. While we would very much appreciate your help, you are not required to complete this survey.

## **Appendix C:**

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### **Summary of Media Activity**

- **2005 RDP**
- **2005 CIOT**
- **2006 RDP**
- **2006 CIOT**

**2005 RDP Phase: Number of Events and Stories**

<b>Earned Media</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
Press Events	n/a	n/a	n/a	n/a	n/a	n/a	n/a
TV News Stories	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Radio News Stories	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Print News Stories	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Total</b>	n/a	n/a	n/a	n/a	n/a	n/a	n/a

**2005 RDP Phase: Funding by Ad Type**

<b>Paid Advertising \$</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
TV ads	\$122,145	\$42,365	\$193,504	\$228,000	\$66,243	\$119,840	<b>\$772,097</b>
Radio Ads	\$42,412	\$65,363	\$48,376	\$69,000	\$172,808	\$29,960	<b>\$427,919</b>
Print Ads	-	-	-	-	-	-	<b>\$0</b>
Other/Outdoor	\$5,089	\$14,525	-	\$3,000	\$48,962	-	<b>\$71,577</b>
<b>Total</b>	<b>\$169,646</b>	<b>\$121,042</b>	<b>\$241,880</b>	<b>\$300,000</b>	<b>\$288,014</b>	<b>\$149,800</b>	<b>\$1,270,382</b>

**2005 RDP Phase: Number of TV and Radio Ads**

<b># Paid Ads</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
Television	2,726	3,734	6,354	2,631	n/a	4,332	<b>19,777</b>
Radio	2,151	2,857	3,486	1,455	n/a	1,677	<b>11,626</b>
<b>TV + Radio</b>	<b>4,877</b>	<b>6,591</b>	<b>9,840</b>	<b>4,086</b>	<b>0</b>	<b>6,009</b>	<b>31,403</b>

**2005 RDP Phase: Percent Ad Funds by Medium**

<b>Ad \$ by Medium</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
% Television \$	72%	35%	80%	76%	23%	80%	<b>61%</b>
% Radio \$	25%	54%	20%	23%	60%	20%	<b>34%</b>
% Print \$	0%	0%	0%	0%	0%	0%	<b>0%</b>
% Outdoor \$	0%	0%	0%	0%	0%	0%	<b>0%</b>
% Other \$	Incl. prod.	12%	0%	1%	17%	0%	<b>6%</b>

**2005 RDP Phase: Distribution of Radio and TV Ads**

<b>Radio and TV Ads</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
% Television	56%		65%	64%	n/a	72%	<b>63%</b>
% Radio	44%		35%	36%	n/a	28%	<b>37%</b>

**2005 CIOT Phase: Number of Events and Stories**

<b>Earned Media</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
Press Events	8	16	7	12	54	6+	<b>103+</b>
TV News Stories	200	200	110	23+	138	7+	<b>478+</b>
Radio News Stories	combined	752	137	43+	63	9+	<b>1,004+</b>
Print News Stories	-	1530	286	unk	179	12+	<b>2,007+</b>
<b>Total</b>	<b>208</b>	<b>2498</b>	<b>540</b>	<b>78+</b>	<b>434</b>	<b>34+</b>	<b>3,792+</b>
Other	200 combined stories	-	releases kits distr	-	many others banners stuffers	Fairs	-

**2005 CIOT Phase: Funding by Ad Type**

<b>Paid Advertising</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
TV ads	\$610,545	\$73,507	\$624,147	\$252,000	\$430,590	\$278,570	<b>\$2,269,359</b>
Radio Ads	\$235,078	\$43,286	\$124,437	\$79,600	\$178,057	\$69,643	<b>\$730,101</b>
Print Ads	-	-	-	\$1,800	-	-	<b>\$1,800</b>
Outdoor	-	\$78,300	-	\$4,000	-	-	<b>\$82,300</b>
Other	incl. prod.	-	-	\$12,600	-	-	<b>\$12,600</b>
<b>Total</b>	<b>\$845,623</b>	<b>\$195,093</b>	<b>\$748,584</b>	<b>\$350,000</b>	<b>\$608,647</b>	<b>\$348,213</b>	<b>\$3,069,160</b>

**2005 CIOT Phase: Number of TV and Radio Ads**

<b># paid Ads</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
TV	6,591	4,894	3,797	3,000	1,649	4,272	<b>24,203</b>
Radio	1,531	2,533	1,751	2,475	3,224	2,070	<b>13,584</b>
<b>TV + Radio</b>	<b>8122</b>	<b>7427</b>	<b>5548</b>	<b>5475</b>	<b>4873</b>	<b>6342</b>	<b>37,787</b>

**2005 CIOT Phase: Percent Ad Funds by Medium**

<b>Ad \$ by Medium</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
% Television \$	72%	38%	83%	72%	71%	80%	<b>74%</b>
% Radio \$	25%	22%	17%	23%	29%	20%	<b>23%</b>
% Print \$	-	-	-	1%	-	-	<b>n/a</b>
% Outdoor \$	3%	40%	-	1%	-	-	<b>n/a</b>
% Other \$	incl. prod.	-	-	4%	-	-	<b>n/a</b>

**2005 CIOT Phase: Distribution of Radio and TV Ads**

<b>Radio &amp; TV Ads</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
% Television	81%	-	68%	55%	34%	67%	<b>64%</b>
% Radio	19%	-	32%	45%	66%	33%	<b>36%</b>

**2006 RDP Phase: Number of Events and Stories**

<b>Earned Media</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
Press Events	3	2	6	4	5	6	<b>26</b>
TV News Stories	12	10	52	6	12	34	<b>126</b>
Radio News Stories	17	50	87	70	0	25	<b>249</b>
Print News Stories	79	15	133	150	3	180	<b>560</b>
<b>Total</b>	<b>108</b>	<b>75</b>	<b>272</b>	<b>226</b>	<b>15</b>	<b>239</b>	<b>935</b>
Other	3	0	0		20	39	<b>62</b>
<b>Total (with Other)</b>	<b>111</b>	<b>75</b>	<b>272</b>	<b>226</b>	<b>35</b>	<b>278</b>	<b>997</b>

revised  
1.24.08

**2006 RDP Phase: Funding by Ad Type**

<b>Paid Advertising \$</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
TV ads	\$116,489	\$50,338	\$291,100	\$76,000	\$7,388	\$139,913	<b>\$681,228</b>
Radio Ads	\$53,500	\$72,051	\$53,570	\$65,000	\$210,146	\$67,265	<b>\$521,532</b>
Print Ads	-	-	-	-	-	-	<b>\$0</b>
Outdoor	-	-	\$1,839	-	-	-	<b>\$1,839</b>
Other	incl. prod.	-	-	-	\$21,452	-	<b>\$21,452</b>
<b>Total</b>	<b>\$169,989</b>	<b>\$122,389</b>	<b>\$346,509</b>	<b>\$141,000</b>	<b>\$238,986</b>	<b>\$207,178</b>	<b>\$1,226,051</b>
movie theaters							

**2006 RDP Phase: Number of TV and Radio Ads**

<b># paid Ads</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
TV	1,744	3,870	3,750	1,185	5,503	2,793	<b>18,845</b>
Radio	1,868	4,060	2,280	3,780	3,707	1,177	<b>16,872</b>
<b>TV + Radio</b>	<b>3,612</b>	<b>7,930</b>	<b>6,030</b>	<b>4,965</b>	<b>9,210</b>	<b>3,970</b>	<b>35,717</b>

**2006 RDP Phase: Percent Ad Funds by Medium**

<b>Ad \$ by Medium</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
% TV \$	<b>69%</b>	41%	<b>84%</b>	54%	3%	<b>68%</b>	<b>56%</b>
% Radio \$	31%	<b>59%</b>	15%	46%	<b>88%</b>	32%	<b>43%</b>
% Print \$	-	-	-	-	-	-	-
% Outdoor \$	-	-	1%	-	-	-	-
% Other \$	incl. prod.	-	-	-	9%	-	<b>2%</b>

**2006 RDP Phase: Distribution of Radio and TV Ads**

<b>Radio and TV Ads</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
% TV	48%	49%	<b>62%</b>	24%	<b>60%</b>	<b>70%</b>	<b>53%</b>
% Radio	52%	51%	38%	<b>76%</b>	40%	30%	<b>47%</b>

Note that all numbers are derived from mobilizations data reports for the 2006 RDP Program.

**2006 CIOT Phase: Number of Events and Stories**

<b>Earned Media</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
Press Events	16	2	6	7	43	1	<b>75</b>
TV News Stories	28	12	143	9	61	20	<b>273</b>
Radio News Stories	58	10	167	96	5	31	<b>367</b>
Print News Stories	261	50	286	250	36	243	<b>1126</b>
<b>Total</b>	<b>347</b>	<b>72</b>	<b>596</b>	<b>355</b>	<b>102</b>	<b>294</b>	<b>1766</b>
Other	50	-	-	4	5	-	<b>59</b>
<b>Total (with Other)</b>	<b>397</b>	<b>72</b>	<b>596</b>	<b>359</b>	<b>107</b>	<b>294</b>	<b>1825</b>

**2006 CIOT Phase: Funding by Ad Type**

<b>Paid Advertising \$</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
Television ads	\$364,989	\$334,907	\$832,130	\$260,400	\$391,936	\$222,029	<b>\$2,406,391</b>
Radio Ads	\$130,302	\$83,275	\$143,707	\$113,050	\$197,681	\$71,579	<b>\$739,594</b>
Print Ads	-	-	-	\$644	-	-	<b>\$644</b>
Outdoor	-	-	\$6,484	-	-	-	<b>\$6,484</b>
Other	incl. prod.	-	-	\$32,000	\$47,706	-	<b>\$79,706</b>
<b>Total</b>	<b>\$495,291</b>	<b>\$418,182</b>	<b>\$982,321</b>	<b>\$406,094</b>	<b>\$637,323</b>	<b>\$293,608</b>	<b>\$3,232,819</b>

movie  
theaters

**2006 CIOT Phase: Number of TV and Radio Ads**

<b># Paid Ads</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
Television	2,744	<b>4,759</b>	<b>6,850</b>	1,608	5,661	<b>4,002</b>	<b>25,624</b>
Radio	2,375	2,579	3,780	<b>4,045</b>	6,326	1,603	<b>20,708</b>
<b>TV + Radio</b>	<b>5,119</b>	<b>7,338</b>	<b>10,630</b>	<b>5,653</b>	<b>11,987</b>	<b>5,605</b>	<b>46,332</b>

**2006 CIOT Phase: Percent Ad Funds by Medium**

<b>Ad \$ by Medium</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
% Television \$	74%	80%	85%	64%	61%	76%	<b>74%</b>
% Radio \$	26%	20%	15%	28%	31%	24%	<b>23%</b>
% Print \$	-	-	-	-	-	-	-
% Outdoor \$	-	-	1%	-	-	-	-
% Other \$	incl. prod.	-	-	-	7%	-	<b>2%</b>

**2006 CIOT Phase: Distribution of Radio and TV Ads**

<b>Radio and TV Ads</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
% Television	<b>54%</b>	<b>65%</b>	<b>64%</b>	28%	47%	<b>71%</b>	<b>55%</b>
% Radio	46%	35%	36%	<b>72%</b>	<b>53%</b>	29%	<b>45%</b>

Note that all numbers are derived from mobilizations data reports for the 2006 CIOT Program.

## A Summary of Media-Related Data: 2005 and 2006 Campaigns

### 2005 Media Expenditures (\$)

	RDP	CIOT	Combined
IL	169,646	845,622	<b>1,015,268</b>
IN	121,042	195,093	<b>316,135</b>
MI	241,880	748,584	<b>990,464</b>
MN	300,000	350,000	<b>650,000</b>
OH	288,014	608,647	<b>896,661</b>
WI	149,800	348,213	<b>498,013</b>
<b>Total</b>	<b>1,270,382</b>	<b>3,096,159</b>	<b>4,366,541</b>
<b>Average</b> (unweighted)	<b>\$211,730</b>	<b>\$516,027</b>	<b>\$727,757</b>

### 2005 Media \$ (per capita)

	RDP	CIOT	Combined
IL	\$0.06	\$0.07	<b>\$0.08</b>
IN	\$0.18	\$0.03	<b>\$0.05</b>
MI	\$0.09	\$0.07	<b>\$0.10</b>
MN	\$0.18	\$0.07	<b>\$0.13</b>
OH	\$0.44	\$0.05	<b>\$0.08</b>
WI	\$0.08	\$0.06	<b>\$0.09</b>
<b>Average</b> (unweighted)	<b>\$0.17</b>	<b>\$0.06</b>	<b>\$0.09</b>

### 2005 Number of Ads

	RDP	CIOT	Combined
IL	4,877	8,122	<b>12,999</b>
IN	6,591	7,427	<b>14,018</b>
MI	9,840	5,548	<b>15,388</b>
MN	4,086	5,475	<b>9,561</b>
OH	n/a	4,873	<b>n/a</b>
WI	6,009	6,342	<b>12,351</b>
<b>Total</b> (w/o OH)	<b>31,403</b>	<b>37,787</b>	<b>64,317</b>
<b>Average</b> (w/o OH)	<b>6,281</b>	<b>6,583</b>	<b>12,863</b>

### 2005 Ads per 10K Residents

	RDP	CIOT	Combined
IL	17	6	<b>10</b>
IN	100	12	<b>22</b>
MI	35	5	<b>15</b>
MN	24	11	<b>19</b>
OH	n/a	4	<b>n/a</b>
WI	32	11	<b>22</b>
<b>Average</b> (unweighted)	<b>42</b>	<b>8</b>	<b>16</b>

### 2006 Media Expenditures (\$)

	RDP	CIOT	Combined
IL	169,989	495,291	<b>665,280</b>
IN	122,389	418,182	<b>540,571</b>
MI	346,509	982,321	<b>1,328,830</b>
MN	141,000	406,094	<b>547,094</b>
OH	238,986	637,323	<b>876,309</b>
WI	207,178	293,608	<b>500,786</b>
<b>Total</b>	<b>1,226,051</b>	<b>3,232,819</b>	<b>4,458,870</b>
<b>Average</b> (unweighted)	<b>\$204,342</b>	<b>\$538,803</b>	<b>\$743,145</b>

### 2006 Media \$ (per capita)

	RDP	CIOT	Combined
IL	\$0.06	\$0.04	<b>\$0.05</b>
IN	\$0.15	\$0.07	<b>\$0.09</b>
MI	\$0.10	\$0.10	<b>\$0.13</b>
MN	\$0.11	\$0.08	<b>\$0.11</b>
OH	\$0.36	\$0.06	<b>\$0.08</b>
WI	\$0.07	\$0.05	<b>\$0.09</b>
<b>Ave</b> (unweighted)	<b>\$0.14</b>	<b>\$0.07</b>	<b>\$0.09</b>

### 2006 Number of Ads

	RDP	CIOT	Combined
IL	3,612	5,119	<b>8,731</b>
IN	7,930	7,338	<b>15,268</b>
MI	6,030	10,630	<b>16,660</b>
MN	4,965	5,653	<b>10,618</b>
OH	9,210	11,987	<b>21,197</b>
WI	3,970	5,605	<b>9,575</b>
<b>Total</b> (OH incl)	<b>35,717</b>	<b>46,332</b>	<b>82,049</b>
<b>Average</b> (OH incl)	<b>5,953</b>	<b>7,722</b>	<b>13,675</b>

### 2006 Ads per 10K Residents

	RDP	CIOT	Combined
IL	12	4	<b>7</b>
IN	99	12	<b>24</b>
MI	18	11	<b>16</b>
MN	38	11	<b>21</b>
OH	132	10	<b>18</b>
WI	13	10	<b>17</b>
<b>Average</b> (unweighted)	<b>55</b>	<b>10</b>	<b>17</b>

Note regarding 2005 Number of Ads and Ad rates (per 10K residents): RDP and Combined Averages are based on five States (OH excluded).

## **Appendix D:**

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### **Summary of Enforcement Activity**

- **2005 RDP**
- **2005 CIOT**
- **2006 RDP**
- **2006 CIOT**

(2005 RDP Information not complete)



### Enforcement Characteristics: 2005 RDP

<b>Agency Participants</b>	<b>IL</b>	<b>IN</b>	<b>MI No Enf</b>	<b>MN No Enf</b>	<b>OH</b>	<b>WI No Enf</b>	<b>Region</b>
<b># of State Units</b>	n/a	n/a	-	-	n/a	-	n/a
# Participating	n/a	n/a	-	-	n/a	-	n/a
% Participating	n/a	n/a	-	-	n/a	-	n/a
	n/a	n/a	-	-	n/a	-	n/a
<b># of County Agencies</b>	n/a	n/a	-	-	n/a	-	n/a
# Participating	n/a	n/a	-	-	n/a	-	n/a
% Participating	n/a	n/a	-	-	n/a	-	n/a
	n/a	n/a	-	-	n/a	-	n/a
<b># of Local Agencies</b>	n/a	n/a	-	-	n/a	-	n/a
# Participating	n/a	n/a	-	-	n/a	-	n/a
% Participating	n/a	n/a	-	-	n/a	-	n/a
	n/a	n/a	-	-	n/a	-	n/a
<b>Total Agencies Units</b>	n/a	n/a	-	-	n/a	-	n/a
<b>Total Participating</b>	n/a	n/a	-	-	n/a	-	n/a
<b>% Participating</b>	n/a	n/a	-	-	n/a	-	n/a
	n/a	n/a	-	-	n/a	-	n/a
<b>Additional Agencies</b>	n/a	n/a	-	-	n/a	-	n/a
<b>Total Agencies/Units</b>	n/a	n/a	-	-	n/a	-	n/a
<b>Hours Worked</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
DWI	n/a	n/a	-	-	n/a	-	
SBU	4,774	520	-	-	1204	-	6,498
Combined							
<b>SBU (Alone + Combined)</b>	<b>4,774</b>	<b>520</b>	<b>-</b>	<b>-</b>	<b>1204</b>	<b>-</b>	<b>6,498</b>
<b>Overtime/Type of Enforcement</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
% Hrs That Are Overtime	n/a	n/a	-	-	n/a	-	-
% Hrs on Checkpoints or EZs	n/a	n/a	-	-	n/a	-	-
# of Checkpoints or EZs	1778	220	-	-	0	-	1,998
<b>Enforcement Approach</b>	<b>EZs +</b>	<b>EZs +</b>	<b>-</b>	<b>-</b>	<b>Reg/Sat</b>	<b>-</b>	
<b>Enforcement Activity</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
<b>DWI/OWI Arrests</b>	n/a	n/a	-	-	n/a	-	n/a
<b>Seat Belt Citations</b>	<b>8981</b>	<b>1326</b>	<b>-</b>	<b>-</b>	<b>857</b>	<b>-</b>	<b>11,164</b>
<b>Child Restraint Citations</b>	<b>266</b>	<b>39</b>	<b>-</b>	<b>-</b>	<b>6</b>	<b>-</b>	<b>311</b>
Felony Arrests	n/a	n/a	-	-	n/a	-	n/a
Stolen Vehicles	n/a	n/a	-	-	n/a	-	n/a
Fugitives Apprehended	n/a	n/a	-	-	n/a	-	n/a
Suspended Licenses	n/a	n/a	-	-	n/a	-	n/a
Uninsured Motorists	n/a	n/a	-	-	n/a	-	n/a
<b>Speeding Citations</b>	<b>n/a</b>	<b>n/a</b>	<b>-</b>	<b>-</b>	<b>n/a</b>	<b>-</b>	<b>n/a</b>
Reckless Driving	n/a	n/a	-	-	n/a	-	n/a
Drug Arrests	n/a	n/a	-	-	n/a	-	n/a
Other	n/a	n/a	-	-	n/a	-	n/a
<b>Totals</b>	<b>9,247</b>	<b>1,365</b>	<b>-</b>	<b>-</b>	<b>863</b>	<b>-</b>	<b>11,475</b>
Notes: "EZs" refers to Enforcement Zones; "Reg" refers to regular patrols; "Sat" refers to Saturation Patrols "n/a" means not available; "-" means no enforcement activity							

### Enforcement Characteristics: 2005 CIOT

<b>Agency Participants</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
<b># of State Units</b>	22	17	63	12	57	5	<b>176</b>
# Participating	22	17	63	12	57	5	<b>176</b>
% Participating	100%	100%	100%	100%	100%	100%	<b>100%</b>
<b># of County Agencies</b>	102	92	83	87	88	72	<b>524</b>
# Participating	18	49	78	85	78	49	<b>357</b>
% Participating	18%	53%	94%	98%	89%	68%	<b>70%</b>
<b># of Local Agencies</b>	208	280	506	366	791	567	<b>2,718</b>
# Participating	156	101	417	301	639	138	<b>1,752</b>
% Participating	75%	36%	82%	82%	81%	24%	<b>63%</b>
<b>Total Agencies Units</b>	<b>332</b>	<b>389</b>	<b>652</b>	<b>465</b>	<b>936</b>	<b>644</b>	<b>3,418</b>
<b>Total Participating</b>	<b>196</b>	<b>167</b>	<b>558</b>	<b>398</b>	<b>774</b>	<b>192</b>	<b>2,285</b>
<b>% Participating</b>	<b>59%</b>	<b>43%</b>	<b>86%</b>	<b>86%</b>	<b>83%</b>	<b>30%</b>	<b>64%</b>
<b>Additional Agencies</b>	4	0	0	5	57	0	<b>66</b>
<b>Total Agencies/Units</b>	<b>200</b>	<b>167</b>	<b>558</b>	<b>403</b>	<b>831</b>	<b>192</b>	<b>2,351</b>
<b>Hours Worked</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
DWI			241				
SBU				44,708		94,791	32,397
Combined		14,064	14,393		8,024		
<b>SBU (Alone + Combined)</b>							<b>208,377</b>
<b>Overtime/Type of Enforcement</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
% Hrs That Are Overtime	<b>100%</b>	<b>100%</b>	<b>60%</b>			<b>50%</b>	<b>77%</b>
% Hrs on Checkpoints or EZs	<b>80%</b>	<b>93%</b>				<b>0%</b>	<b>87%</b>
# of Checkpoints or EZs	<b>2912</b>	<b>1385</b>	<b>?</b>			<b>0</b>	<b>4,297</b>
<b>Enforcement Approach</b>	<b>EZs +</b>	<b>EZs +</b>	<b>EZ+</b>	<b>Reg/Sat</b>	<b>Reg/Sat</b>	<b>Reg/Sat</b>	
<b>Enforcement Activity</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
<b>DWI/OWI Arrests</b>	527	75	1,057	285	4,413	590	<b>6,947</b>
<b>Seat Belt Citations</b>	30,546	15,093	30,931	12,102	17,025	10,750	<b>116,447</b>
<b>Child Restraint Citations</b>	873	683	1,067	71	88	262	<b>3,044</b>
Felony Arrests	202	31	645	n/a	691	108	<b>1,677</b>
Stolen Vehicles	965	n/a	2	3	n/a	n/a	<b>970</b>
Fugitives Apprehended	316	n/a	51	n/a	n/a	n/a	<b>367</b>
Suspended Licenses	252	548	1,867	n/a	4,203	1,973	<b>8,843</b>
Uninsured Motorists	2,041	n/a	n/a	n/a	n/a	n/a	<b>2,041</b>
<b>Speeding Citations</b>	<b>7,582</b>	<b>n/a</b>	<b>15,161</b>	<b>4,392</b>	<b>28,745</b>	<b>10,569</b>	<b>66,449</b>
Reckless Driving	16	n/a	n/a	n/a	n/a	n/a	<b>16</b>
Drug Arrests	234	n/a	12	86	n/a	206	<b>538</b>
Other	7,547	n/a	23,108	12,535	n/a	28,354	<b>71,544</b>
<b>Totals</b>	<b>51,634</b>	<b>16,986</b>	<b>75,112</b>	<b>30,350</b>	<b>56,990</b>	<b>53,648</b>	<b>284,717</b>

Notes: "EZs" refers to Enforcement Zones; "Reg" refers to regular patrols; "Sat" refers to Saturation Patrols

### Enforcement Characteristics: 2006 RDP

<b>Agency Participants</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
<b># of State Units</b>	20	16	63	11	63	7	<b>180</b>
# Participating	20	8	24	11	6	3	<b>72</b>
% Participating	100%	50%	38%	100%	10%	43%	<b>57%</b>
<b># of County Agencies</b>	68	92	83	87	88	72	<b>490</b>
# Participating	19	8	12	85	0	5	<b>129</b>
% Participating	28%	9%	14%	98%	0%	7%	<b>26%</b>
<b># of Local Agencies</b>	309	410	501	367	791	556	<b>2,934</b>
# Participating	58	18	25	305	0	227	<b>633</b>
% Participating	19%	4%	5%	83%	0%	41%	<b>25%</b>
<b>Total Agencies/Units</b>	<b>401</b>	<b>518</b>	<b>647</b>	<b>476</b>	<b>942</b>	<b>635</b>	<b>3,619</b>
<b>Total Participating</b>	<b>97</b>	<b>34</b>	<b>61</b>	<b>410</b>	<b>6</b>	<b>235</b>	<b>843</b>
<b>% Participating</b>	<b>24%</b>	<b>7%</b>	<b>9%</b>	<b>86%</b>	<b>1%</b>	<b>37%</b>	<b>27%</b>
<b>Additional Agencies</b> (Included in Above Totals)	4			11			<b>15</b>
<b>Hours Worked</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
DWI	n/a	n/a	n/a	n/a	n/a	n/a	n/a
SBU	8819	1100	1308	2014	1164	1957	<b>16,362</b>
Combined	0	0	0	0	0	0	0
<b>SBU (Alone + Combined)</b>	<b>8819</b>	<b>1100</b>	<b>1308</b>	<b>2014</b>	<b>1164</b>	<b>1957</b>	<b>16,362</b>
<b>Overtime/Type of Enforcement</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
% Hrs That Are Overtime	80%	95%	100%	100%	100%	0%	79%
% Hrs on Checkpoints or EZs	<b>2300</b>						
# of Checkpoints or EZs	<b>438</b>						
<b>Enforcement Approach</b>	<b>EZs + Sat.</b>	<b>EZs? Sat.</b>	<b>EZs/ Roving</b>	<b>Reg./ Sat.</b>	<b>Reg./ Sat.</b>	<b>Reg./ Sat.</b>	
<b>Enforcement Activity</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
<b>DWI/OVI Arrests</b>	86	26	35	n/a	6	293	446
<b>Seat Belt Citations</b>	<b>10,956</b>	<b>2,690</b>	<b>1,219</b>	<b>2,680</b>	<b>569</b>	<b>2,165</b>	<b>20,279</b>
<b>Child Restraint Citations</b>	<b>384</b>	<b>71</b>	<b>20</b>	<b>n/a</b>	<b>8</b>	<b>55</b>	<b>538</b>
Felony Arrests	71	19	18	n/a	6	44	<b>158</b>
Stolen Vehicles	8	n/a	n/a	n/a	n/a	n/a	<b>8</b>
Fugitives Apprehended	253	n/a	n/a	n/a	n/a	n/a	<b>253</b>
Suspended Licenses	462	116	55	n/a	21	39	<b>693</b>
Uninsured Motorists	1,147	n/a	n/a	n/a	n/a	n/a	<b>1,147</b>
<b>Speeding Citations</b>	<b>1,436</b>	<b>778</b>	<b>175</b>	<b>n/a</b>	<b>487</b>	<b>2,498</b>	<b>5,374</b>
Reckless Driving	5	n/a	n/a	n/a	n/a	n/a	<b>5</b>
Drug Arrests	118	n/a	n/a	n/a	n/a	123	<b>241</b>
Other	1,163	89	76	n/a	n/a	420	<b>1,748</b>
<b>Totals</b>	<b>16,587</b>	<b>4,341</b>	<b>2,306</b>	<b>3,567</b>	<b>2,045</b>	<b>6,507</b>	<b>35,352</b>

Notes: "EZs" refers to Enforcement Zones; "Reg" refers to regular patrols; "Sat" refers to Saturation Patrols

### Enforcement Characteristics: 2006 CIOT

<b>Agency Participants</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
<b># of State Units</b>	20	16	63	11	63	7	<b>180</b>
# Participating	20	16	63	11	63	7	<b>180</b>
% Participating	100%	100%	100%	100%	100%	100%	<b>100%</b>
<b># of County Agencies</b>	102	92	83	87	88	72	<b>524</b>
# Participating	32	63	78	87	78	71	<b>409</b>
% Participating	31%	68%	94%	100%	89%	99%	<b>80%</b>
<b># of Local Agencies</b>	728	350	501	367	791	566	<b>3,303</b>
# Participating	263	174	428	305	624	311	<b>2,105</b>
% Participating	36%	50%	85%	83%	79%	55%	<b>65%</b>
<b>Total Agencies/Units</b>	<b>854</b>	<b>458</b>	<b>647</b>	<b>476</b>	<b>999</b>	<b>646</b>	<b>4,080</b>
<b>Total Participating</b>	<b>315</b>	<b>253</b>	<b>569</b>	<b>412</b>	<b>822</b>	<b>390</b>	<b>2,761</b>
<b>% Participating</b>	<b>37%</b>	<b>55%</b>	<b>88%</b>	<b>87%</b>	<b>82%</b>	<b>60%</b>	<b>68%</b>
<b>Additional Agencies</b>	4			11	57	1	<b>73</b>
(included in above Totals)							
<b>Hours Worked</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
DWI							
SBU	25,847	3,766	23,400	4,000		23,277	80,290
Combined	4,307	0	0		97,823		102,130
<b>SBU (Alone + Comb.)</b>	<b>30,154</b>	<b>3,766</b>	<b>23,400</b>	<b>4,000</b>	<b>97,823</b>	<b>23,277</b>	<b>182,420</b>
<b>Overtime/ Type of Enforcement</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
% Hrs That Are Overtime	80%	100%	71%	100%	0%	39%	65%
% Hrs on Chkpts or EZs	n/a	n/a	n/a	0%	0%	0%	n/a
# of Checkpoints or EZs	<b>3862</b>	<b>2108</b>	n/a	0	0	0	<b>6,970 +</b>
<b>Enforcement Approach</b>	<b>EZ/ Reg./ Sat.</b>	<b>EZ/ Reg./ Sat.</b>	<b>EZ/ Reg./ Sat.</b>	<b>Reg./ Sat.</b>	<b>Reg./ Sat.</b>	<b>Reg./ Sat.</b>	<b>EZ/ Reg./ Sat.</b>
<b>Enforcement Activity</b>	<b>IL</b>	<b>IN</b>	<b>MI</b>	<b>MN</b>	<b>OH</b>	<b>WI</b>	<b>Region</b>
<b>DWI/OWI Arrests</b>	321	87	1,096	n/a	1,797	664	<b>3,965</b>
<b>Seat Belt Citations</b>	<b>45,450</b>	<b>14,401</b>	<b>23,653</b>	<b>11,711</b>	<b>39,963</b>	<b>10,892</b>	<b>146,070</b>
<b>Child Restraints</b>	<b>1,546</b>	<b>883</b>	<b>739</b>	<b>n/a</b>	<b>216</b>	<b>238</b>	<b>3,622</b>
Felony Arrests	129	70	671	<i>(MN only Collects SB Ticket Information)</i>	511	108	<b>1,489</b>
Stolen Vehicles	18	n/a	1		n/a	n/a	<b>19</b>
Fugitives Apprehended	389	n/a	45		n/a	n/a	<b>434</b>
Suspended Licenses	1,352	462	2,200		2,151	1,819	<b>7,984</b>
Uninsured Motorists	2,882	n/a	n/a	n/a	n/a	n/a	<b>2,882</b>
<b>Speeding Citations</b>	<b>4,514</b>	<b>872</b>	<b>13,824</b>		<b>27,793</b>	<b>7,173</b>	<b>54,176</b>
Reckless Driving	24	n/a	n/a	n/a	n/a	n/a	<b>24</b>
Drug Arrests	212	n/a	16	n/a	n/a	252	<b>480</b>
Other	4,907	212	4,347	n/a	21,899	946	<b>32,311</b>
<b>Totals</b>	<b>61,744</b>	<b>16,987</b>	<b>46,592</b>	<b>11,711</b>	<b>94,330</b>	<b>22,092</b>	<b>260,298</b>
		Many Add'l	Many Add'l			Many Add'l	

Notes: "EZs" refers to Enforcement Zones; "Reg" refers to regular patrols; "Sat" refers to Saturation Patrols

## **Appendix E:**

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### **Summary of Motorist Survey Results Illinois, Indiana, and Wisconsin**

**Results of Motorist Surveys in Illinois:  
Targeted Rural Areas and Statewide**

Illinois Motorist Survey 2006 Rural Targeted Areas		w1	w2	w3	w2- w1	w3- w2	w3- w1
<b>Awareness Indices</b>		Percent			Percentage Points		
<b>S/R/H Messages to Buckle Up</b>		<b>68%</b>	-	<b>74%</b>			<b>6</b>
Source of message	TV	39%	-	47%	-	-	<b>8</b>
	Radio	16%	-	22%	-	-	<b>6</b>
	Newspaper	18%	-	25%	-	-	<b>7</b>
	Outdoor	16%	-	0%	-	-	<b>-16</b>
	Ads	-	-	-	-	-	-
<b>Recognize CIOT Slogan</b>		<b>89%</b>		<b>90%</b>			<b>2</b>
<b>State Police Enforce Strictly?</b>		<b>41%</b>	-	<b>85%</b>	-	-	<b>44</b>
<b>Local Police Enforce Strictly?</b>		<b>35%</b>	-	<b>87%</b>	-	-	<b>52</b>
<b>S/R/H about ENF. Zones?</b>		<b>32%</b>	-	<b>53%</b>	-	-	<b>21</b>
<b>Ticket is Likely for Unbuckled</b>		<b>52%</b>	-	<b>52%</b>	-	-	<b>0</b>
<b>S/R/H about Night Enforcement</b>		-	-	-	-	-	-
Illinois Motorist Survey 2006 Statewide		w1	w2	w3	w2- w1	w3- w2	w3- w1
<b>Awareness Indices</b>		Percent			Percentage Points		
<b>S/R/H Messages to Buckle Up</b>		<b>62%</b>	-	<b>76%</b>	-	-	<b>14</b>
Source of Message:	TV	31%	-	45%	-	-	<b>15</b>
	Radio	17%	-	23%	-	-	<b>6</b>
	Newspaper	16%	-	23%	-	-	<b>6</b>
	Outdoor	16%	-	18%	-	-	<b>2</b>
	Ads	-	-	-	-	-	-
<b>Recognize CIOT Slogan</b>		<b>84%</b>	-	<b>85%</b>	-	-	<b>1</b>
<b>State Police Enforce Strictly?</b>		<b>35%</b>	-	<b>78%</b>	-	-	<b>43</b>
<b>Local Police Enforce Strictly?</b>		<b>32%</b>	-	<b>76%</b>	-	-	<b>44</b>
<b>S/R/H about ENF. Zones?</b>		<b>31%</b>	-	<b>50%</b>	-	-	<b>19</b>
<b>Ticket is Likely for Unbuckled</b>		<b>50%</b>	-	<b>50%</b>	-	-	<b>0</b>
<b>S/R/H about Night Enforcement</b>		-	-	-	-	-	-

**Results of Motorist Surveys in Indiana:  
Rural (Targeted and Non-Targeted) Areas and Statewide**

Indiana Motorist Survey 2006 Rural Targeted Areas		w1	w2	w3	w2- w1	w3- w2	w3- w1
<b>Awareness Indices</b>		Percent			Percentage Points		
<b>S/R/H Messages to Buckle Up</b>		<b>64%</b>	-	<b>77%</b>	-	-	<b>13</b>
<b>Source of message</b>							
	TV	35%	-	43%	-	-	8
	Radio	18%	-	32%	-	-	14
	Newspaper	25%	-	26%	-	-	1
	Outdoor	34%	-	45%	-	-	11
	Ads	-	-	-	-	-	-
<b>Recognize CIOT Slogan</b>		<b>84%</b>	-	<b>85%</b>	-	-	<b>2</b>
<b>Police Enforce Law Strictly?</b>		<b>26%</b>	-	<b>83%</b>	-	-	<b>57</b>
<b>S/R/H about ENF. Zones?</b>		<b>38%</b>	-	<b>60%</b>	-	-	<b>22</b>
<b>Ticket is Likely for Unbuckled</b>		<b>66%</b>	-	<b>67%</b>	-	-	<b>1</b>
<b>S/R/H about Night Enforcement</b>		-	-	-	-	-	-

Indiana Motorist Survey 2006 Statewide		w1	w2	w3	w2- w1	w3- w2	w3- w1
<b>Awareness Indices</b>		Percent			Percentage Points		
<b>S/R/H Messages to Buckle Up</b>		<b>61%</b>	-	<b>75%</b>	-	-	<b>14</b>
<b>Source of Message:</b>							
	TV	33%	-	48%	-	-	<b>15</b>
	Radio	16%	-	26%	-	-	<b>10</b>
	Newspaper	19%	-	24%	-	-	<b>5</b>
	Outdoor	31%	-	33%	-	-	<b>3</b>
	Ads	-	-	-	-	-	-
<b>Recognize CIOT Slogan</b>		<b>80%</b>	-	<b>83%</b>	-	-	<b>3</b>
<b>Police Enforce Law Strictly?</b>		<b>25%</b>	-	<b>77%</b>	-	-	<b>52</b>
<b>S/R/H about ENF. Zones?</b>		<b>42%</b>	-	<b>63%</b>	-	-	<b>21</b>
<b>Ticket is Likely for Unbuckled</b>		<b>65%</b>	-	<b>61%</b>	-	-	<b>-4</b>
<b>S/R/H about Night Enforcement</b>		-	-	-	-	-	-

Indiana Motorist Survey 2006 Rural Control Areas		w1	w2	w3	w2- w1	w3- w2	w3- w1
<b>Awareness Indices</b>		Percent			Percentage Points		
<b>S/R/H Messages to Buckle Up</b>		<b>58%</b>	-	<b>77%</b>	-	-	<b>19</b>
<b>Source of Message:</b>							
	TV	29%	-	48%	-	-	<b>19</b>
	Radio	16%	-	29%	-	-	<b>13</b>
	Newspaper	21%	-	26%	-	-	<b>6</b>
	Outdoor	24%	-	31%	-	-	<b>7</b>
	Ads	-	-	-	-	-	-
<b>Recognize CIOT Slogan</b>		<b>81%</b>	-	<b>85%</b>	-	-	<b>5</b>
<b>Police Enforce Law Strictly?</b>		<b>27%</b>	-	<b>75%</b>	-	-	<b>48</b>
<b>S/R/H about ENF. Zones?</b>		<b>38%</b>	-	<b>68%</b>	-	-	<b>31</b>
<b>Ticket is Likely for Unbuckled</b>		<b>63%</b>	-	<b>64%</b>	-	-	<b>1</b>
<b>S/R/H about Night Enforcement</b>		-	-	-	-	-	-

## Results of Motorist Surveys in Wisconsin Rural Targeted Areas and Statewide

Wisconsin Motorist Survey 2006 Rural Targeted Areas		w1	w2	w3	w2- w1	w3- w2	w3- w1
<b>Awareness Indices</b>		Percent			Percentage Points		
<b>S/R/H Messages to Buckle Up</b>		<b>57%</b>	<b>-</b>	<b>88%</b>	<b>-</b>	<b>-</b>	<b>31</b>
Source of message	TV	35%	-	70%	-	-	34
	Radio	19%	-	47%	-	-	28
	Newspaper	10%	-	17%	-	-	7
	Outdoor	15%	-	15%	-	-	1
	Ads	-	-	-	-	-	-
<b>Recognize CIOT Slogan</b>		<b>59%</b>	<b>-</b>	<b>83%</b>	<b>-</b>	<b>-</b>	<b>24</b>
<b>Police Enforce Law Strictly?</b>		<b>11%</b>	<b>-</b>	<b>13%</b>	<b>-</b>	<b>-</b>	<b>3</b>
<b>S/R/H about ENF. Zones?</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Ticket is Likely for Unbuckled</b>		<b>18%</b>	<b>-</b>	<b>21%</b>	<b>-</b>	<b>-</b>	<b>3</b>
<b>S/R/H about Night Enforcement</b>		<b>6%</b>	<b>-</b>	<b>15%</b>	<b>-</b>	<b>-</b>	<b>9</b>

Wisconsin Motorist Survey 2006 Statewide		w1	w2	w3	w2- w1	w3- w2	w3- w1
<b>Awareness Indices</b>		Percent			Percentage Points		
<b>S/R/H Messages to Buckle Up</b>		<b>58%</b>	<b>-</b>	<b>87%</b>	<b>-</b>	<b>-</b>	<b>29</b>
Source of Message:	TV	36%	-	67%	-	-	31
	Radio	19%	-	44%	-	-	25
	Newspaper	12%	-	16%	-	-	4
	Outdoor	16%	-	17%	-	-	1
	Ads	-	-	-	-	-	-
<b>Recognize CIOT Slogan</b>		<b>58%</b>	<b>-</b>	<b>82%</b>	<b>-</b>	<b>-</b>	<b>24</b>
<b>Police Enforce Law Strictly?</b>		<b>11%</b>		<b>13%</b>			<b>2</b>
<b>S/R/H about ENF. Zones?</b>		<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Ticket is Likely for Unbuckled</b>		<b>19%</b>	<b>-</b>	<b>21%</b>	<b>-</b>	<b>-</b>	<b>1</b>
<b>S/R/H about Night Enforcement</b>		<b>8%</b>	<b>-</b>	<b>15%</b>	<b>-</b>	<b>-</b>	<b>7</b>



## **Appendix F:**

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### **Summary of 2006 Telephone Survey Results Regarding Sources of Information/Awareness General and Enforcement-Related**

**Results of 2006 Telephone Surveys**  
**Sources of *General Seat belt* Message Awareness**

Where S/R/H SB Messages			w1	w2	w3	RDP	CIOT	Overall
IL	TV	R	64.0	69.0	68.0	5.0	-1.0	4.0
		S	36.0	-	46.0	-	-	10.0
IN	TV	R	67.0	-	63.0	-	-	-4.0
		S	63.0	-	64.0	-	-	1.0
MI	TV	R	59.0	65.0	74.0	6.0	9.0	15.0
		S	61.0	62.0	74.0	1.0	12.0	13.0
OH	TV	R	52.0	-	72.0	-	-	20.0
		S	46.0	-	73.0	-	-	27.0
Ave N=4	TV	R	60.5	-	69.3	-	-	8.8
		S	51.5	-	64.3	-	-	12.8
IL	Radio	R	30.0	35.0	40.0	5.0	5.0	10.0
		S	23.0	-	32.0	-	-	9.0
IN	Radio	R	6.0	-	10.0	-	-	4.0
		S	6.0	-	9.0	-	-	3.0
MI	Radio	R	24.0	21.0	18.0	-3.0	-3.0	-6.0
		S	17.0	22.0	20.0	5.0	-2.0	3.0
OH	Radio	R	23.0	-	46.0	-	-	23.0
		S	21.0	-	38.0	-	-	17.0
Ave N=4	Radio	R	20.8	-	28.5	-	-	7.8
		S	16.8	-	24.8	-	-	8.0
IL	Newspaper	R	28.0	31.0	27.0	3.0	-4.0	-1.0
		S	36.0	-	32.0	-	-	-4.0
IN	Newspaper	R	10.0	-	9.0	-	-	-1.0
		S	9.0	-	10.0	-	-	1.0
MI	Newspaper	R	9.0	-	11.0	-	-	2.0
		S	8.0	6.0	8.0	-2.0	2.0	0.0
Ave N=3	Newspaper	R	15.7	-	15.7	-	-	0.0
		S	17.7	-	16.7	-	-	-1.0
IN	Outdoor	R	13.0	-	16.0	-	-	3.0
		S	17.0	-	14.0	-	-	-3.0
Ave N=1	Newspaper	R	13.0	-	16.0	-	-	3.0
		S	17.0	-	14.0	-	-	-3.0
IN	Ad	R	74.0	-	76.0	-	-	2.0
		S	76.0	-	75.0	-	-	-1.0
MI	Ad	R	90.0	86.0	85.0	-	-	-5.0
		S	83.0	81.0	80.0	-	-	-3.0
Ave N=2	Ad	R	82.0	-	80.5	-	-	-1.5
		S	79.5	-	77.5	-	-	-2.0

Notes: **S/R/H** = Saw/Read/Heard; **Ad** = Advertisement; **R** = Rural; **S** = Statewide

**Results of 2006 Telephone Surveys  
Sources of Awareness of *Special SB Enforcement Efforts***

Where S/R/H About Special Enforce			RDP	CIOT	Overall			
			w1	w2	w3	w2-w1	w3-w2	w3-w1
IL	TV	R	27.0	43.0	47.0	16.0	4.0	20.0
		S	28.0	-	34.0	-	-	6.0
IN	TV	R	25.0	-	31.0	-	-	6.0
		S	23.0	-	30.0	-	-	7.0
MI	TV	R	18.0	29.0	38.0	11.0	9.0	20.0
		S	22.0	33.0	40.0	11.0	7.0	18.0
MN	TV	R	29.0	33.0	40.0	4.0	7.0	11.0
		S	34.0	-	52.0	-	n/a	18.0
WI	TV	R	62.0	80.0	82.0	18.0	2.0	20.0
		S	58.0	-	82.0	-	n/a	24.0
Ave	TV	R	32.2	46.3	47.6	12.3	5.5	15.4
		S	33.0	-	47.6	-	-	14.6
			n=5	n=4	n=5	n=4	n=4	n=5

			w1	w2	w3	RDP	CIOT	Overall
IL	Radio	R	31.0	30.0	29.0	-1.0	-1.0	-2.0
		S	18.0	-	25.0	-	-	7.0
IN	Radio	R	14.0	-	6.0	-	-	-8.0
		S	7.0	-	8.0	-	-	1.0
MI	Radio	R	14.0	13.0	14.0	-1.0	1.0	0.0
		S	14.0	16.0	12.0	2.0	-4.0	-2.0
MN	Radio	R	47.0	31.0	36.0	-16.0	5.0	-11.0
		S	32.0	-	27.0	-	-	-5.0
WI	Radio	R	46.0	49.0	63.0	3.0	14.0	17.0
		S	37.0	-	58.0	-	-	21.0
Ave	Radio	R	30.4	30.8	29.6	-3.8	4.8	-0.8
		S	21.6	-	26.0	-	-	4.4
			n=5	n=4	n=5	n=4	n=4	n=5

			w1	w2	w3	RDP	CIOT	Overall
IL	Newspaper	R	36.0	38.0	36.0	2.0	-2.0	0.0
		S	24.0	-	27.0	-	-	3.0
IN	Newspaper	R	32.0	-	25.0	-	-	-7.0
		S	30.0	-	20.0	-	-	-10.0
MI	Newspaper	R	39.0	18.0	23.0	-21.0	5.0	-16.0
		S	26.0	22.0	16.0	-4.0	-6.0	-10.0
MN	Newspaper	R	24.0	21.0	16.0	-3.0	-5.0	-8.0
		S	18.0	-	13.0	-	-	-5.0
OH	Newspaper	R	46.0	44.0	56.0	-2.0	12.0	10.0
		S	63.0	-	40.0	-	-	-23.0
Ave	Newspaper	R	35.4	30.3	31.2	-6.0	2.5	-4.2
		S	32.2	-	23.2	-	-	-9.0
			n=5	n=4	n=5	n=4	n=4	n=5

Note: S/R/H = Saw/Read/Heard; R = Rural; S = Statewide

**Results of Telephone Surveys**  
**Sources of Awareness of Special SB Enforcement Efforts**  
(continued)

Where S/R/H About Special Enforce						RDP	CIOT	Overall
			w1	w2	w3	w2- w1	w3- w2	w3-w1
IL	Outdoor	R	36.0	19.0	25.0	-17.0	6.0	-11.0
		S	12.0	-	11.0	-	-	-1.0
IN	Outdoor	R	5.0	-	18.0	-	-	13.0
		S	9.0	-	8.0	-	-	-1.0
MN	Outdoor	R	13.0	15.0	22.0	2.0	7.0	9.0
		S	29.0	-	21.0	-	-	-8.0
WI	Outdoor	R	54.0	50.0	47.0	-4.0	-3.0	-7.0
		S	58.0	-	46.0	-	-	-12.0
Ave	Outdoor	R	27.0	28.0	28.0	-6.3	3.3	1.0
		S	27.0	-	21.5	-	-	-5.5
			n=4	n=3	n=4	n=3	n=3	n=4

			w1	w2	w3	RDP	CIOT	Overall
IL	Ad	R	36.0	38.0	36.0	2.0	-2.0	0.0
		S	-	-	-	-	-	-
IN	Ad	R	45.0	-	61.0	-	-	16.0
		S	47.0	-	53.0	-	-	6.0
MI	Ad	R	75.0	88.0	69.0	13.0	-19.0	-6.0
		S	64.0	54.0	61.0	-10.0	7.0	-3.0
MN	Ad	R	56.0	67.0	68.0	11.0	1.0	12.0
		S	57.0	-	71.0	-	-	14.0
Ave	Ad	R	53.0	64.3	58.5	8.7	-6.7	5.5
		S	56.0	-	61.7	-	-	5.7
		R	n=4	n=3	n=4	n=3	n=3	n=4
		S	n=3	-	n=3	-	-	n=3

Notes: **S/R/H** = Saw/Read/Heard; **R** = Rural; **S** = Statewide.

## **Appendix G:**

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**Summary of Key Telephone Survey Results From 2002 Through 2007  
General and Enforcement-Related Message Awareness and Perceptions**

**Great Lakes Region States**

**Appendix G**  
**Summary of Key 2006 Telephone Survey Results**  
**General and Enforcement-Related Message Awareness and Perceptions**

<b>Awareness of Recent Messages to Buckle Up</b>												
	May 2002		May 2003		May 2004		May 2005		May 2006		May 2007	
<b>State</b>	pre	post	pre	post	pre	post	pre	post	pre	post	pre	post
<b>IL</b>	48	67	63	82	-	-	59	78	62	74	65	78
<b>IN</b>	-	71	59	76	-	-	61	72	59	67	55	-
<b>MI</b>	70	81	76	89	81	89	82	85	75	86	-	-
<b>MN</b>	-	-	67	85	73	85	66	85	-	-	68	82
<b>OH</b>	-	-	72	84	70	86	63	82	65	80	56	69
<b>WI</b>	-	-	69	81	67	85	68	78	63	89	-	-
<b>Average</b>	<b>59</b>	<b>73</b>	<b>68</b>	<b>83</b>	<b>73</b>	<b>86</b>	<b>67</b>	<b>80</b>	<b>65</b>	<b>79</b>	<b>61</b>	<b>76</b>
<b>Primary</b>	<b>59</b>	<b>73</b>	<b>66</b>	<b>82</b>	<b>81</b>	<b>89</b>	<b>67</b>	<b>78</b>	<b>65</b>	<b>76</b>	<b>60</b>	<b>78</b>
<b>Secondary</b>	-	-	<b>69</b>	<b>83</b>	<b>70</b>	<b>85</b>	<b>66</b>	<b>82</b>	<b>64</b>	<b>84</b>	<b>62</b>	<b>76</b>
<b>Recognition of the CIOT Slogan</b>												
	May 2002		May 2003		May 2004		May 2005		May 2006		May 2007	
<b>State</b>	pre	post	pre	post	pre	post	pre	post	pre	post	pre	post
<b>IL</b>	41	71	67	85	84	90	81	91	84	91	<b>89</b>	<b>94</b>
<b>IN</b>	-	91	78	90	-	-	86	94	83	91	82	-
<b>MI</b>	64	77	73	89	81	89	87	89	81	93	-	83.5
<b>MN</b>	-	-	11	58	29	60	39	79	<b>65</b>	<b>76</b>	70	78
<b>OH</b>	-	-	17	28	43	66	45	77	55	62	-	-
<b>WI</b>	19	22	17	43	35	63	44	82	47	80	-	-
<b>Average</b>	<b>41</b>	<b>57</b>	<b>44</b>	<b>66</b>	<b>54</b>	<b>74</b>	<b>64</b>	<b>85</b>	<b>69</b>	<b>82</b>	<b>80</b>	<b>85</b>
<b>Primary</b>	<b>53</b>	<b>80</b>	<b>73</b>	<b>88</b>	<b>83</b>	<b>90</b>	<b>85</b>	<b>91</b>	<b>83</b>	<b>92</b>	<b>86</b>	<b>89</b>
<b>Secondary</b>	-	-	<b>15</b>	<b>43</b>	<b>35</b>	<b>63</b>	<b>43</b>	<b>79</b>	<b>56</b>	<b>73</b>	<b>70</b>	<b>78</b>
<b>Awareness of Special Police Efforts to Ticket for Seat Belt Violations</b>												
	May 2002		May 2003		May 2004		May 2005		May 2006		May 2007	
<b>State</b>	pre	post	pre	post	pre	post	pre	post	pre	post	pre	post
<b>IL</b>	-	-	12	49	-	-	16	55	20	46	18	47
<b>IN</b>	-	78	31	79	-	-	22	66	24	53	23	
<b>MI</b>	20	38	18	53	22	48	15	63	19	56	19	40
<b>MN</b>	-	-	11	50	13	42	7	50	13	41	11	44
<b>OH</b>	-	-	17	-	-	35	17	52	18	41	19	39
<b>WI</b>	6	15	7	33	8	41	8	47	8	32	-	-
<b>Average</b>	<b>13</b>	<b>44</b>	<b>16</b>	<b>53</b>	<b>14</b>	<b>44</b>	<b>14</b>	<b>56</b>	<b>17</b>	<b>45</b>	<b>17</b>	<b>43</b>
<b>Primary</b>	<b>20</b>	<b>58</b>	<b>20</b>	<b>60</b>	<b>22</b>	<b>48</b>	<b>18</b>	<b>61</b>	<b>21</b>	<b>52</b>	<b>20</b>	<b>44</b>
<b>Secondary</b>	<b>6</b>	<b>15</b>	<b>12</b>	<b>42</b>	<b>11</b>	<b>39</b>	<b>11</b>	<b>50</b>	<b>13</b>	<b>38</b>	<b>15</b>	<b>41</b>
<b>Source: Telephone Surveys From GLR States</b>												

**Appendix G (continued)**  
**Summary of Key Telephone Survey Results**  
**General and Enforcement-Related Message Awareness and Perceptions**

<b>Perceive That More Tickets Than Usual Are Being Issued</b>												
	<b>May 2002</b>		<b>May 2003</b>		<b>May 2004</b>		<b>May 2005</b>		<b>May 2006</b>		<b>May 2007</b>	
<b>State</b>	<b>pre</b>	<b>post</b>	<b>pre</b>	<b>post</b>	<b>pre</b>	<b>post</b>	<b>pre</b>	<b>post</b>	<b>pre</b>	<b>post</b>	<b>pre</b>	<b>post</b>
<b>IL</b>	-	-	28	43	-	-	35	46	36	42	33	47
<b>IN</b>	-	53	45	61	-	-	36	50	37	51	37	-
<b>MI</b>	33	37	30	49	40	62	44	57	48	62	-	53
<b>MN</b>	-	-	29	43	58	79	50	66	49	61	55	61
<b>OH</b>	-	-	44	68	53	68	50	61	34	56	46	61
<b>WI</b>	-	-	27	44	26	45	23	52	28	40	-	-
<b>Average</b>	<b>33</b>	<b>45</b>	<b>34</b>	<b>51</b>	<b>44</b>	<b>47</b>	<b>40</b>	<b>55</b>	<b>39</b>	<b>52</b>	<b>43</b>	<b>56</b>
<b>Primary</b>	<b>33</b>	<b>45</b>	<b>34</b>	<b>51</b>	<b>40</b>	<b>62</b>	<b>38</b>	<b>51</b>	<b>40</b>	<b>52</b>	<b>35</b>	<b>50</b>
<b>Secondary</b>	-	-	<b>33</b>	<b>52</b>	<b>69</b>	<b>64</b>	<b>41</b>	<b>60</b>	<b>37</b>	<b>52</b>	<b>51</b>	<b>61</b>
<b>Perceive That Ticket is Likely (certain or very likely)</b>												
	<b>May 2002</b>		<b>May 2003</b>		<b>May 2004</b>		<b>May 2005</b>		<b>May 2006</b>		<b>May 2007</b>	
<b>State</b>	<b>pre</b>	<b>post</b>	<b>pre</b>	<b>post</b>	<b>pre</b>	<b>post</b>	<b>pre</b>	<b>post</b>	<b>pre</b>	<b>post</b>	<b>pre</b>	<b>post</b>
<b>IL</b>	-	-	51	57	-	-	61	66	62	69	67	72
<b>IN</b>	-	42	66	74	-	-	68	75	71	74	70	-
<b>MI</b>	66	68	48	66	57	65	63	76	66	75	-	64
<b>MN</b>	-	-	41	51	43	50	45	59	50	53	49	54
<b>OH</b>	-	-	45	59	46	56	47	55	40	46	42	48
<b>WI</b>	-	-	32	43	41	50	43	51	46	48	-	-
<b>Average</b>	<b>66</b>	<b>55</b>	<b>47</b>	<b>58</b>	<b>47</b>	<b>41</b>	<b>55</b>	<b>64</b>	<b>56</b>	<b>61</b>	<b>57</b>	<b>59</b>
<b>Primary</b>	<b>66</b>	<b>55</b>	<b>55</b>	<b>66</b>	<b>57</b>	<b>65</b>	<b>64</b>	<b>72</b>	<b>66</b>	<b>73</b>	<b>69</b>	<b>68</b>
<b>Secondary</b>	-	-	<b>39</b>	<b>51</b>	<b>43</b>	<b>52</b>	<b>45</b>	<b>55</b>	<b>45</b>	<b>49</b>	<b>46</b>	<b>51</b>

**Source: Telephone Surveys From GLR States**





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