Evaluation of the *Checkpoint Strikeforce* Program

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16. Abstract

Checkpoint Strikeforce is a NHTSA regionwide DWI enforcement program implemented in NHTSA's Mid-Atlantic Region (Region 3) comprised of Delaware, the District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia. The program emphasizes frequent, well publicized checkpoints implemented on a sustained basis throughout the July–to-December period of each calendar year. The program was initiated in 2002 and continues. This report presents the evaluation results for the first three years of the program from 2002 to 2004. Results indicate that it is feasible to implement such a DWI enforcement and public information program on a regionwide and continuing basis. Each jurisdiction was able to meet and generally dramatically exceed the goal of conducting at least one checkpoint per week throughout the program period. This included even the smaller jurisdictions in Delaware. Public awareness measures indicated some modest shifts in the desired direction in terms of awareness of the checkpoint program and self-reported behavior. Roadside breath test surveys of the blood alcohol concentration (BAC) of nighttime drivers in two of three jurisdictions revealed reductions in the proportion of drivers with BACs of .05 grams per deciliter or greater. Analysis of fatal crash data indicated a reduction in alcohol-involved drivers in fatal crashes on the order of 7% when compared to the rest of the United States. This reduction approached, but did not reach, statistical significance.

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Executive Summary

This report presents the evaluation results of an assessment of the implementation and effectiveness of the first three years of *Checkpoint Strikeforce* (*CPSF*), a regional multi-State driving while intoxicated (DWI) enforcement and public information program. The period discussed in this report was implemented in the National Highway Traffic Safety Administration's Mid-Atlantic Region beginning with the period of July through December 2002 and continued July through December 2003, and July through December 2004. The *Checkpoint Strikeforce* program continues, but this evaluation focuses on the first three years and primarily 2002 and 2004.

Checkpoint Strikeforce is a highly focused, zero-tolerance, continuous, border-to-border multi-State initiative involving frequent sobriety checkpoints in five States (Delaware, Maryland, Pennsylvania, Virginia, West Virginia[1]) and the District of Columbia that comprise the Mid-Atlantic Region (now known as NHTSA's Region 3). The goal is to realize meaningful reductions in alcohol-related crashes through general deterrence brought on by increased presence and awareness of DWI enforcement activities. The program involves a coalition of NHTSA, State, and local transportation and law enforcement agencies from the Mid-Atlantic States, working together in a seamless effort to enforce DWI laws. Each State committed to conduct at least one checkpoint per week throughout each 6-month program period. The States and the NHTSA regional office also committed to publicize the enforcement effort through both paid and earned media efforts throughout the program periods.

The evaluation of *CPSF* is focused on gathering information descriptive of program activities, measuring public awareness and self-reported behavior, measuring on-road blood alcohol concentrations (BACs) in selected jurisdictions, and examining trends in fatal crashes regionwide. For this report, fatal crash data for the region are analyzed and reported, and year-to-year comparisons of BAC data are reported. Crash data, including lower levels of severity, were collected, analyzed, and reported where available.

Media Activities

Though the level of public information and education activities varied across the region, each State mounted efforts and all carried the unifying theme of *"Checkpoint Strikeforce. You Drink & Drive. You Lose."* All States used a combination of paid media outlets and earned media outlets; however jurisdictions such as Virginia; Washington, DC; and Maryland invested substantially more in paid media than other States in the NHTSA Mid-Atlantic Region.

Law Enforcement Activities

In 2002, 2003, and 2004 respectively, police in the Mid-Atlantic Region conducted more than 700, 800, and 900 checkpoints under the *Checkpoint Strikeforce* banner, resulting in more than 400,000; 500,000; and 560,000 vehicle contacts and nearly 2,000; over 2,500; and over 3,000 DWI arrests.

[1] Since the time period of this study, Kentucky is now included in NHTSA's Region 3.

Survey Data

Public awareness survey results indicated slight shifts in the desired direction in terms of self-reported drinking-driving behavior and perceptions of impaired driving enforcement, particularly checkpoints. For example, more respondents in January 2005 compared to those in June 2002 reported a perception of an increased likelihood of being stopped by police after having too much to drink. Further, there was an increase in the proportion of respondents reporting they had seen or heard of *Checkpoint Strikeforce*, though that slogan was less well recognized than the Nationwide theme at that time of, "*You Drink & Drive. You Lose.*"

Crash Data

We examined fatal crash data from NHTSA's Fatality Analysis Reporting System (FARS) from 1991 through 2004. An interrupted time-series analysis contrasting the region with the rest of the Nation indicated a 7.05% reduction in alcohol-related fatal crashes in the region relative to the Nation as a whole. This reduction approaches statistical significance (p=.119). In one State, West Virginia, the reduction was 16.72% and statistically significant (p=.018) when compared to the Nation as a whole. This was the only state that realized a significant reduction relative to the Nation as a whole.

We also compared the intensity of the checkpoint program in each jurisdiction (as measured by checkpoints per 100,000 population) with the effect observed on crashes. We found that intensity of checkpoint activity had a pattern which closely reflected effects on crashes.

Roadside BAC Measurements

We conducted roadside BAC measurements on 3,475 drivers in Maryland, Delaware, and Virginia. These surveys were conducted in conjunction with existing sobriety checkpoints in the summer of 2004 and 2005. The objective of this data collection activity was to obtain breath test samples from a random sample of night-time drivers. Results in Virginia and Delaware revealed a decrease in the proportion of drivers with .05 grams per deciliter (g / dL) or greater BAC. Results in Maryland are difficult to determine due to disparities in data collection sites. That is, we were unable to collect data at the same sites the second year so comparing results year-to-year would be problematic.

Conclusions

The Mid-Atlantic Region's *CPSF* program has illustrated that a regionwide impaired driving checkpoint enforcement program can be successfully implemented and sustained for at least three years. Previous national and regional mobilizations have accomplished brief blitzes of DWI enforcement on a regional and national level, and some States have implemented long-term checkpoint programs. The Mid-Atlantic's *CPSF*, however, has resulted in a continuing sustained checkpoint operation over an extended period (6 months per year) throughout the Mid-Atlantic region of the country for three successive years. Analyses of process data indicated that every jurisdiction was able to meet or exceed the target of at least one checkpoint per week throughout the 6-month period in each of the years.

Fatal crash analyses indicated that by 2004, the region as a whole was experiencing a 7.05% reduction in alcohol-related fatal crashes relative to the Nation as a whole. This reduction approaches but does not meet statistical significance (p=.119). We also found that intensity of

checkpoint activity (as measured by checkpoints per 100,000 population) appears to be related to the effect on crashes.

Lessons learned from this program should help guide subsequent regionwide efforts currently being planned, both in terms of implementation and evaluation. For example, efforts should continue to be made to ensure that media efforts reach the target audience that accounts for most of the impaired driving, that is, 21- to 34-year-old males, and expanded use of low-staff checkpoints could help increase the intensity of the program. This is particularly important as the intensity of checkpoint efforts may be correlated with changes in crash patterns.

This continued, substantial effort combining high-visibility enforcement strategies with public information campaigns has resulted in an indication of a trend toward a reduction in alcohol-related crashes in the Mid-Atlantic region. Continued examination of future years as the program continues and expands may reveal larger and statistically significant results as the program matures.

Introduction

This report presents the evaluation results of an assessment of the implementation and effectiveness of the first three years of *Checkpoint Strikeforce*, a regional multi-State DWI enforcement and public information program. The program discussed in this report was implemented in the National Highway Traffic Safety Administration's Mid-Atlantic Region beginning with the period of July through December 2002 and continued July through December 2003, and July through December 2004. The program was also conducted in July through December 2005; however, the evaluation period concluded at the end of 2004.

Background

Checkpoint Strikeforce is a highly focused, zero-tolerance, continuous, border-to-border multi-State initiative involving frequent sobriety checkpoints in the five States (Delaware, Maryland, Pennsylvania, Virginia, West Virginia[2]) and the District of Columbia that comprise NHTSA's Mid-Atlantic Region. The goal of the program is to realize meaningful reductions in alcohol-related crashes through general deterrence brought on by increased presence and awareness of DWI enforcement activities. The program involves a coalition of NHTSA, State, and local transportation and law enforcement agencies from the Mid-Atlantic States, working together in a seamless effort to enforce DWI and DUI laws. (Throughout this report we use the term DWI for consistency.)

There is a clear need for effective DWI enforcement efforts. Alcohol-involved[3] driving was associated with 16,885 traffic crash fatalities in 2005 in the United States (NHTSA, 2006). Although there was a consistent and dramatic decline in alcohol-related crashes from the early-1980s through the mid-1990s, the number leveled off in 1995 and was recently on the rise until 2003, when a decrease was observed. For example, alcohol-related fatalities increased slightly from 17,400 in 2001 to 17,419 in 2002, and then decreased in 2003 to 17,013, and then were further reduced to 16,694 in 2004 (NHTSA, 2006). Clearly, there is a need to stabilize and further reduce the effects of impaired driving on a national basis. Impaired driving is viewed as a major threat to personal safety, and the majority of Americans support the use of sobriety checkpoints and tougher laws that protect them and their families from impaired drivers (Royal, 2003).

Laws dealing with DWI and the enforcement of these laws in the United States serve as both general and specific deterrents to DWI, but it is impossible for law enforcement to detect every impaired driver on the road. Police can, however, target impaired driving by strategically implementing checkpoints when and where impaired driving has been found to occur. To maximize public exposure to DWI checkpoints and reach as many of the motoring public as possible and thus enhance deterrence value, another consideration should be to conduct them in areas where they are visible to as high a number of nighttime drivers as possible. Checkpoints have been used by police in the United States for at least the past two decades as a strategy to enforce impaired driving laws. At sobriety checkpoints, police stop all vehicles, or a systematic selection of vehicles, to evaluate drivers for signs of alcohol or other drug impairment. To minimize public concern about the activity, signs are typically posted at the approaches to the checkpoints warning drivers of an upcoming checkpoint. Uniformed police

[2] Since the time period of this study, Kentucky is now included in NHTSA's Region 3.

[3] "Alcohol-involved driving" in this context means one or more of the drivers or fatally-injured bicyclists or pedestrians involved in the fatal crash had a positive blood alcohol concentration.

officers approach drivers and identify themselves, describe the purpose of the stop, and ask the driver questions designed to elicit a response that will permit the officer to observe the driver's general demeanor. Drivers who do not appear impaired are immediately waved through, while those who show signs of impairment are usually moved to a safe holding area where they are investigated further and either arrested or released. Because of the frequent signage and the nature of the interaction with the drivers by the police, this enforcement activity is likely to be identified by the public as anti-DWI enforcement.

Studies show that well-publicized sobriety checkpoints with high public visibility significantly reduce alcohol-related fatalities (Shults et al., 2001), and sobriety checkpoints are among the most effective tools available to prevent impaired driving (Lacey, Jones, & Smith, 1999). Studies in the early 1980s found significant decreases in alcohol-related crashes associated with sobriety checkpoint programs (Epperlein, 1985; Lacey et al., 1986; Voas et al., 1985). Later studies (Levy et al., 1988; Levy et al., 1990; Wells et al., 1992) confirmed that frequent, highly publicized checkpoint programs substantially reduced alcohol-related crashes by 10 to 15%. Three recent reports on the effectiveness of sobriety checkpoints have added convincing and consistent evidence. A demonstration program in Tennessee (*Checkpoint Tennessee*) was sponsored by NHTSA to determine if highly publicized checkpoints conducted throughout the State on a weekly basis would have an effect on impaired driving in the State. The evaluation of the program, using interrupted time series analysis techniques, showed a 20% reduction in fatal crashes involving drivers with BACs of .10 and above, which extended at least 21 months after conclusion of the formal program (Lacey et al., 1999). The second report was a review of the latest literature on the effectiveness of sobriety checkpoints and random breath testing in reducing motor vehicle crash injuries (Peek-Asa, 1999). Six studies were reviewed that met the criteria of including an evaluation of checkpoints, with a control or baseline comparison. All six studies found that checkpoints were effective in reducing alcohol-related fatalities and injuries. The third study was conducted by the Centers for Disease Control and Prevention (CDC) and involved a systematic review of the evidence regarding interventions to reduce alcohol-impaired driving (Shults et al., 2001). Fifteen studies of the effectiveness of sobriety checkpoints were summarized and the analysis showed a median reduction of 20% in fatal and injury crashes associated with sobriety checkpoint programs. The authors concluded that these studies "provide strong evidence" that sobriety checkpoints are effective in preventing alcohol-related fatalities and injuries.

NHTSA has published numerous reports on the conduct of sobriety checkpoints. Research examining different alcohol-impaired driving law enforcement strategies showed that the proportion of all crashes involving alcohol declined an average of 28% in four communities that used publicized sobriety checkpoints compared with a 17% decline in communities that used publicized roving patrols (saturation patrols) (Stuster & Blowers, 1995). In an effort to promote the use of sobriety checkpoints in the States, NHTSA has issued guidelines to communities on conducting sobriety checkpoints (Compton, 1983; NHTSA, 1990) and has produced a law enforcement training video on sobriety checkpoints (NHTSA, 1999) and a how-to guide for planning and publicizing them (NHTSA, 2000). Police and other officials have been skeptical of the cost benefit of sobriety checkpoints, but a recent study indicates that checkpoint programs can yield considerable cost savings (Miller, Gailbraith, & Lawrence, 1998). NHTSA has also recently published guidelines for conducting checkpoints with fewer staff than has customarily been used to partially overcome the reluctance to use them based on cost and logistical issues (NHTSA, 2006).

Despite evidence supporting the increased use of sobriety checkpoints and guidance on how to conduct them, many police agencies have been unenthusiastic. Ross (1992) explored reasons for the sporadic use of checkpoints. A few of the reasons given were that checkpoints yield few arrests and were believed to be an inefficient use of police resources; that checkpoints require more resources than most departments can afford; and that there is little political support for checkpoints. All of the reasons given in opposition to checkpoints were countered by Ross and have been addressed in a NHTSA (1993) brochure. However, over a decade later, sobriety checkpoints are still underused, except in a minority of States.

Challenge of a Regionwide Effort

The *CPSF* program is an attempt to respond to some of the challenges mentioned above in mounting checkpoint programs. Though statewide programs have been implemented in the past, *CPSF* represents the first attempt to implement a coordinated, long-term, regionwide (multi-State) checkpoint DWI enforcement and public information program. In this case, the effort involved gaining the cooperation and endorsement of all six Governor's Highway Safety Programs and commitments from law enforcement agencies, statewide, in each jurisdiction. The overall activity was coordinated by the NHTSA Mid-Atlantic Region staff. Each State committed to conducting at least one checkpoint per week throughout the 6-month period of each year (July-December), and all jurisdictions committed to generating earned media using the "*Checkpoint Strikeforce. You Drink & Drive. You Lose."* slogan. Several committed to using resources for paid media along those lines as well. Each State met or exceeded those commitments. The smallest jurisdiction, the District of Columbia, approached the commitment of one checkpoint per week, but did not meet it every year. The purpose of this report is to document activity within these jurisdictions and report results of measures of public awareness and self-reported behavior as well as an analysis of fatal crashes. We also examine fatal, injury and property damage crashes combined and injury data in States which have data sets which are current enough to provide insight into the results of the program. Roadside survey data on BAC levels of nighttime drivers were also collected in three States and are reported.

Project Kickoff

CPSF was launched on June 27, 2002, as the Nation's first regionwide sobriety checkpoint blitz. Sobriety checkpoints were supplemented with saturation patrols and public awareness campaigns, in conjunction with the *"You Drink & Drive. You Lose"* national mobilization efforts. This first program period was successful in that the States were able to meet or exceed their checkpoint targets of conducting at least one checkpoint per week during the last six months of the calendar year and the NHTSA Regional Administrator encouraged each State to continue the program in the last six months of 2003, 2004, and 2005.

Overview of Progress and Challenges to Date

Goals of *CPSF* included holding frequent checkpoints (at a minimum, one per week in each State) for the last 6 months of each year from 2002 to 2005, aggressively publicizing that enforcement effort, in order to raise public awareness of those efforts, and to reduce alcohol-related crashes.

The ultimate objective of anti-DWI programs such as the one described in this report is to reduce the deaths, injuries, and property damage associated with alcohol-related crashes (that is, crashes involving a driver with a positive BAC). The traditional metric in the evaluation of

these programs is alcohol-related fatal crashes. This measure is used because a census of fatal crashes is taken and the reporting of attributes of those crashes (such as alcohol involvement), though imperfect, is the most complete and accurate categorization of crashes which may be examined. Additionally, these reports are consolidated in a uniform format in a single national file, NHTSA's Fatality Analysis Reporting System. A drawback of using that measure, however, is that the file is usually not available for analysis until near the end of the following calendar year. This report describes process measures of activity undertaken in enforcement for 2002 through 2004 and public information for 2002 and 2004, measures of changes in public awareness, and analyses of fatal crash data from the FARS system through 2004. Crashes of a lesser degree of severity were examined for West Virginia and Maryland.

The primary measure of public awareness and self-reported behavior for this project is a brief survey completed by patrons in Department of Motor Vehicle (DMV) offices. These data were collected in three of the six jurisdictions and provided to us for analysis. The ultimate objective of this project is to achieve general deterrence of impaired driving through heightened public awareness of DWI enforcement efforts achieved through well-publicized enforcement. Thus, it was important to take measures of public awareness and self-reported behavior. These data were supplemented by results from surveys conducted by researchers under other auspices and provided to us by those researchers.

A more direct measure of the behavior that the program is intended to affect is the BACs of drivers on the roadway. This is studied through administering anonymous breath tests to a random sample of persons passing through checkpoints. Ideally, this measure would be taken before and after the implementation of the program, to identify any changes that may have occurred. It was not logistically feasible to collect these data for the first year of *CPSF*, but such data were collected in 2004 and in 2005 in limited areas to assist in the evaluation of program activities.

This report summarizes descriptive data on enforcement and public information activities undertaken under the banner of *CPSF*; the results of public awareness surveys conducted in five of the six jurisdictions in Mid-Atlantic Region in 2002, 2003, and 2004; results from BAC data collection activities in 2004, 2005, and results from analyses of crashes through 2004.

Media Activities

Checkpoint Media Activities

Introduction

Publicity is a key component of the checkpoint general deterrence strategy. Enforcement efforts need to be publicized to increase effectiveness. The actual enforcement effort can directly reach only a limited number of people; the media, however, has the potential to reach far more persons in the community and thus maximize the message that (1) an intensified enforcement effort is in effect, and (2) those that choose to drink and drive have increased chances of being caught. To achieve this goal, NHTSA's Mid-Atlantic Region has used a combination of paid media outlets (e.g., broadcast TV, radio public service announcements [PSAs], newspapers, and billboards), and earned media outlets (free media, such as news stories or opinion pieces, which come about as a result of public relations efforts).

During the period of this study, the Mid-Atlantic Region used the unified message: *Checkpoint Strikeforce. You Drink & Drive. You Lose*. along with a graphic *CPSF* logo with a red handprint (at right). This logo was provided to each Mid-Atlantic site, along with guidance on gaining earned media, suggested talking points, recommended media outlets, and a fact sheet titled "Saturation Patrols & Sobriety Checkpoints," which explained sobriety checkpoints and was available in print and on the NHTSA Web site (http://www.nhtsa.gov).

Throughout the region, media efforts preceded key enforcement times (4th of July, Halloween, Christmas, and the New Year holidays). This section provides an overview of these efforts first by describing those that occurred the first year of *CPSF* (2002), and then those in 2004. (Media activities for 2003 media activities were not in the scope of this project.)

In the rest of this chapter we describe regionwide kickoff activities for 2002, 2003 and 2004; we then discuss public information support provided to States by NHTSA's regional office, financial resources allocated by States to public information efforts in 2002 and 2004, followed by State-by-State discussions of media activities in 2002 and 2004. This is followed by a description of the results of media searches we conducted to discern the extent of hard news coverage stimulated by the program.

2002 Project Kickoff Event

A news conference kicked off the regional *CPSF* sobriety checkpoint blitz on Thursday, June 27, 2002, at the U.S. Capitol in Washington, DC, just before the July 4th holiday weekend during which heavy traffic was anticipated. Billed as "an unprecedented border-through-border law enforcement effort," the blitz stressed that more Americans feared harm to their families from holiday drinking and driving than from fireworks, food poisoning, drowning, or even terrorism. Featured speakers were the NHTSA Administrator; the MADD National President; a

representative of the Metropolitan DC Police Department; uniformed police officers from all six Mid-Atlantic sites; and Federal, State, and local traffic safety representatives. Photo opportunities with uniformed officers and police cruisers were featured, along with a breath test van and a mock sobriety checkpoint conducted by the DC Metropolitan Police Department with assistance from other Mid-Atlantic police departments. This event was well covered by local press (see Table 1).

Table 1. *Checkpoint Strikeforce* Kickoff (July 2002) Press Conference Media Coverage

Medium	Media Name	Location
Newspaper	*Washington Post*	Washington, DC
	Washington Times	Washington, DC
	Northern Virginia Journal	Northern VA
	Daily Press	Newport News, VA
	Baltimore Daily Record	Baltimore, MD
	Weekly Reader	
News Wire	Associated Press (news & photo desk)	National
	PR Newswire	
	M2 Presswire	
	Regulatory Intelligence Data Service	
Radio	National Public Radio	National
	WTOP Radio Network	Washington, DC
	WAMU-FM	Washington, DC
	WPFW-FM	Washington, DC
	WKMZ-FM	Martinsburg, WV
Television	WUSA-TV	Washington, DC
	WRC-TV	Washington, DC
	WTTG-TV	Washington, DC
	WJLA-TV	Washington, DC

2003 Project Kickoff Events

On Friday, June 27, 2003, approximately 15 police agencies from Maryland, Virginia, and the District of Columbia attended the *CPSF* kickoff event at the Montgomery County Public Service Training Academy in Rockville, Maryland. Speakers included Dr. Elizabeth Baker, from NHTSA, and representatives from MADD and the Washington Regional Alcohol Program. An outdoor display of marked patrol cars and other vehicles, signs, and equipment used during sobriety checkpoints accompanied the event. That night, between 10 p.m. and 3 a.m., officers

from Montgomery County, the Maryland-National Capital Park Police, and the Maryland State Police held checkpoints supplemented by a saturation patrol.

On August 27, 2003, Virginia Governor Mark R. Warner highlighted police *CPSF* efforts at a special news conference in Richmond, at the Henrico County Jail. He unveiled findings on the year-long Task Force to Combat Driving under the Influence of Drugs and Alcohol program. A series of creative radio ads targeting 21- to 35-year-old males were also announced. One radio ad titled "*Checkpoint Strikeforce*" used eerie music and a script reminiscent of the TV series "Twilight Zone" to illustrate how a driver might feel approaching a sobriety checkpoint; another, called "Unhappy Hour," featured a woman describing to her girlfriend her breakup with a boyfriend due to his arrest at a checkpoint; and the last, "Add It All Up," parodied MasterCard's "Priceless" ad to show the enormous costs of a drunk driving arrest.

2004 Project Kickoff Events

Agencies from across the metropolitan Washington, DC, region joined forces to kick off the 2004 *CPSF* campaign. On Thursday, June 19, 2004, Metropolitan Police of the District of Columbia met with Transportation Secretary Norman Mineta and members of other law enforcement agencies and advocacy groups to kickoff the *CPSF* sobriety checkpoint and public awareness campaign.

Delaware launched *CPSF* over the July 4th holiday weekend with a mock DWI checkpoint which demonstrated roadside stops and follow-up arrest procedures for suspect offenders. Six actual DWI checkpoints (2 in each county) were scheduled, with dozens of State and local law enforcement officials attending.

Maryland kicked off its *CPSF* campaign on July 13, 2004. Several television stations covered a news conference at the State police barrack in Glen Burnie, where Anne Arundel County Police unveiled their newest weapon against alcohol-impaired driving—a passive alcohol sensor built into a flashlight.

On June 29, 2004, Virginia launched its third annual *CPSF* campaign at a Chesterfield County news conference. This was scheduled in conjunction with the unveiling of Virginia's newest DWI laws. Virginia's plan featured not only weekly checkpoints to be conducted over a 6-month period but also a radio advertising campaign of more than $400,000, aimed at preventing impaired driving. At the same time, the National Transportation Safety Board presented awards to Virginia State legislators responsible for getting 25 new impaired driving bills passed in May 2004.

On August 26, 2004, the District Department of Transportation joined the Washington, DC, Metropolitan Police Department and police departments from Fairfax, Virginia, and Montgomery County, Maryland, to launch the *CPSF* campaign at a publicized, late-afternoon sobriety checkpoint featuring field sobriety tests intercepting impaired Happy Hour patrons near Georgetown's many bars and taverns. Attending were Kurt Erickson, head of the Washington Regional Alcohol Program; Debbie Hardy, whose daughter had been killed by an impaired driver; and Dr. Elizabeth Baker, NHTSA Regional Administrator.

On September 2, 2004, West Virginia Governor Bob Wise kicked off the "*You Drink & Drive. You Lose.*" and the *CPSF* campaigns at a press event at the West Virginia State Police Headquarters. The West Virginia DWI Taskforce is made up of the Governor's Highway Safety Program, Commission on Drunk Driving Prevention, West Virginia State Police, West Virginia

Prosecutors' Institute, Alcohol Beverage Control Commission, and local law enforcement officials. At that time, a year-round, sustained, impaired-driving enforcement plan was announced, consisting of a minimum of 1,526 high-visibility enforcement events, 780 public education events, 780 media events, 42 training opportunities, and 30 age-specific activities.

NHTSA Regionwide CPSF Support

Mid-Atlantic NHTSA Region Office staff provided technical assistance (draft press releases, speaker talking points, signs, etc.) to the six Mid-Atlantic State Highway Safety Offices (SHSOs). Types of support included printing of billboards, brochures, and magnetic decals for police cruisers promoting *CPSF*. The NHTSA regional office hosted a Best Practices in Impaired Driving Enforcement Conference in Shepherdstown, West Virginia, June 2-4, 2004, to bring together enforcement experts and practitioners to share best practices, refocus and reenergize State impaired-driving programs, and prepare for the regionwide *CPSF*. The NHTSA regional office also employed a media contractor to develop activities and products for the six jurisdictions. An electronic communication network system (consisting of SHSO and State alcohol coordinators, regional and SHSO media contractors, and NHTSA headquarters) was developed to share information.

2002 and 2004 Site Summaries

In addition to NHTSA support, each SHSO developed individual approaches to publicizing the *CPSF* project. Interviews were conducted with highway safety coordinators to gather information on program strategies as well as publicity efforts. We also developed a Media Information Report as a tool for State coordinators to report activity (Appendix A). Budgetary records from Mid-Atlantic indicate a wide difference in media funds available for projects. For example, in 2002 approximately $15,000 was paid in Delaware and $445,000 in Virginia (Table 2). Because some States had already programmed allotted funds and because some locations are much smaller than others, there is considerable variation in expenditures.

Table 2. Estimated Paid Media by Jurisdiction, 2002 & 2004

	2002 Budget	2004 Budget	Media Campaign Coordinating Agencies
Delaware	$15,000	$110,000	Delaware Office of Highway Safety
District of Columbia	$50,000	$223,892	WRAP (Washington Regional Alcohol Program)
Maryland	$105,000	$223,892	Done locally by the Community Traffic Safety Program (CTSP) Coordinators in each county 2004: Maryland Highway Safety Office
Pennsylvania	Relied primarily on Earned Media	$500,000	District Safety Press Officers in the district offices of PennDOT, in coordination with task forces, with assistance from Kelly/Margolis
Virginia	$445,000	$500,000	Stratacom (through WRAP)
West Virginia	$110,000	$100,000	Greer, Margolis, Mitchell, Burns (GMMB) Currently: In-house through WV Highway Safety Program

Washington, DC

2002 Media Efforts

The majority of the media efforts in the Washington, DC, area were coordinated and publicized by the Washington Regional Alcohol Program, a public-private coalition formed in 1982 to fight drunk driving, drugged driving, and underage drinking in the Washington-metropolitan area. WRAP particularly promotes safe and sober driving during high-risk times that include holidays such as July 4th, Halloween, and New Year's Eve. Additionally, the Washington, DC, Metropolitan Police Department sent out press releases announcing its sobriety checkpoints, which in several instances stimulated hard news coverage.

A number of specific activities intended to generate hard news coverage were undertaken. The District of Columbia, Maryland, and Virginia pooled some of their media funds for a large media buy on a major news radio outlet for that area (*WTOP*). The total buy was $260,000. Virginia and Maryland each contributed $105,000 and the District of Columbia contributed $50,000. *WTOP*, which has as many as 1,000,000 listeners primarily in the DC metro area also reaches Delaware, Pennsylvania, and West Virginia. During the 6-month period, WTOP ran 930 spots.

WRAP offered its SoberRide campaign for the July 4th holiday, and the Washington Post ran a headline: "Free Cab Rides on Fourth of July."

On Halloween, WRAP conducted a press conference around the corner from a sobriety checkpoint, and Channel 7 News did an on-site interview, highlighting the dangers of impaired driving. WRAP's Halloween SoberRide program operated from 8 p.m. to 4 a.m., offering a free (up to a $50 fare) taxi ride home for potentially impaired drivers. Riders called a toll-free number to request a free and safe ride home. SoberRide was offered in the District of Columbia and in several bordering Maryland and Virginia counties.

The December 2002 issue of *Washingtonian Magazine* contained a story on impaired driving titled "Step Out of the Car, Please," which documented the activities part of *CPSF*.

Officers offered handouts at checkpoints, including SoberRide handouts describing WRAP's free holiday taxi program to keep impaired drivers off the roads. Good press coverage was generated by activities around the New Year's holiday, generating articles in both the *Washington Post* and *Washington Times*, and interviews with news on channels 4, 7, and 9.

CPSF flyers labeled "Drinking and Driving: A Deadly Combination" were distributed to all drivers passing through checkpoints. These flyers included a summary of DC's impaired driving laws, a *Know Your Limit* table, and a brief survey regarding public opinion of sobriety checkpoints.

One unanticipated form of coverage which possibly drew additional attention to the program came in the form of a letter to the *Washington Post* traffic reporter "Dr. Gridlock." The author questioned whether the checkpoints publicized under the *CPSF* program were actually occurring, because he hadn't seen any. "None of the aggressive drivers that zoom past me every day, cutting in and out, seem to be at risk of being pulled over, nor have I seen any checkpoints designed to catch drunk drivers," wrote the author. "Someone is spending a lot of money on advertising. Is anybody spending any on implementing these two programs?" The NHTSA Mid-Atlantic Administrator submitted a written response to Dr. Gridlock indicating that extensive activity was occurring.

2004 Media Efforts

In the Washington, DC, metropolitan area, from June 20th to July 13th, ads in both English and Spanish ran on network television programs viewed primarily by 21- to 34-year-old males. The ads focused on legal consequences of alcohol-impaired driving. On July 10, 2004, a local Washington, DC, television station ran a segment on Virginia police cracking down on DWI drivers. On November 11, 2004, another local station ran a segment featuring several Fairfax County police commenting on sobriety checkpoints.

CPSF's creative radio ads (see Appendix B) which ran in the Metropolitan Washington, DC, area throughout 2004, were designed for the target audience of 21- to 35-year-old males, the hard-to-reach audience that is statistically most at risk for impaired driving. Each ad closed with a 10-second message read by local law enforcement officials. The ads included:

- "Mom," a 60-second vignette of a 24-year-old forced to rely on his mother for transportation because he was arrested at a sobriety checkpoint and consequently lost his license.
- "Losing Your License," with sound effects (bottles clanking, cell door slamming, gavel banging, etc.) and a hard-hitting script indicating the life-changing consequences of an impaired driving arrest at a sobriety checkpoint.
- "*Checkpoint Strikeforce*—The Movie" played out like a movie trailer, dramatically demonstrating the consequences of driving impaired.

Delaware

2002 Media Efforts

Delaware's Office of Highway Safety produced most of the media material for *CPSF* used in that State (Figure 5), with a mixture of paid media (focusing on billboards and radio) and earned media.

Rather than organize a press event, Delaware offered TV stations the opportunity to capture a live shot at the kickoff checkpoint on July 3, 2002, in Dover, Delaware. This was covered by the local CBS station and aired during the 11 p.m. news. Press releases

were sent out for kickoff, wrap-up, and at the end of each month, summarizing arrests. Over a 6-month period, these generated at least 33 stories in print and radio.

Billboards were posted in one of each of the three counties for five months. NHTSA helped by providing 5 pre-created billboards. Because of weathering, each billboard had to be changed monthly, resulting in the need for 10 posters for the remaining two counties. The billboards displayed the *CPSF* logo.

Radio ads were purchased on three stations, covering the entire State of Delaware. The Community Relations Officer at the Delaware Office of Highway Safety wrote the script (see Appendix C), and a local radio station produced it for free. One radio PSA was done in Spanish for play on a Spanish station. Each station ran 8 to 13 60-second spots, one weekend per month. The requested airtime was Thursday through Saturday afternoon and early evenings, to catch drinkers before happy hour and before going out on weekend evenings.

Weekly updates on arrests were posted on the State of Delaware's Web site (www.state.de.us/highway), and also on a *CPSF* page (http://www.state.de.us/highway/Checkpoint%20Strikeforce.htm). This generated many hits and made it easy for reporters to check for the latest updates.

2004 Media Efforts

In Delaware, a mock DWI was filmed on June 23, 2004, with officers from the Newport and New Castle police departments.

Maryland

2002 Media Efforts

In Maryland, Community Traffic Safety Program (CTSP) coordinators played a lead role in carrying out planning and publicizing community policing activities. They pulled together the task forces comprised of law enforcement, businesses, and representatives from other interested groups. The Maryland *CPSF* effort consisted of 23 counties and the City of Baltimore. There were no statewide paid media efforts—media outreach was conducted solely on a local level. Local CTSPs have relied on both earned and paid media to get the word out. Maryland relied mainly on WRAP for media assistance.

After the national press conference kicking off *CPSF* was held in Washington, DC, on June 27, 2002, a Maryland press conference was held in the parking lot of Camden Yards, the stadium of the Baltimore Orioles baseball team.

Additionally, a variety of media efforts took place in different counties. Two of Maryland's most populous counties (Prince George's and Montgomery) joined forces to produce a PSA targeted to African-American males (18 to 24 years old) after focus group results showed that members of this target group did not see impaired driving as an important issue for African-Americans. The ad features people of different ethnicities at a party. An African-American male leaves the party, unlocks the car door, and speeds off in the vehicle. The logo, "Don't Let a Good Time Turn Bad" is shown. Then the audience is told, "Every 38 minutes someone is killed in an alcohol-related crash." The PSA then cuts to a mother crying, with a minister in the room. The screen says, "Give up the keys or designate a driver. Drinking and driving does not discriminate."

This TV PSA was run approximately 80 times, which included 40% additional play which the television station provided as a matching donation. The demographics of the viewership were examined to select the shows that the PSA would follow. Some of the selected shows were Steve Harvey, Washington Issues, and Blind Date. Radio Spots were also developed, and 91 plays of these were purchased.

Maryland was also able to take advantage of *Click It or Ticket*[4] billboard buys, requesting that any leftover "freebies" be donated to *CPSF*. More than 30 free *CPSF* billboards were put up across the State of Maryland as a result.

Maryland also had a "Swamp Patrol" program targeting drinking boaters once they were in their vehicles on dry land.

2004 Media Efforts

On June 25, 2004, in Maryland a local television station ran a segment on a DWI checkpoint in Centerville; and on July 2, 2004, a local station also interviewed Montgomery County, Maryland, officers and a driver at a checkpoint; 4 days later, the same station followed up with the holiday weekend DWI checkpoints. On July 13, 2004, a local station ran several segments on DWI crackdowns, saying that "a new DWI crackdown is now taking place in Maryland." A number of newscasts covered the remainder of the year, including several focusing on the passive sensor flashlights, one with the headline "Beaming out Boozers."

Pennsylvania

2002 Media Efforts

There were no statewide media funds available for this project in Pennsylvania, so earned media was encouraged and heavily relied on. The Pennsylvania Department of Transportation (PennDOT) coordinated the media outreach through the district safety press officers in the district offices. There were 55 local *CPSF* projects in Pennsylvania, which were organized into regional task forces, made up of approximately 20 projects each. The State office participated in the kickoff media tours, and one of its employees participated in TV and radio interviews.

Each of the Pennsylvania task force regions held press conferences at the start of each holiday period. They often supplemented these conferences with DUI trailers and photos taken with players from the Pittsburgh Steelers. NHTSA also provided media material for a Halloween message that was used by the task forces.

PennDOT worked closely with an advertising agency, Greer, Margolis, Mitchell, Burns and Associates, on a previous DUI project, the *"Step Away From Your Vehicle"* campaign. This agency assisted Pennsylvania's *CPSF* project by producing a low-budget PSA that relied on earned media for distribution. Appendix D provides more details on selected media efforts.

To mark the beginning of the Thanksgiving Holiday season, PennDOT designated November 26, 2002, as "Red Out Day." Employees, community members, schools, and law enforcement agencies were encouraged to participate by wearing red clothing, red ribbons, and "Red Out

[4] *Click It or Ticket* is a highly publicized law enforcement effort that gives people more of a reason to buckle up their seat belts—the increased threat of a traffic ticket. Most people buckle up for safety, but for some people, only the threat of a ticket spurs them to put on a seat belt. This zero-tolerance enforcement of seat belt laws has a special emphasis on teens and young adults.

Day" stickers to remind motorists to buckle up, drive safely, and drive sober. Additionally, the Lehigh Valley Regional DUI Task Force / TEAM DUI joined forces with law enforcement agencies throughout that area to conduct sobriety checkpoints, DUI roving patrols and "Cops in Shops" activities in select locations throughout the Valley. (The "Cops in Shops" program targeted minors attempting to purchase alcohol and adults who furnished alcohol to minors, by stationing undercover or "plain clothes" police officers in Pennsylvania State Liquor Stores, beer distributors, eating establishments, and other businesses that sold alcohol.)

2004 Media Efforts

In 2004, Pennsylvania followed the same basic strategy described for 2002 in terms of earned media activities and invested approximately $500,000 in paid media focused primarily on electronic media such as television and radio, supplemented by advertising in sports venues.

Virginia

2002 Media Efforts

Led by State and local law enforcement agencies and the Virginia Department of Motor Vehicles, the *CPSF* campaign reminded people of the existence of checkpoints and the many dangers and consequences of impaired driving, including being caught and arrested. The Virginia Highway Safety Office contracted with Strat@comm (a public affairs firm) and WRAP to aggressively and proactively conduct a media advocacy and paid media campaign, which resulted in sweeping, statewide news coverage of *CPSF* in addition to extensive paid media play in the electronic media.

Virginia's *CPSF* campaign was successfully launched on June 27, 2002, at Virginia's State Capitol building. Speakers included Virginia Governor Mark Warner's chief of staff, Bill Leighty; Secretary of Public Safety John Marshall; Secretary of Transportation Whitt Clement; State Police Superintendent Lt. Colonel Gerald Massengill; DMV Commissioner Asbury Quillan; and WRAP Executive Director Kurt Erickson. Attending media included *COX Radio, Richmond Times-Dispatch, Virginia Capitol Connection, Virginia Public Radio, WCVE-TV (PBS), WRIC-TV (ABC), and WTVR-TV (CBS). The Roanoke Times & World News* and *Virginian-Pilot* did not attend but covered the launch. The goals of the campaign were unveiled, the ads were played, and a mock sobriety checkpoint was conducted by the Virginia State Police and Capitol Police to display to the media what occurs at a sobriety checkpoint.

Available data show that more than four million print impressions were made. Print impressions are calculated by multiplying the number of readers of a publication by the number of news items which appear. Highlights of the coverage include the *Washington Post, Richmond Times-Dispatch, Roanoke Times,* and *Virginian-Pilot*. *CPSF* was covered by virtually all major regional radio networks and generated significant radio coverage. As part of its overall media outreach, an armchair radio tour was held, which secured 21 radio interviews conducted by telephone. Additionally, stations running the ads used PSAs to promote the campaign. Highlights of the leading radio outlets include: *COX Radio, Metro Networks* (2 interviews), *Virginia News Network, Virginia Public Radio,* and *WTOP-AM*. Fifty-nine broadcast stories aired, with reports showing broad coverage throughout the Commonwealth. Based on available information, television news stories reached an audience of more than two million viewers.

2004 Media Efforts

Virginia's 2003 *CPSF* media campaign reached much of Virginia's population with 40 television stories reaching an audience of 1,025,826.

In 2003 in Virginia, 27,036 professionally-produced *CPSF* radio ads (consisting of 18,504 paid spots and 8,532 earned media spots (PSAs or matching spots) were broadcast throughout Virginia over the four-month period between the end of August and December 2003. These were aired on 44 radio stations throughout the State. The ads involved State and local law enforcement partners recording local tag-lines at the end of each radio spot. Additionally, a separate *CPSF* radio campaign was conducted in northern Virginia in partnership with the Maryland Highway Safety Office.

In 2004, Virginia's *CPSF* campaign featured a $600,000 statewide radio ad-buy targeting the 21- to 35-year-old male audience. The ads also served as a communications vehicle for Virginia's newest DWI laws, with four hard-hitting scripts about the new laws and their potential consequences for impaired drivers. Sound effects in the ads included clanking bottles, wailing sirens, and slamming jail doors. The first radio ad, titled "It Gets Worse," began airing on nearly 50 Virginia radio stations on July 1, the day that the new DWI laws went into effect. *Checkpoint Strikeforce* aired from July through December 2004. One of the ads, in Spanish, aired on a Spanish-language radio stations.

Virginia's media was engaged in nearly two dozen radio interviews regarding the 2003 *CPSF* campaign via radio stations.

West Virginia

2002 Media Efforts

The media outreach efforts for West Virginia's *CPSF* program were coordinated by the public affairs administrator for the West Virginia's Governor's Highway Safety Program. West Virginia used paid media only to publicize the program. NHTSA and the advertising agency of Greer, Margolis, Mitchell, Burns (GMMB) designed a PSA for television.

West Virginia spent $100,000 on media buys (approximately 80% television and 20% radio). The funding was from a mixture of 410 Highway Safety funds[5] and a $30,000 contribution from West Virginia's Drunk Driving Commission. The ads were aired on prime time television across the State. Because media is relatively inexpensive in West Virginia, they were able to gain significant airtime—they estimate that they paid for 8,600 spots and received 2,000 bonus spots. The spots aired during the Halloween and Christmas mobilizations (Oct. 25-Nov. 1 and Dec. 16-30, 2002). The media buys targeted males age 18 to 24, selecting shows appealing to that demographic.

The 30-second PSA emphasized the increased chances of being caught and arrested for DUI. The PSA started with scenarios showing officers who have pulled someone over. In each, the officers ask the driver to step out of the vehicle. The different male drivers were seen taking a breath test, Horizontal Gaze Nystagmus test, or the walk-and-turn test. A voice-over warned that West Virginia was cracking down on drivers who drink and drive. The *CPSF* logo then

[5] Section 410 funding refers to Federal highway safety grant monies that are available to States that meet specified criteria to decrease impaired driving.

appeared. Two versions of a radio spot were also recorded (see Appendix E for the script from one of these).

Thus, through the efforts of the NHTSA Mid-Atlantic staff, the State highway safety offices, and WRAP, there were significant and continuing publicity efforts supportive of DUI enforcement throughout the region for this initial 6-month *CPSF* period.

2004 Media Efforts

West Virginia and Pennsylvania both benefited from supplemental NHTSA-funded paid television advertising during the Labor Day 2004 crackdown period because they were among NHTSA's strategic evaluation States (SES), which received additional resources from NHTSA Headquarters to supplement their efforts to reduce impaired driving. In West Virginia, $166,000 was spent in that endeavor, and a similar amount was spent in Pennsylvania.

Media Analysis

All of the jurisdictions attempted to obtain earned media coverage through a variety of efforts such as press conferences, press releases, and other attempts to obtain coverage of enforcement activities. Similarly, most jurisdictions printed informational cards to be handed out at checkpoints. In an effort to assess the impact of these earned media efforts, we conducted Lexis-Nexis searches of the print media on a regular basis throughout the *CPSF* period. Search terms used were "*Checkpoint Strikeforce*" for exact matches, and "checkpoint" paired with "sobriety / DUI / DWI" for more general matches. Due to a limited number of Delaware-specific publications used by Lexis-Nexis, we could not conduct an adequate media search for Delaware on that particular database. We did, however, compile media coverage counts for Delaware by assessing clippings the Delaware Office of Highway Safety gave us. Articles from various Delaware-specific publications were coded as either specific or related the same way articles from Lexis-Nexis were coded for the other jurisdictions. As shown in Table 3, the greatest amount of coverage, across the region, was found for 2003 and 2004. Articles specifically addressing the *CSPF* program were first found in 2002 and then increased in 2003 and 2004.

Table 3. NHTSA's Mid-Atlantic Region's Media Coverage

YEAR	SPECIFIC	RELATED * **
2001	0	109
2002	52	156
2003	78	157
2004	76	198

* Search terms for the related articles included DWI, DUI, DWI and checkpoint, DUI and checkpoint, and sobriety checkpoint

** All terms (listed above) used for the related term search, were searched in conjunction with *and without* "*Checkpoint Strikeforce*"

When looking by State across the four years (see Table 4), the media search revealed that Delaware yielded the highest number of specific media coverage for *CPSF,* while Pennsylvania had the greatest amount of related media coverage. Pennsylvania is not only the largest State in the region, but media coverage often extends into Delaware was well.

Table 4. Number of Articles Referring to *Checkpoint Strikeforce*

	2001		2002		2003		2004		TOTAL	
	S	**R**	**S**	**R**	**S**	**R**	**S**	**R**	**S**	**R**
Delaware	0	0	15	0	68	10	64	12	**148**	**22**
Maryland	0	22	7	19	0	30	2	26	**9**	**97**
Pennsylvania	0	52	1	78	4	42	0	98	**5**	**270**
Virginia	0	9	9	24	4	31	3	13	**16**	**77**
Washington, DC	0	20	13	23	1	27	4	25	**18**	**95**
West Virginia	0	6	7	12	1	17	3	24	**11**	**59**

S = Articles specific to *Checkpoint Strikeforce*
R = Articles related to *Checkpoint Strikeforce*

In Table 4, S refers to articles specific to *CPSF*, meaning the campaign term "*Checkpoint Strikeforce* "was mentioned in the article. R refers to articles related to the *CPSF* campaign. For Maryland, Virginia, Pennsylvania, and West Virginia, along with the District of Columbia, we conducted the searches using Lexis-Nexis under each jurisdiction's specific news sources (i.e. when searching for Maryland articles, searched under Maryland News Sources). It is to be noted that Maryland, Virginia, and the District of Columbia may have had some overlap as these jurisdiction were oftentimes grouped together by WRAP. The relevant comparisons are among years within States. For example, Maryland had no mention of *CPSF* in 2001 which is expected since the campaign had not yet begun. However, in 2002 seven mentions were identified, but very few were found in subsequent years. More general references to DWI enforcement in Maryland showed a fairly consistent pattern across the years.

Law Enforcement Activities

Sobriety Checkpoints

Each of the six Mid-Atlantic Region jurisdictions agreed to implement a minimum of one checkpoint per week during each 6-month project period. They also agreed to provide reports summarizing the activity of those checkpoints. During the first implementation period, there was some inconsistency in this reporting. To remedy this situation, the NHTSA Regional Office arranged to have a Web-based reporting system developed based on the initial reporting form (Appendix F); coordinators in each State were given access to the site for reporting. This resulted in more consistent reporting across jurisdictions. Reporting practices improved as the program matured. Summaries of enforcement activity for each jurisdiction in the region for the *CPSF* implementation periods for 2002, 2003, 2004, and part of 2005 appear below.

The first year of the *CPSF* effort began June 28, 2002, and continued through New Year's Day 2003. During this time, the Mid-Atlantic Region States conducted more than 700 checkpoints (see Table 5), resulting in over 400,000 vehicle contacts, including 1,929 DWI arrests, and 480 seat belt / child safety seat (CSS) citations. One should note that the District of Columbia, Delaware, and Maryland are primary enforcement seat belt law jurisdictions, and the remainder are secondary. In primary enforcement States, no other violation need occur to trigger a seat belt citation, while in secondary enforcement jurisdictions another violation must be observed before an enforcement action may be taken on a seat belt violation.

Table 5. *Checkpoint Strikeforce*, June 28, 2002-January 1, 2003 (Year One)

	DC	DE	MD	PA	VA	WV	Total
Number of Checkpoints	27	31	66	417	140	56	737
DWI Arrests	253	93	133	1,064	296	90	1,929
Vehicle Contacts	22,947	9,375	22,347	274,169	37,646	38,568	405,052
Seat belt Citation/CSS	0	47	0	0	390	43	480
Suspended Licenses	0	0	15	0	24	5	44
Drug Arrests	2	14	14	0	125	8	163

In the second year, States conducted over 800 checkpoints (see Table 6), resulting in a total of over 500,000 vehicle contacts, including 2,514 DWI arrests, 1,717 seat belt / child safety seat citations, and 203 felony arrests.

Table 6. *Checkpoint Strikeforce*, (June 26, 2003-January 5, 2004) (Year Two)

	DC	DE	MD	PA	VA	WV	Total
Number of Checkpoints	28	99	66	256	309	101	859
DWI Arrests	224	388	376	849	553	124	2,514
Vehicle Contacts	31,604	44,557	57,913	222,348	95,037	51,809	503,268
Seat belt Citations	0	272	587	26	468	84	1,437
CSS Citations	0	44	34	26	165	11	280
Felony Arrests	12	18	6	1	129	23	189
Stolen Vehicles Recovered	0	3	1	0	6	0	10
Fugitives Apprehended	0	57	9	72	60	5	203
Suspended Licenses	0	0	25	204	601	72	902
Drug Arrests	0	81	60	0	117	32	290

In the third year of this effort, the States conducted 932 checkpoints (see Table 7). These checkpoints resulted in over 560,000 vehicle contacts, including 3,187 DWI arrests, 2,548 seat belt/child safety seat citations, and 265 felony arrests.

Table 7. *Checkpoint Strikeforce*, (June 25, 2004-January 6, 2005) (Year Three)

	DC	DE	MD	PA	VA	WV	Total
Number of Checkpoints	35	115	74	393	224	99	932
DWI Arrests	272	564	220	1577	322	246	3,187
Vehicle Contacts	38,376	67,145	39,023	238,600	108,070	71,447	562,661
Seat belt Citations	234	521	1	840	271	368	2,235
CSS Citations	94	81	2	42	105	25	349
Felony Arrests	4	75	10	0	102	74	265
Stolen Vehicles Recovered	0	16	2	0	3	10	31
Fugitives Apprehended	0	128	8	149	19	11	315
Suspended Licenses	6	4	30	514	562	157	1,273
Drug Arrests	7	136	36	0	168	100	447

The data in the tables above reflect information recorded through the Mid-Atlantic Regional Office Web-based reporting system. Most States in the region relied on a State coordinator to enter the data in the system and found that system to work effectively. However, the data have to be entered to be tabulated, and not all States have managed to keep current. West Virginia conducted 241 checkpoints during the 2004 *CPSF* period. The State said it will continue to input data in the regional site.

Examination of the tables above shows the region as a whole has increased its enforcement activity associated with *CPSF* from year to year, though there has been some variation from that pattern on a State-by-State basis. Overall, these data indicate the States have been able to sustain an intensive anti-DWI enforcement effort throughout the three years of *CPSF* that were studied.

Impressive as this continued checkpoint activity is, it may be instructive to compare its intensity, with the Statewide *Checkpoint Tennessee* program referred to earlier, which is often cited as an example of an effective continuing checkpoint program. As a measure of intensity we calculated the rate of checkpoints per 100,000 population for a 6-month period for the Tennessee program and for each of the six jurisdictions in the Mid-Atlantic region and region-wide for 2004. The Tennessee program generated 9.04 checkpoints per 100,000 population. The rate for the Mid-Atlantic region was 3.35. The rate for the District of Columbia was 6.12, for Delaware it was 14.68, for Maryland 1.40, for Pennsylvania 3.20, for Virginia 3.17, and for West Virginia 13.327. Thus only Delaware and West Virginia met or exceeded the rate accomplished in Tennessee.

Table 8 reflects data reported through August of 2005 and indicates that the program is continuing to be implemented in 2005. The NHTSA Regional Office has encouraged States to conduct the program throughout the year, though the emphasis remains on the July through December period. Thus this table reflects data from earlier in the year.

Table 8. *Checkpoint Strikeforce*, (January 7, 2005-August 31, 2005) (Year Four)

	DC	DE	MD	PA*	VA	WV	Total
Number of Checkpoints	9	48	99		33	83	272
DWI Arrests	52	292	287		63	93	787
Vehicle Contacts	5,818	31,840	49,364		10,533	42,384	139,939
Seat belt Citations	63	244	16		59	61	443
CSS Citations	1	24	3		39	12	79
Felony Arrests	1	65	10		12	7	95
Stolen Vehicles Recovered	0	11	2		1	0	14
Fugitives Apprehended	0	111	12		5	2	130
Suspended Licenses	0	1	30		87	75	193
Drug Arrests	1	144	51		28	44	268

* No Pennsylvania data was entered into the database.

Whereas the tables above present data about DWI arrests generated within specific *CPSF* enforcement activities, Table 9 presents annual jurisdiction-wide data about the total number of DWI arrests per year. Comparison of this table with the number of DWI arrests reported under the auspices of *CPSF* indicates that though the program was a significant enforcement effort, it accounted for less than 5% of DWI arrests overall.

One must bear in mind that a basic premise of checkpoints is they are intended to achieve general deterrence by being visible enforcement activities directly associated with impaired driving enforcement rather than through the number of arrests generated. So, the number of arrests is not necessarily an indicator of the program's success, and should not be the only measure of success.

Table 9. DWI Arrests (2000-2004)

	DC	DE	MD	PA	VA	WV	Total
2000	1,856	5,644	24,869	41,058	26,298	7,977	105,846
2001	1,888	6,005	23,015	40,011	25,302	6,976	101,309
2002	1,551	5,840	23,053	41,284	24,234	6,246	100,657
2003	1,711	5,964	23,560	41,613	24,336	6,097	101,570
2004	1,780	5,981	23,625	43,699	25,394	6,606	105,305

Public Awareness Data

In this section, results of four measures of public awareness are presented: brief surveys administered by DMV offices in Delaware, Maryland, and West Virginia and analyzed by project staff; a telephone survey administered in Maryland by researchers from the University of Maryland; a telephone survey administered in Virginia on behalf of the Washington Regional Alcohol Program; and a brief DMV survey administered by staff of the Preusser Research Group in West Virginia and Pennsylvania.

DMV Survey Data

The primary measure of public awareness and self-reported behavior for this project was a brief survey completed by patrons in DMV offices (see Appendix G for both English and Spanish versions). The basic procedure was to ask all driver license applicants (new, renewal, replacement, or reinstatement) to complete the questionnaires while waiting for their picture licenses to be developed. Thus, they knew they would be receiving their licenses, and presumably would answer honestly. More detailed data collection procedures for the survey appear in Appendix H. These data were collected in three of the six jurisdictions and provided to us for analysis. These data were collected in seven waves from June 2002 to January 2005. In this section, we highlight results from some of the questions on the DMV surveys where response patterns differed from Wave 1 to Wave 7 (for complete data, see Appendix I). West Virginia participated in only the first three waves of data collection, and those results are reported later in this chapter. Results from only Delaware and Maryland are presented in this section of the report because they contain data from all seven waves. Once the survey was developed, PIRE staff prepared packages of scannable surveys and mailed them to DMV offices with arrangements to have them handed out by DMV staff. Each site administered seven waves of surveys—one wave occurred just before kickoff (June 2002), the second wave served as a 4- to 5-month follow-up in December (2002), and Wave 3 served as a 6-month follow-up in January (2003), at the completion of the first *CPSF* program period. A fourth wave was administered in the summer of 2003, the midpoint of this study period. The fifth, sixth, and seventh waves were administered before, during, and after the 2004 *CPSF* period. Due to logistical complications, Pennsylvania; Virginia; and Washington, DC, DMV offices could not administer surveys for this project, but survey results for Pennsylvania and Virginia (from other sources) and for a Maryland telephone survey are summarized later in this section and appear in the appendices.

As indicated in Table 10, a total of 7,314 surveys were completed in Maryland and Delaware.

Table 10. Surveys Administered by Wave by State

Wave	Season	MD	DE	Total
1 (pre)	Summer 2002*	777	328	1,105
2 (during)	Fall 2002	1,024	95	1,129
3 (post)	Winter 2003	989	65	1,054
4 (mid-study)	Summer 2003	542	98	640
5 (pre)	Summer 2004	1,068	237	1,305
6 (during)	Fall 2004	691	249	940
7 (post)	Winter 2005	1,020	121	1,141
Total		6,121	1,193	7,314

* Summer refers to June and July; fall refers to October and November; winter refers to January.

The DMV survey developed for the Mid-Atlantic Region checkpoint evaluation included 24 items (Appendix I). These items were distributed into the following categories:

- Demographics
- Behaviors (driving, seat belt use, drinking)
- Problem behaviors (how often drink and drive, how much, etc.)
- Enforcement perceptions
- Intervention (awareness of *CPSF* and other enforcement programs)
- Comparison intervention: Seat belt program
- Media awareness

DMV personnel were instructed to give the survey forms to driver license applicants after they knew that they were going to receive their licenses and while they were waiting for their photographs to be developed. This was done in an effort to reduce response bias (i.e., to ensure that respondents were answering questions in a truthful manner rather than in the way that they thought the examiner would like them to respond). The surveys were tailored to each State in that the State name was inserted into the text where appropriate.

Presented below are results on respondent demographics, driving frequency, seat belt use, opinions on strength of enforcement, as well as respondents' awareness of impaired driving checkpoints in their respective States, and publicity concerning *CPSF*. Finally, drinking and driving experiences, including number of times driving after drinking too much are examined. Within the following tables, a percentage that is statistically significantly higher than the average is in boldface type; significantly lower ($p<.05$) than average according to $\chi 2$ is in underlined italics.

Respondent Demographics

Delaware averaged 50.7% male and Maryland 50.4% male respondents. The individual States demonstrated no significant differences in gender distribution between the waves.

Respondents from Delaware and Maryland were 74.2% and 70.5% White respectively, 17.4% and 19.5% African-American respectively, 1.8% and 4.4% Asian respectively, 1.6% and 0.8% Native American respectively, and 5% and 4.7% Other respectively (see Table 11). The racial characteristics varied significantly from wave to wave, within the States. The tables below indicate where racial categories were overrepresented relative to the overall pattern (boldface) and underrepresented (underlined italic) relative to the overall distribution. Comparing the racial distribution of respondents between the two States, Maryland had significantly more Asians and Delaware had significantly more Whites and Native Americans.

Table 11. Combined Demographic Data by Wave; Delaware and Maryland

		Race				
STATE	**Wave**	**White**	**African-American**	**Asian**	**Native American**	**Other**
DE	**1 - 2002**	**78.9%** (251)	*9.1%* (29)	**3.8%** (12)	1.6% (5)	6.6% (21)
	2 - 2002	**85.4%** (76)	12.4% (11)	0.00% (0)	1.1% (1)	1.1% (1)
	3 - 2003	71.9% (46)	21.9% (14)	1.6% (1)	0.0% (0)	4.7% (3)
	4 - 2003	67.7% (63)	21.5% (20)	0.00% (0)	2.2% (2)	8.6% (8)
	5 - 2004	*64.5%* (149)	**26.8%** (62)	1.7% (4)	2.2% (5)	4.8% (11)
	6 - 2004	77.5% (183)	15.7% (37)	1.3% (3)	1.3% (3)	4.2% (10)
	7 - 2005	71.6% (83)	23.3% (27)	0.9% (1)	1.7% (2)	2.6% (3)
	Overall	74.2% (851)	17.4% (200)	1.8% (21)	1.6% (18)	5.0% (57)
MD	**1 - 2002**	74.0% (551)	17.4% (130)	4.2% (31)	1.2% (9)	3.2% (24)
	2 - 2002	74.0% (743)	*16.4%* (165)	4.5% (45)	0.7% (7)	4.4% (44)
	3 - 2003	**75.7%** (728)	17.2% (165)	4.0% (38)	0.5% (5)	*2.7%* (26)
	4 - 2003	*62.5%* (330)	**26.5%** (140)	4.4% (23)	1.3% (7)	5.3% (28)
	5 - 2004	69.2% (725)	18.2% (191)	5.4% (57)	1.0% (10)	**6.1%** (64)
	6 - 2004	70.1% (472)	**22.1%** (149)	3.7% (25)	0.6% (4)	3.4% (23)
	7 - 2005	*65.6%* (675)	**22.4%** (230)	4.6% (47)	0.5% (5)	**7.0%** (72)
	Overall	70.5% (4,224)	19.5% (1,170)	4.4% (266)	0.8% (47)	4.7% (281)

Note: Bold indicates statistically significantly higher than average.
Underlined italics indicate statistically significantly lower than average.

The proportion identifying themselves as Hispanic averaged 5.8% in Delaware and 8.7% in Maryland, across the seven waves. Hispanic individuals were underrepresented in Wave 2 (1.2% in Delaware and 4.6% in Maryland) and overrepresented in Wave 4 (9.1% in Delaware and 9.0% in Maryland). Overall, the proportion of Hispanics in Delaware (5.8%) was not significantly different from the proportion in Maryland (6.2%).

In both Delaware and Maryland, the largest number of respondents was in the 30 to 45 age group, followed by the 46 to 64 age group (see Table 12); however, respondents in Maryland tended to be younger (16 to 20 age group and 21 to 29 age group) than those in Delaware (11.0% in Maryland versus 7.4% in Delaware, and 20.8% in Maryland versus 17.6% in Delaware respectively).

Table 12. Age Category by Wave; Delaware and Maryland

		Age Category				
STATE	**Wave**	**16-20**	**21-29**	**30-45**	**46-64**	**65 or Older**
DE	**1 - 2002**	7.7% (25)	18.9% (61)	35.0% (113)	31.6% (102)	*6.8%* (22)
	2 - 2002	3.3% (3)	*6.7%* (6)	36.7% (33)	37.8% (34)	15.6% (14)
	3 - 2003	4.6% (3)	**29.2%** (19)	36.9% (24)	23.1% (15)	6.2% (4)
	4 - 2003	**12.5%** (12)	21.9% (21)	35.4% (34)	21.9% (21)	8.3% (8)
	5 - 2004	8.5% (20)	17.4% (41)	30.2% (71)	27.2% (64)	**16.6%** (39)
	6 - 2004	6.0% (15)	14.9% (37)	29.8% (74)	34.7% (86)	14.5% (36)
	7 - 2005	7.5% (9)	18.3% (22)	33.3% (40)	28.3% (34)	12.5% (15)
	Overall	7.4% (87)	17.6% (207)	33.1% (389)	30.2% (356)	11.7% (138)
MD	**1 - 2002**	*6.6%* (50)	19.1% (145)	36.2% (275)	29.4% (223)	8.7% (66)
	2 - 2002	9.8% (100)	19.9% (204)	33.2% (340)	26.2% (268)	**10.9%** (112)
	3 - 2003	12.3% (119)	22.1% (214)	*30.4%* (295)	26.7% (259)	8.6% (83)
	4 - 2003	**18.8%** (100)	20.0% (106)	32.4% (172)	*22.8%* (121)	*6.0%* (32)
	5 - 2004	12.1% (129)	18.9% (201)	34.8% (370)	25.5% (271)	8.7% (93)
	6 - 2004	11.4% (77)	19.0% (129)	31.9% (216)	29.6% (201)	8.1% (55)
	7 - 2005	*8.8%* (92)	**25.0%** (261)	33.2% (347)	27.5% (287)	*5.5%* (57)
	Overall	11.0% (667)	20.8% (1,260)	33.2% (2,015)	26.9% (1,630)	8.2% (498)

Note: Bold indicates statistically significantly higher than average.
Underlined italics indicate statistically significantly lower than average.

Driving Frequency

In Delaware, the trend of driving less during Wave 4 was not as prominent, as the statistically significant reduction in Maryland; however, Delaware did experience a significant reduction in driving frequency during Wave 5. Further, across all survey waves, more respondents from Delaware reported driving *everyday* compared to Maryland (81.7% in Delaware compared to 76.1% in Maryland), which had more respondents reporting *several days a week* (10.9% in Delaware compared to 15.1% in Maryland; see Table 13).

Table 13. Driving Frequency by Wave; Delaware and Maryland

		Driving Frequency				
STATE	**Wave**	**Everyday**	**Several Days a Week**	**Once a Week or Less**	**Only Certain Times a Year**	**Never**
DE	**1 - 2002**	84.9% (276)	7.7% (25)	1.5% (5)	0.9% (3)	4.9% (16)
	2 - 2002	85.6% (77)	11.1% (10)	0.0% (0)	2.2% (2)	1.1% (1)
	3 - 2003	84.6% (55)	12.3% (8)	1.5% (1)	0.0% (0)	1.5% (1)
	4 - 2003	81.4% (79)	7.2% (7)	3.1% (3)	3.1% (3)	5.2% (5)
	5 - 2004	*77.6%* (184)	12.2% (29)	3.0% (7)	0.8% (2)	**6.3%** (15)
	6 - 2004	80.3% (196)	12.7% (31)	4.5% (11)	0.4% (1)	2.0% (5)
	7 - 2005	79.8% (95)	15.1% (18)	0.8% (1)	1.7% (2)	2.5% (3)
	Total	81.7% (962)	10.9% (128)	2.4% (28)	1.1% (13)	3.9% (46)
MD	**1 - 2002**	**79.5%** (599)	14.1% (106)	2.7% (20)	1.5% (11)	*2.3%* (17)
	2 - 2002	76.8% (782)	15.5% (158)	3.4% (35)	1.2% (12)	3.0% (31)
	3 - 2003	74.9% (727)	16.4% (159)	3.1% (30)	1.2% (12)	4.4% (43)
	4 - 2003	*72.3%* (382)	13.6% (72)	4.0% (21)	1.7% (9)	**8.3%** (44)
	5 - 2004	76.9% (817)	14.6% (155)	2.6% (28)	1.4% (15)	4.4% (47)
	6 - 2004	75.7% (514)	14.6% (99)	3.1% (21)	1.2% (8)	5.4% (37)
	7 - 2005	75.1% (783)	15.9% (166)	2.8% (29)	0.8% (8)	5.4% (56)
	Total	76.1% (4,604)	15.1% (915)	3.0% (184)	1.2% (75)	4.5% (275)

Note: Bold indicates statistically significantly higher than average.
Underlined italics indicate statistically significantly lower than average.

Seat belt Use

In Delaware, the percentage of respondents reporting they *always* wore their seat belts dropped by almost 15 percentage points from Wave 1 to Wave 3 and then rose by 22 percentage points in Waves 5 and Wave 6. In Maryland, the number of respondents reporting to *always* wear their seat belt remained constant across the first five waves with a small increase in Wave 6 (see Table 14). Significantly more Maryland respondents reported *always* and significantly fewer responded in all other categories than did respondents from Delaware.

Table 14. Reported Seat belt Use by Wave; Delaware and Maryland

		Seat Belt Use				
STATE	**Wave**	**Always**	**Nearly Always**	**Sometimes**	**Seldom**	**Never**
DE	**1 - 2002**	74.7% (242)	11.4% (37)	6.8% (22)	**4.0%** (13)	**3.10%** (10)
	2 - 2002	78.7% (70)	12.4% (11)	7.9% (7)	0.0% (0)	1.10% (1)
	3 - 2003	*60.0%* (39)	20.0% (13)	10.8% (7)	**6.2%** (4)	3.10% (2)
	4 - 2003	*63.9%* (62)	**19.6%** (19)	**13.4%** (13)	2.1% (2)	1.00% (1)
	5 - 2004	**82.1%** (193)	10.6% (25)	5.1% (12)	1.7% (4)	0.40% (1)
	6 - 2004	**82.7%** (201)	12.3% (30)	*2.9%* (7)	1.2% (3)	0.80% (2)
	7 - 2005	80.5% (95)	8.5% (10)	8.5% (10)	1.7% (2)	0.8% (1)
	Total	77.0% (902)	12.4% (145)	6.7% (78)	2.4% (28)	1.5% (18)
MD	**1 - 2002**	88.5% (668)	7.7% (58)	2.5% (19)	0.7% (5)	0.70% (5)
	2 - 2002	88.4% (895)	7.6% (77)	2.7% (27)	0.8% (8)	0.60% (6)
	3 - 2003	88.7% (863)	6.7% (65)	2.4% (23)	1.3% (13)	0.90% (9)
	4 - 2003	88.9% (471)	7.0% (37)	2.5% (13)	0.6% (3)	1.10% (6)
	5 - 2004	91.0% (968)	6.6% (70)	1.9% (20)	0.4% (4)	*0.20%* (2)
	6 - 2004	**92.5%** (629)	*5.0%* (34)	1.3% (9)	0.6% (4)	0.60% (4)
	7 - 2005	90.0% (940)	6.2% (65)	2.3% (24)	0.4% (4)	1.1% (11)
	Total	89.7% (5,434)	6.7% (406)	2.2% (135)	0.7% (41)	0.7% (43)

Note: Bold indicates statistically significantly higher than average.
Underlined italics indicate statistically significantly lower than average.

Enforcement

Responses to the question "If you drove after having too much to drink, how likely are you to be stopped by a police officer?" in Maryland were quite consistent throughout the 7 waves, showing only a drop in response percentage in Wave 6 in the *somewhat likely* and *somewhat unlikely* categories (see Table 15). In Delaware, however, the percentage responding *almost certain* varied from 10.2% to 30.8% and responding *very unlikely* varied from 16.1% to 27.7%. As a whole, Maryland respondents were more likely to respond that being stopped was *almost certain* than were Delaware respondents (26.7% versus 21.5% on average); there were no differences between the two States on the other categories. There was also a steady increase for respondents in both Delaware and Maryland to respond either *almost certain* or *very likely*, although there was a dip for the *almost certain* response during Waves 3 and 4 in Delaware.

Table 15. Likelihood of Being Stopped by Police Officer by Wave; Delaware and Maryland

		Likelihood of Being Stopped by Police Officer				
STATE	**Wave**	**Almost Certain**	**Very Likely**	**Somewhat Likely**	**Somewhat Unlikely**	**Very Unlikely**
DE	**1 - 2002**	22.9% (58)	25.3% (64)	20.9% (53)	11.1% (28)	19.8% (50)
	2 - 2002	**30.8%** (20)	20.0% (13)	20.0% (13)	10.8% (7)	18.5% (12)
	3 - 2003	10.2% (5)	26.5% (13)	30.6% (15)	14.3% (7)	18.4% (9)
	4 - 2003	16.1% (10)	21.0% (13)	30.6% (19)	16.1% (10)	16.1% (10)
	5 - 2004	20.1% (37)	24.5% (45)	20.7% (38)	7.1% (13)	**27.7%** (51)
	6 - 2004	20.1% (37)	21.2% (39)	25.0% (46)	10.3% (19)	23.4% (43)
	7 - 2005	26.1% (24)	28.3% (26)	17.4% (16)	4.3% (4)	23.9% (22)
	Total	21.5% (191)	24.0% (213)	22.5% (200)	9.9% (88)	22.2% (197)
MD	**1 - 2002**	24.6% (124)	20.6% (104)	20.8% (105)	10.7% (54)	23.4% (118)
	2 - 2002	24.8% (178)	24.4% (175)	20.1% (144)	9.9% (71)	20.9% (150)
	3 - 2003	28.8% (197)	21.2% (145)	21.5% (147)	9.6% (66)	19.0% (130)
	4 - 2003	22.7% (80)	26.3% (93)	23.2% (82)	7.9% (28)	19.8% (70)
	5 - 2004	25.7% (192)	23.8% (178)	20.6% (154)	7.6% (57)	22.2% (166)
	6 - 2004	29.1% (141)	25.6% (124)	*16.7%* (81)	*5.4%* (26)	23.1% (112)
	7 - 2005	29.3% (229)	21.1% (165)	20.2% (158)	6.8% (53)	22.5% (176)
	Total	26.7% (1,141)	23.0% (984)	20.4% (871)	8.3% (355)	21.6% (922)

Note: Bold indicates statistically significantly higher than average.
Underlined italics indicate statistically significantly lower than average.

In Delaware, there were no major changes in the responses to the more generalized question of whether DWI enforcement was *too strong* or *too weak* or *about right* (see Table 16). The majority (58.7%) believe that DWI enforcement is *about right***,** with 34.1% believing that it is *too weak*. In Maryland, the two significant changes occurring across the waves included a reduction in respondents who answered the DWI enforcement question as *too* weak and an increase in those who answered *about right*, both occurring in Wave 6. Overall, the two States had no differences in response patterns.

Table 16. Drinking and Driving Enforcement by Wave; Delaware and Maryland

		Drinking and Driving Enforcement		
STATE	**Wave**	**Too Strong**	**Too Weak**	**About Right**
DE	**1 - 2002**	5.8% (15)	35.9% (93)	58.3% (151)
	2 - 2002	4.3% (3)	27.1% (19)	68.6% (48)
	3 – 2003	8.0% (4)	42.0% (21)	50.0% (25)
	4 - 2003	7.1% (6)	38.1% (32)	54.8% (46)
	5 - 2004	6.4% (12)	35.6% (67)	58.0% (109)
	6 - 2004	10.0% (21)	33.5% (70)	56.5% (118)
	7 - 2005	7.9% (8)	25.7% (26)	66.3% (67)
	Total	7.2% (69)	34.1% (328)	58.7% (564)
MD	**1 - 2002**	4.9% (29)	39.5% (232)	55.5% (326)
	2 - 2002	6.9% (56)	35.5% (290)	57.6% (470)
	3 – 2003	5.5% (43)	36.6% (284)	57.9% (449)
	4 - 2003	6.9% (32)	37.1% (172)	56.0% (260)
	5 - 2004	4.1% (34)	37.7% (312)	58.2% (482)
	6 - 2004	4.5% (25)	*30.6%* (171)	**64.9%** (362)
	7 - 2005	5.9% (48)	33.5% (272)	60.6% (493)
	Total	5.5% (267)	35.8% (1,733)	58.7% (2,842)

Note: Bold indicates statistically significantly higher than average.
Underlined italics indicate statistically significantly lower than average.

Seen or Heard of an Impaired Driving Checkpoint

In Delaware, respondents reported having seen or heard about an impaired driving checkpoint in the last month more often in Waves 6 and 7, and less often in Wave 1 (see Table 17). Affirmative responses in Delaware jumped in both Waves 6 and 7, to 51 and 66.1% respectively. In Maryland, affirmative responses peaked at 36.4% in Wave 4, and then dropped to 24.4% in Wave 5, before rebounding somewhat in Waves 6 and 7. Across the 7 waves, Maryland respondents were less likely to have seen or heard of a checkpoint than those from Delaware (29.8% in Maryland compared to 42.6% in Delaware). This is consistent with the intensity findings that the rate of checkpoints per 100,000 was higher in Delaware than in Maryland.

Table 17. Seen or Heard of Checkpoint by Wave; Delaware and Maryland

		Seen or Heard of Checkpoint	
STATE	**Wave**	**No**	**Yes**
DE	**1 - 2002**	**64.8%** (190)	*35.2%* (103)
	2 - 2002	66.7% (56)	33.3% (28)
	3 - 2003	66.7% (40)	33.3% (20)
	4 - 2003	61.5% (59)	38.5% (37)
	5 - 2004	60.8% (138)	39.2% (89)
	6 - 2004	*49.0%* (120)	**51.0%** (125)
	7 - 2005	*33.9%* (38)	**66.1%** (74)
	Total	57.4% (641)	42.6% (476)
MD	**1 - 2002**	73.2% (488)	26.8% (179)
	2 - 2002	70.1% (653)	29.9% (278)
	3 - 2003	70.1% (618)	29.9% (263)
	4 - 2003	*63.6%* (336)	**36.4%** (192)
	5 - 2004	**75.6%** (765)	*24.4%* (247)
	6 - 2004	69.8% (448)	30.2% (194)
	7 - 2005	*66.5%* (661)	**33.5%** (333)
	Total	70.2% (3,969)	29.8% (1,686)

Note: Bold indicates statistically significantly higher than average.
Underlined italics indicate statistically significantly lower than average.

Checkpoint Strikeforce

In terms of awareness of specific media messages, *CPSF* was more frequently recognized by the end of the program, with significant increases in recognition during Waves 6 and 7 in both Delaware and Maryland (see Table 18). In Delaware, more than a quarter of respondents recognized the name, a significantly larger number than the 7.5% recognition in Maryland.

Table 18. *Checkpoint Strikeforce* by Name, by Wave; Delaware and Maryland

		Checkpoint Strikeforce	
STATE	**Wave**	**Don't Know Name**	**Know Name**
DE	**1 - 2002**	**95.1%** (312)	*4.9%* (16)
	2 - 2002	92.2% (83)	7.8% (7)
	3 - 2003	89.2% (58)	10.8% 7()
	4 - 2003	94.9% (93)	5.1% (5)
	5 - 2004	91.6% (217)	8.4% (20)
	6 - 2004	*83.0%* (210)	**17.0%** (43)
	7 - 2005	*74.4%* (90)	**25.6%** (31)
	Total	89.2% (1,063)	10.8% (129)
MD	**1 - 2002**	**96.8%** (752)	*3.2%* (25)
	2 - 2002	95.5% (986)	4.5% (47)
	3 - 2003	95.4% (936)	4.6% (45)
	4 - 2003	95.0% (515)	5.0% (27)
	5 - 2004	95.1% (1,017)	4.9% (52)
	6 - 2004	*92.4%* (641)	**7.6%** (53)
	7 - 2005	*92.5%* (985)	**7.5%** (80)
	Total	94.7% (5,832)	5.3% (329)

Note: Bold indicates statistically significantly higher than average.
Underlined italics indicate statistically significantly lower than average.

More respondents reported recognition of the *You Drink & Drive. You Lose.* slogan, than *CPSF* (see Table 19). In Delaware, the recognition rate jumped more than 20 percentage points between Wave 1 and Wave 6, from 17.1% to 40.7%, before dropping back slightly in Wave 7. Delaware respondents had a higher recognition of this slogan than did Marylanders. Recognition of the slogan in Maryland shot up during Waves 5, 6, and 7, peaking at 36.7% during Wave 6.

Table 19. Aware of *You Drink & Drive. You Lose.* by Name; Delaware and Maryland

		"You Drink & Drive. You Lose."	
STATE	**Wave**	**Don't Know Name**	**Know Name**
DE	**1 - 2002**	**82.9%** (272)	*17.1%* (56)
	2 - 2002	74.4% (67)	25.6% (23)
	3 - 2003	*56.9%* (37)	**43.1%** (28)
	4 - 2003	73.5% (72)	26.5% (26)
	5 - 2004	70.5% (167)	29.5% (70)
	6 - 2004	*59.3%* (150)	**40.7%** (103)
	7 - 2005	*60.3%* (73)	**39.7%** (48)
	Total	70.3% (838)	29.7% (354)
MD	**1 - 2002**	**81.9%** (636)	*18.1%* (141)
	2 - 2002	**81.8%** (845)	*18.2%* (188)
	3 - 2003	**84.0%** (824)	*16.0%* (157)
	4 - 2003	78.4% (425)	21.6% (117)
	5 - 2004	*73.1%* (781)	**26.9%** (288)
	6 - 2004	*63.3%*(439)	**36.7%** (255)
	7 - 2005	*68.3%* (727)	**31.7%** (338)
	Total	75.9% (4,677)	24.1% (1,484)

Note: Bold indicates statistically significantly higher than average.
Underlined italics indicate statistically significantly lower than average.

There were no significant increases or reductions in awareness of the slogan "*Team DUI*" or the slogan "*Please Step Away From Your Vehicle*" in Delaware or Maryland.

Awareness of Recent News about Impaired Driving

In Maryland, the percentage of respondents indicating that they had heard recent news about impaired driving was significantly lower in Waves 3, but significantly higher in Waves 6 and 7 at more than 50% (see Table 20). Similarly, Delaware had significantly more respondents who had heard recent news about impaired driving during Wave 6. Each State showed increases in awareness through the waves, although news awareness in Delaware was significantly higher than in Maryland.

Table 20. Aware of Recent News About Impaired Driving Wave; Delaware and Maryland

		Aware of Recent News About Impaired Driving	
STATE	**Wave**	**No**	**Yes**
DE	**1 - 2002**	50.0% (146)	50.0% (146)
	2 - 2002	50.6% (42)	49.4% (41)
	3 - 2003	43.3% (26)	56.7% (34)
	4 - 2003	39.8% (37)	60.2% (56)
	5 - 2004	50.2% (115)	49.8% (114)
	6 - 2004	*39.8%* (96)	**60.2%** (145)
	7 - 2005	37.6% (41)	62.4% (68)
	Total	45.4% (503)	54.6% (604)
MD	**1 - 2002**	51.5% (343)	48.5% (323)
	2 - 2002	55.0% (518)	45.0% (423)
	3 - 2003	**57.6%** (505)	*42.4%* (371)
	4 - 2003	51.0% (266)	49.0% (256)
	5 - 2004	52.3% (527)	47.7% (480)
	6 - 2004	*46.2%* (298)	**53.8%** (347)
	7 - 2005	*48.4%* (480)	**51.6%** (511)
	Total	52.0% (2,937)	48.0% (2,711)

Note: Bold indicates statistically significantly higher than average.
Underlined italics indicate statistically significantly lower than average.

Drinking and Driving Experiences

In both Delaware and Maryland, most respondents (87.1% and 90% respectively) reported no driving within two hours of drinking in the past 30 days (see Table 21). This percentage in Wave 4 dropped significantly to 73.8% in Delaware and rose significantly in Waves 6 and 7 in Maryland. Overall, Maryland had a higher percentage reporting 0 times of driving after drinking and a lower percentage reporting 3 or more times of driving after drinking than did Delaware.

Table 21. Times Driving Within Two Hours of Drinking in Past 30 Days by Wave; Delaware and Maryland

		Times Driving After Drinking in Past 30 days			
STATE	**Wave**	**0**	**1**	**2**	**3 or More**
DE	**1 - 2002**	89.2% (263)	5.1% (15)	2.7% (8)	*3.1%* (9)
	2 - 2002	**93.8%** (75)	1.3% (1)	1.3% (1)	3.8% (3)
	3 - 2003	85.5% (47)	7.3% (4)	1.8% (1)	5.5% (3)
	4 - 2003	*73.8%* (59)	6.3% (5)	6.3% (5)	**13.8%** (11)
	5 - 2004	86.1% (192)	4.0% (9)	4.0% (9)	5.8% (13)
	6 - 2004	85.2% (196)	6.1% (14)	3.5% (8)	5.2% (12)
	7 - 2005	92.9% (104)	3.6% (4)	1.8% (2)	*1.8%* (2)
	Total	87.1% (936)	4.8% (52)	3.2% (34)	4.9% (53)
MD	**1 - 2002**	87.9% (582)	3.3% (22)	3.0% (20)	**5.7%** (38)
	2 - 2002	*87.8%* (819)	5.0% (47)	3.2% (30)	4.0% (37)
	3 - 2003	91.2% (818)	3.1% (28)	2.6% (23)	3.1% (28)
	4 - 2003	88.6% (398)	3.6% (16)	2.2% (10)	**5.6%** (25)
	5 - 2004	90.2% (882)	4.4% (43)	2.6% (25)	2.9% (28)
	6 - 2004	**91.9%** (601)	3.8% (25)	1.5% (10)	2.8% (18)
	7 - 2005	**91.7%** (920)	4.4% (44)	1.7% (17)	*2.2%* (22)
	Total	90.0% (5,020)	4.0% (225)	2.4% (135)	3.5% (196)

Note: Bold indicates statistically significantly higher than average.
Underlined italics indicate statistically significantly lower than average.

Similarly, more than 95% of respondents reported no times of driving after drinking too much, in both Delaware and Maryland, with Delaware showing the lowest proportion in Wave 4 and Maryland showing the lowest in Waves 1 and 4 (See Table 22). Of course for this variable an increase in reporting no times driving after drinking too much is desired, thus the overall trends are in the right direction. In Maryland, the proportion of individuals reporting no times was less in Wave 1, rose in Wave 3, and lowered again in Wave 4, before leveling off.

Table 22. Times of Driving After Too Much Drinking by Wave; Delaware and Maryland

		Times of Driving After Too Much Drinking			
STATE	**Wave**	**0**	**1**	**2**	**3 or More**
DE	**1 - 2002**	97.1% (272)	1.4% (4)	0.7% (2)	0.7% (2)
	2 - 2002	98.7% (77)	1.3% (1)	0.0% (0)	0.0% (0)
	3 - 2003	94.2% (49)	1.9% (1)	1.9% (1)	1.9% (1)
	4 - 2003	*91.0%* (71)	**5.1%** (4)	0.0% (0)	**3.8%** (3)
	5 - 2004	96.3% (207)	2.8% (6)	0.5% (1)	0.5% (1)
	6 - 2004	98.1% (211)	0.0% (0)	0.5% (1)	1.4% (3)
	7 - 2005	98.2% (112)	0.9% (1)	0.0% (0)	0.9% (1)
	Total	96.8% (999)	1.6% (17)	0.5% (5)	1.1% (11)
MD	**1 - 2002**	*95.5%* (600)	1.3% (8)	0.8% (5)	**2.4%** (15)
	2 - 2002	97.5% (881)	1.2% (11)	0.3% (3)	1.0% (9)
	3 - 2003	**98.7%** (861)	0.5% (4)	0.0% (0)	0.8% (7)
	4 - 2003	*95.2%* (412)	0.9% (4)	0.9% (4)	**3.0%** (13)
	5 - 2004	98.1% (931)	1.1% (10)	0.4% (4)	*0.4%* (4)
	6 - 2004	97.4% (625)	0.3% (2)	0.5% (3)	1.9% (12)
	7 - 2005	97.9% (963)	0.9% (9)	0.2% (2)	1.0% (10)
	Total	97.4% (5,273)	0.9% (48)	0.4% (21)	1.3% (70)

Note: Bold indicates statistically significantly higher than average.
Underlined italics indicate statistically significantly lower than average.

DMV Survey Results: West Virginia

As indicated earlier, DMV surveys were administered in support of this project for only the first three waves (Summer 2002, Fall 2002, and Winter 2003). A total of 5,700 surveys were sent to West Virginia DMV offices (1,300 in Wave 1 and 2,200 in both Waves 2 and 3) and 4,922 were received back for analysis. In Wave 1, only 1,300 surveys were sent out to the DMV offices. West Virginia DMV personnel reproduced the survey themselves when more were needed.

Table 23 shows the distribution of survey respondents by wave. The youngest age group (16 to 20) became progressively larger from wave to wave.

Table 23. Age Category by Wave; West Virginia

			Wave			Total
			1	2	3	
Age Category	16-20	Count	65	153	204	422
		%	4.1%	8.1%	14.1%	8.6%
	21-29	Count	286	345	343	974
		%	18.1%	18.4%	23.7%	19.9%
	30-45	Count	524	637	474	1,635
		%	33.2%	33.9%	32.7%	33.3%
	46-64	Count	555	574	345	1474
		%	35.2%	30.5%	23.8%	30.0%
	65 or older	Count	147	170	84	401
		%	9.3%	9.0%	5.8%	8.2%
Total		Count	1,577	1,879	1,450	4,906
		%	100.0%	100.0%	100.0%	100.0%

Table 24. Driving Frequency by Wave; West Virginia

			Wave			Total
			1	2	3	
Driving Frequency	Every day	Count	1,277	1,490	1,091	3,858
		%	81.3%	79.8%	75.5%	79.0%
	Several days a week	Count	208	251	211	670
		%	13.2%	13.5%	14.6%	13.7%
	Once a week or less	Count	39	60	74	173
		%	2.5%	3.2%	5.1%	3.5%
	Only certain times a year	Count	11	29	25	65
		%	.7%	1.6%	1.7%	1.3%
	Never	Count	35	36	44	115
		%	2.2%	1.9%	3.0%	2.4%
Total		Count	1,570	1,866	1,445	4,881
		%	100.0%	100.0%	100.0%	100.0%

Seat Belt Use

The percentage of West Virginia respondents reporting always using seat belts decreased by almost 13 percentage points from Wave 1 to Wave 3 (Table 25).

Table 25. Reported Seat Belt Use by Wave; West Virginia

			Wave			Total
			1	2	3	
Seat Belt Use	Always	Count	1,228	1,352	941	3,521
		%	78.1%	72.4%	65.2%	72.1%
	Nearly always	Count	228	273	251	752
		%	14.5%	14.5%	17.4%	15.4%
	Sometimes	Count	79	150	149	378
		%	5.0%	8.0%	10.3%	7.7%
	Seldom	Count	23	48	57	128
		%	1.5%	2.6%	4.0%	2.6%
	Never	Count	15	44	45	104
		%	1.0%	2.4%	3.1%	2.1%
Total		Count	1,573	1,867	1,443	4,883
		%	100.0%	100.0%	100.0%	100.0%

Enforcement

Among West Virginia respondents queried about the likelihood of being stopped by a police officer if driving impaired, there was an over 5-percentage-point increase found in Wave 3 respondents reporting *somewhat likely* and less than a 2-percentage-point decrease in respondents indicating *almost certain* from in Wave 3 compared to Wave 1 (see Table 26).

Table 26. Likelihood of Being Stopped by Police Officer by Wave; West Virginia

			Wave			Total
			1	2	3	
Likelihood of Being Stopped by Police Officer	Almost certain	Count	222	318	246	786
		%	23.7%	23.3%	21.9%	23.0%
	Very likely	Count	242	355	271	868
		%	25.9%	26.0%	24.1%	25.4%
	Somewhat likely	Count	212	301	315	828
		%	22.6%	22.1%	28.0%	24.2%
	Somewhat unlikely	Count	97	155	118	370
		%	10.4%	11.4%	10.5%	10.8%
	Very unlikely	Count	163	234	173	570
		%	17.4%	17.2%	15.4%	16.7%
Total		Count	936	1,363	1,123	3,422
		%	100.0%	100.0%	100.0%	100.0%

When asked about the intensity of DWI enforcement, there was little change in the proportion of respondents feeling that it was either too strong or too weak.

Table 27. Drinking and Driving Enforcement by Wave; West Virginia

West Virginia			Wave 1	Wave 2	Wave 3	Total
Drinking and Driving Enforcement	Too strong	Count	43	61	57	161
		% within Wave	3.0%	3.5%	4.2%	3.5%
	Too weak	Count	635	765	622	2,022
		% within Wave	43.8%	44.0%	45.7%	44.4%
	About right	Count	564	726	521	1,811
		% within Wave	38.9%	41.7%	38.3%	39.8%
	Don't know	Count	207	187	162	556
		% within Wave	14.3%	10.8%	11.9%	12.2%
Total		Count	1,449	1,739	1,362	4,550
		% within Wave	100.0%	100.0%	100.0%	100.0%

Seen or Heard of an Impaired Driving Checkpoint

In West Virginia, there was a 7-percentage-point increase in Wave 3 from Wave 1 in the proportion of respondents reporting they had seen or heard about a sobriety checkpoint.

Table 28. Seen or Heard of Checkpoint by Wave; West Virginia

West Virginia			Wave 1	Wave 2	Wave 3	Total
Seen or Heard of Checkpoint	Yes	Count	517	758	595	1,870
		%	36.7%	43.8%	43.8%	41.6%
	No	Count	891	974	764	2,629
		%	63.3%	56.2%	56.2%	58.4%
Total		Count	1,408	1,732	1,359	4,499
		%	100.0%	100.0%	100.0%	100.0%

Checkpoint Strikeforce

In terms of awareness of specific media messages, *CPSF* was more frequently recognized by Wave 3, though still only about 12% recognized the slogan. This change in West Virginia (see Table 29) was an almost 8-percentage-point increase in number of respondents recognizing the name.

Table 29. *Checkpoint Strikeforce* by Wave; West Virginia

West Virginia			Wave 1	Wave 2	Wave 3	Total
Checkpoint Strikeforce	Don't know name	Count	1521	1750	1281	4,552
		%	96.0%	92.8%	88.3%	92.5%
	Know name	Count	64	136	170	370
		%	4.0%	7.2%	11.7%	7.5%
Total		Count	1,585	1,886	1,451	4,922
		%	100.0%	100.0%	100.0%	100.0%

Heard Recent News about Impaired Driving

In West Virginia there was little change in respondents indicating they had seen or heard recent news about impaired driving. The increase in Wave 3 relative to wave 1 was less than 2 percentage points (see Table 30).

Respondents also reported learning about impaired driving enforcement more frequently through radio or an actual checkpoint at Wave 3 than earlier. There was no change in reports about the other media. This is in concert with the actual program where the paid media buy was more concentrated in radio than other media.

Table 30. Aware of Recent News About Impaired Driving Wave; West Virginia

			Wave			Total
			1	2	3	
Aware of Recent News About Impaired Driving	Yes	Count	733	945	733	2,411
		% within Wave	52.5%	54.6%	54.1%	53.8%
	No	Count	664	785	621	2,070
		% within Wave	47.5%	45.4%	45.9%	46.2%
Total		Count	1,397	1,730	1,354	4,481
		% within Wave	100.0%	100.0%	100.0%	100.0%

Drinking and Driving Experiences

In West Virginia, the majority of respondents reported not driving within two hours of drinking in the past 30 days. This remained consistent across all 3 waves. West Virginia saw an increase in percentage of Wave 3 respondents reporting to have driven *three or more* times within two hours of drinking (Table 31).

Table 31. Times Driving Within Two Hours of Drinking in Past 30 Days by Wave; West Virginia

			Wave			Total
			1	2	3	
Times Driving After Drinking in Past 30 Days	0	Count	1,165	1,546	1,183	3,894
		% within Wave	90.0%	89.5%	88.5%	89.3%
	1	Count	57	64	50	171
		% within Wave	4.4%	3.7%	3.7%	3.9%
	2	Count	36	47	28	111
		% within Wave	2.8%	2.7%	2.1%	2.5%
	3 or more	Count	37	71	76	184
		% within Wave	2.9%	4.1%	5.7%	4.2%
Total		Count	1,295	1,728	1,337	4,360
		% within Wave	100.0%	100.0%	100.0%	100.0%

Similarly, most respondents did not report any times driving after drinking too much and this remained consistent across the three waves. However, there was a slight decrease between Waves 1 and 3. However, though fewer indicated doing so *three or more* times at Wave 3, slightly more did so for 1 and 2 times (see Table 32).

Table 32. Times of Driving After Too Much Drinking by Wave; West Virginia

			Wave			Total
			1	2	3	
Times of Driving After Too Much Drinking	0	Count	1,193	1,625	1,226	4,044
		% within Wave	96.7%	97.0%	94.5%	96.1%
	1	Count	9	27	30	66
		% within Wave	.7%	1.6%	2.3%	1.6%
	2	Count	4	11	17	32
		% within Wave	.3%	.7%	1.3%	.8%
	3 or more	Count	28	13	24	65
		% within Wave	2.3%	.8%	1.9%	1.5%
Total		Count	1,234	1,676	1,297	4,207
		% within Wave	100.0%	100.0%	100.0%	100.0%

West Virginia Summary

In summary, West Virginia survey results for the first project year indicate some shifts in the desired direction in terms of self-reported drinking driving behavior and perceptions of impaired driving enforcement, particularly checkpoints. However, not all of the alcohol results were as dramatic as might be desired. Although awareness of the *CPSF* slogan nearly tripled in West Virginia, it had only reached about 12% of respondents, and those reporting having seen recent news about impaired driving stayed stable as did self-reported drinking and driving behavior. There also was little change in perceptions of whether impaired driving enforcement levels were appropriate. In general, similar changes were not observed for the measures of seat belt use. In fact, self-reported always using seat belts declined by about 13% in West Virginia, and also declined in Delaware. It should be noted that the changes observed are relatively small and generally not statistically significant.

Summary

In summary, the Delaware and Maryland DMV survey results indicate some shifts in the desired direction, particularly in self-reported seat belt use, awareness of checkpoints, various DWI enforcement slogans (*Checkpoint Strikeforce* and *You Drink & Drive. You Lose.*) and new initiatives against impaired driving, along with self-reported drinking driving behavior. In Delaware, reports of having seen or heard about an impaired driving checkpoint increased more than 30 percentage points from Wave 1 to Wave 7; Maryland experienced a significant increase as well. Although awareness of the *CPSF* slogan more than doubled in Maryland and increased five-fold in Delaware, it only reached 25.6% in Delaware and 7.5% in Maryland. Respondents reporting having seen recent news about impaired driving increased more than 10 percentage points in Delaware and also increased in Maryland, particularly during Waves 6 and 7. Self-reported seat belt use increased, particularly during Wave 6 in Maryland, and during Waves 5 and 6 in Delaware after a dip during Waves 3 and 4. Questions about awareness of impaired driving enforcement and checkpoint activities showed increased awareness among respondents and give credence to the hypothesis that the CPSF enforcement public education campaign may be beginning to penetrate its target audience. However, it should be noted that although the changes observed are statistically significant ($p<.05$) the vast majority of respondents were still not familiar with the *CPSF* slogan. Nonetheless, the trends seem to be

going in the desired direction and the potential remains that in subsequent years these trends will continue.

Additional Public Awareness Survey Results

University of Maryland Telephone Survey

Under sponsorship of the Maryland Highway Safety Office, the University of Maryland Department of Public and Community Health conducted statewide random digit dial telephone surveys at the midpoint (October) and end (January) of each of the first three years of the *CPSF* program. Each wave had approximately 850 respondents and respondents were asked questions nearly identical to those on the DMV survey.

In each year there was an increase of about 10 percentage points in the number of respondents reporting having seen or heard about a checkpoint in the previous 30 days from the October to the January survey: initially from 23% to 32% in 2002 gradually rising from 26% to 38% in 2004.

A somewhat different pattern presented when respondents were asked if they knew of any impaired driving enforcement program in Maryland. For the *CPSF* slogan, there was an increase from 18% in October 2002 to 24% in January 2003, but in subsequent years the pattern was from 5% to 9% in 2003 and from 6% to 10% in 2004. The nationwide *You Drink and Drive. You Lose.* slogan was generally more frequently mentioned, with the frequency rising between 2002 and 2004. For the 2002 period the two values were 22% and 24%, for 2003 they were 6% and 17% and for 2004 they were 15% and 30%.

On this Maryland survey, the highest values for those respondents indicating that they were very likely or almost certain to be stopped by police if they drove after having too much to drink came during the first program year, rising from 32% to 34% from October 2002 to January 2003. In the succeeding years the values varied from 23% to 26%. (Figures portraying these results appear in Appendix J.)

Andres McKenna Research / Washington Regional Alcohol Telephone Survey in Virginia

As part of their assessment of their media efforts on behalf of Virginia, WRAP commissioned Andres McKenna Research to conduct a random digit dial telephone survey at the beginning and just after the 2002 *CPSF* implementation period. This survey of 800 respondents per wave (400 adults and an oversample of 400 respondents age 18 to 34) asked about awareness of the *CPSF* slogan by querying “First off, have you heard or read or seen anything in the media recently about the *Checkpoint Strikeforce* sobriety checkpoints in Virginia?” The respondents to this prompted question indicated much higher name recognition than those responding based on recall described in the previous surveys. At baseline, there was 36% recognition of the *CPSF* brand. This rose to 50% in January 2003.

Respondents also indicated overwhelming support of checkpoints with 89% either strongly or somewhat supporting at baseline and the 91% at follow-up. Nearly a third felt that checkpoints were a useful tool against drunk driving on both waves. Additionally, at the second wave, 10% indicated that the *CPSF* checkpoints changed their behavior through such measures as drinking less or using a designated driver. Over 80% of those who indicated they had changed their behavior planned to make those changes permanent. Again, over 80% felt that sobriety

checkpoints were a good investment of tax dollars. Tables summarizing the results of this survey appear in Appendix K.

Preusser Research Group Surveys in Pennsylvania and West Virginia

Presser Research Group conducted DMV surveys before, during, and after special checkpoint blitz periods which occurred in late June or early July 2003 at the time of the kickoff of the second year of the *Checkpoint Strikeforce* program. These surveys were conducted in conjunction with an evaluation they were conducting of Strategic Evaluation States identified by NHTSA for emphasis on impaired-driving enforcement and public information. Approximately 650 surveys were administered in each State in each wave of the survey.

In Pennsylvania, when asked if they had been through a sobriety checkpoint in the past 30 days, there was virtually no change from the 8% reported at baseline on subsequent waves. However, the proportion reporting having been exposed to impaired driving information rose from 73% at baseline to 79% post-blitz with the most frequently cited source post-blitz being television (56%) followed by newspaper (35%). The most frequently cited slogan was "*Friends don't let Friends Drive Drunk,*" which moved from 83% at baseline to 75% at post-blitz (a significant decline) while "*You Drink & Drive. You Lose.*" increased significantly from 23% to 38%. *Checkpoint Strikeforce* was essentially unchanged moving from 9% to 12%.

In West Virginia there was a significant increase from 18% to 26% of respondents reporting that the chances of arrest were "always" if they drove after drinking. In terms of going through a checkpoint in the past 30 days, responses varied significantly moving from 12% pre-blitz to 9% during and up to 14% after. Recent exposure to impaired driving information also rose significantly, from 60% before to 77% after. Again, television was the most frequently cited source post-blitz at 50%, followed by newspaper at 30% and radio at 23%. Recognition of the *Checkpoint Strikeforce* slogan was much higher in West Virginia, rising from 25% pre-blitz to 42% post-blitz, but it still followed *Friends Don't Let Friends Drive Drunk,* 84% pre-blitz to 69% post-blitz and *You Drink & Drive. You Lose,* 27% pre-blitz and 45% post-blitz.

Summary tables of these survey results appear in Appendix L.

Roadside BAC Measures

A direct measure of the behavior that *CPSF* is intended to alter is the actual BACs of nighttime drivers on the roadways. In an effort to measure this, we developed a data collection procedure whereby we obtained voluntary, anonymous breath tests from drivers passing through sobriety checkpoints. We also gathered data about driver demographics, passengers, and vehicle type, through observations. Cooperation was obtained from law enforcement agencies in three of the *CPSF* jurisdictions (Delaware, Maryland, and Virginia) and data collection activities were integrated into checkpoint operations in each of those jurisdictions in late May, June, and early July 2004. Similar data collection activities were conducted in 2005 so that results from those two data collection periods could be compared. A brief description of the data collection procedures appears below (see Appendix M for complete data collection protocol), followed by summary results.

The Data Collection Activity

The general purpose of the roadside data collection activity is to obtain as many observational assessments and breath samples as possible from a random sample of, in this case, nighttime drivers. Data collection consists of two parts:

1. Observations recorded on handheld personal digital assistants (PDAs) or on pencil / paper as backup; and
2. BAC samples.

During a regular sobriety checkpoint, officers stop all vehicles, or a systematic selection of vehicles, to evaluate drivers for signs of alcohol or other drug impairment. Uniformed police officers approach drivers and identify themselves, describe the purpose of the stop, and ask the driver questions designed to allow the officer to observe the driver's general demeanor. Drivers who do not appear impaired are immediately waved through, while those who show signs of impairment are usually moved to a safe holding area where they are investigated further and then arrested or released. When a data collection activity is integrated into a police sobriety checkpoint, the uniformed officer's primary job is to perform normal enforcement duties. The data collection team, consisting of one field supervisor and two to six data collectors, is incorporated into that established checkpoint activity. See Appendix N for talking points used to brief police officers.

Each data collector is paired with an officer in the enforcement line. While the officer questions the driver, the data collector, who is positioned just behind and to one side of the officer, observes the driver and records observations on demographics and seat belt use into the handheld PDA. At the conclusion of the officer's investigation, the driver is told by the officer that the researcher in the white lab coat would like to talk. The officer typically says, "This researcher would like to talk to you." or "This researcher wants a few words with you and then you're free to go."

The officer then steps back and out of direct view, and the data collector steps forward and requests the anonymous breath test, typically saying, "I would like to ask you to provide a voluntary, anonymous breath test for research purposes. The result is stored inside the device and cannot be read until tomorrow. Please take a deep breath and blow slow and steady into the tube."

When the breath test is complete, the data collector returns the driver to the officer's control for traffic direction. The breath test result is not displayed, but rather stored in memory for later download and analysis. Ideally, the officer at the first position in line keeps that driver in place until all vehicles are finished and all vehicles are released together.

Additionally, officers who detain drivers who were selected to be in the roadside survey for further investigation, receive a pink card to fill in about the outcome of that subject (e.g., BAC citation, arrest, release, etc.) once the officer's investigation is complete.

2004 Roadside BAC Data

Two data collection activities were held in Delaware in 2004 (see Table 23). Of the 836 passing vehicles, 315 were selected for the survey. Vehicles were only selected for participation in the survey if the surveyor had completed data entry on the previous subject and if the checkpoint was actively stopping vehicles. Standard checkpoint operations call for allowing free traffic flow when traffic is backed up. Vehicles were not selected during that condition. Of the 315 selected, 294 were approached by data collectors and 21 were pulled aside by officers for further investigation. From these, officers obtained BACs for 18 drivers and 3 of the drivers either refused or were pulled aside for non-alcohol reasons and thus the officer did not request a breath test. Researchers obtained cooperation from 280 drivers and 14 refused, yielding an overall participation rate of 298 out of 315 drivers or 94.6%. However, of the 280 drivers who complied with the researchers' requests, there were 42 instances where either the driver could not provide a sufficient breath sample or the PBT yielded no test result. Thus, overall 256 valid breath tests were obtained from 315 drivers yielding a valid BAC rate of 81.3%. From these, data collectors obtained 238 valid breath samples and the police provided BAC data from 18 of the drivers they pulled aside. Of the valid samples, the vast majority (82.8%) showed BACs of zero; however, 4.3% were at or above the illegal limit of .08.

Table 33. 2004 Delaware Data (Two Checkpoints Combined: 5/7/04 and 5/21/04)

	Number	Percentage
Vehicles passing thru checkpoint	836	
Vehicles selected for survey	315	
Drivers pulled out by police for investigation	21	
BAC Provided	18 [1,2]	85.7%
No BAC	3	14.3%
Drivers approached by researchers	294	
Valid Breath Tests	238 [1,2]	81.0%
No Test / Insufficient Breath Sample	42 [1]	14.3%
Refused	14	4.8%
Distribution of BACs		
.00	212	82.8%
.01-.05	27	10.6%
.051-.079	6	2.3%
.08+	11 [3,4]	4.3%

[1] Combined count of compliant drivers yields a total of 298 of 315 (94.6%).
[2] Combined count of drivers who provided a valid BAC yields a total of 256 of 315 (81.3%).
[3] Actual values collected by researchers were .084, .013, .106, .108, .156.
[4] Actual values collected by police were .080, .096, .130, .140, .140, .164.

One data collection activity was held in Maryland in 2004 (see Table 34). Of the 440 passing vehicles, 326 were selected for the survey. Of those, 10 were pulled out by officers with BAC results for eight, and 316 were approached by data collectors. Of those, data collectors obtained 239 valid breath samples. A total of 296 drivers out of 326 were compliant in at least attempting to provide a BAC, for a participation rate of 90.8%. A rate of 75.8% reflects the number of individuals who actually provided breath samples which yielded valid BAC test results (247 of 326 drivers); 49 BACs were not recorded either due to the drivers inability to provide a sufficient breath sample or the PBT could not record the breath sample. The distribution of BACs again suggests a high percentage of drivers who have a zero BAC (89.9%). Only a fraction of drivers had BACs above the legal limit (1.2%).

Table 34. 2004 Maryland Data (One Checkpoint: 7/3/04)

	Number	Percentage
Vehicles passing thru checkpoint	440	
Vehicles selected for survey	326	
Drivers pulled out by police for investigation	10	
BAC Provided	8 [1,2]	80.0%
No BAC	2	20.0%
Drivers approached by researchers	316	
Valid Breath Tests	239 [1,2]	75.6%
No Test / Insufficient Breath Sample	49 [1]	15.5%
Refused	28	8.9%
Distribution of BACs		
.00	222	89.9%
.01-.05	17	6.9%
.051-.079	5	2.0%
.08+	3 [3,4]	1.2%

[1] Combined count of compliant drivers yields a total of 296 of 326 (90.8%).

[2] Combined count of drivers who provided a valid BAC yields a total of 247 of 326 (75.8%).

[3] Actual values collected by researchers were .116, .173.

[4] Actual value collected by police was .080.

Five data collection activities were held in Fairfax County, Virginia, in 2004 (see Table 35). Of the 2,413 passing vehicles, 1,711 were selected for the survey. Of those, 37 were pulled out by officers who provided BAC results for 19 drivers, and 1,674 were approached by data collectors. Of those, data collectors obtained 1,271 valid breath samples; a participation rate of 92.5% was noted with 1,582 of 1,711 drivers attempting to provide BACs. Once the 292 drivers who failed to provide a sufficient sample were removed from that count, a total of 1,290 drivers of 1,711 had BACs recorded for a rate of 75.4%. The distribution of BACs was similar to the other areas in that a high percentage of drivers had zero BACs (90.8%), and a small proportion had BACs above the legal limit (1.9%).

Table 35. 2004 Virginia Data (Five checkpoints Combined: 5/28/04, 6/5/04, 6/19/04, 7/1/04, and 7/3/04)

	Number	Percentage
Vehicles passing thru checkpoint	2,413	
Vehicles selected for survey	1,711	
Drivers pulled out by police for investigation	37	
BAC Provided	19 [1,2]	54.5%
No BAC	18	45.5%
Drivers approached by researchers	1,674	
Valid Breath Tests	1,271 [1,2]	76.0%
No Test / Insufficient Breath Sample	292 [1]	17.4%
Refused	111	6.6%
Distribution of BACs		
.00	1,170	90.8%
.01-.05	65	5.0%
.051-.079	29	2.3%
.08+	26 [3,4]	1.9%

[1] Combined count of compliant drivers yields a total of 1,582 of 1,711 (92.5%).
[2] Combined count of drivers who provided a valid BAC yields a total of 1,290 of 1,711 (75.4%).
[3] Actual values collected by researchers were .081, .084, .086, .087, .095, .097, .097, .106, .107, .107, .110, .112, .123, .129, .132, .140, .166, .173, .190, over .400 (this subject probably took a drink of alcoholic beverage or mouthwash before the breath test).
[4] Actual values collected by police were .080, .094, .110, .138, .145, .145.

2005 Roadside BAC Data

Data were also collected in Delaware, Maryland, and Virginia in 2005.

Two data collection activities were held in Delaware in 2005 (see Table 36). Of the 1,239 passing vehicles, 249 were selected for the survey. Of those, 11 were pulled out by officers (four BACs provided), and 238 were approached by data collectors. Of those, data collectors obtained 181 valid breath samples. From these, a participation rate of 89.6% was calculated from the 223 of the 249 drivers attempting to provide BACs. However, the rate of drivers who provided valid BACs was 74.3% (185 of 249 drivers), reflecting the 38 drivers from whom BAC records were not recorded either due to an insufficient breath sample or a PBT error. Of the valid samples, the vast majority showed BACs of zero (91.9%). Only a fraction of drivers (1.1%) had BACs above the legal limit of .08.

Table 36. 2005 Delaware Data (Two Checkpoints Combined: 5/20/05, 6/24/05)

	Number	Percentage
Vehicles passing thru checkpoint	1,239	
Vehicles selected for survey	249	
Drivers pulled out by police	11	
BAC Provided	4 [1,2]	36.4%
No BAC	7	63.6%
Drivers approached by researchers	238	
Valid Breath Tests	181 [1,2]	76.1%
No Test / Insufficient Breath Sample	38 [1]	16.0%
Refused	19	8.0%
Distribution of BACs		
.00	170	91.9%
.01-.05	11	5.9%
.051-.079	2	1.1%
.08+	2 [3,4]	1.1%

[1] Combined count of compliant drivers yields a total of 223 of 249 (89.6%).
[2] Combined count of drivers who provided a valid BAC yields a total of 185 of 249 (74.3%).
[3] Actual value collected by researcher was .108.
[4] Actual value collected by police was .100.

One data collection activity was held in Maryland in 2005 (see Table 37). Of the 582 passing vehicles, 336 were selected for the survey. Of those, six were pulled out by officers (providing four BACS), and 330 were approached by data collectors. Of those, data collectors obtained 231 valid breath samples; a rate of 69.9% reflects the combined 235 drivers who provided valid BACs. However, 288 of 336 drivers participated by attempting to provide BACs yielding a participation rate of 85.7%. The distribution of BACs again suggests a high number of drivers who have zero BACs (92.8%). Only a fraction of drivers had BACs above the legal limit (1.7%).

Table 37. 2005 Maryland Data (One Checkpoint: 7/22/2005)

	Number	Percentage
Vehicles passing thru checkpoint	582	
Vehicles selected for survey	336	
Drivers pulled out by police for investigation	6	
BAC Provided	4 [1,2]	66.7%
No BAC	2	33.3%
Drivers approached by researchers	330	
Valid Breath Tests	231 [1,2]	70.0%
No Test / Insufficient Breath Sample	53 [1]	16.1%
Refused	46	13.9%
Distribution of BACs		
.00	218	92.8%
.01-.05	9	3.8%
.051-.079	4	1.7%
.08+	4 [3,4]	1.7%

[1] Combined count of compliant drivers yields a total of 288 of 336 (85.7%).
[2] Combined count of drivers who provided a valid BAC yields a total of 235 of 336 (69.9%).
[3] Actual values collected by researchers were .088, .103.
[4] Actual values collected by police were .090, .184.

Five data collection activities were held in Fairfax County, Virginia, in 2005 (see Table 38). Of the 3,020 passing vehicles, 1,654 were selected for the survey. Of those, 24 drivers were pulled out by officers, yielding 12 BACs, and 1,630 drivers were approached by data collectors. Of those, data collectors obtained 1,251 valid breath samples, yielding a total valid BAC rate of 76.4% (1,263 of 1,654 drivers). Of the 1,654 drivers who were selected and thus either approached by a researcher or pulled out by an officer, 1,492 attempted to provide BACs yielding a participation rate of 90.2%. The distribution of BACs was similar to the other areas in that a high percentage of drivers had zero BACs (92.4%), and a small proportion had BACs above the legal limit (1.4%).

Table 38. 2005 Virginia Data (Five Checkpoints Combined: 5/28/05, 6/04/05, 6/11/05, 6/18/05, and 7/09/05)

	Number	Percentage
Vehicles passing thru checkpoint	3,020	
Vehicles selected for survey	1,654	
Drivers pulled out by police for investigation	24	
BAC Provided	12 [1,2]	50.0%
No BAC	12	50.0%
Drivers approached by researchers	1,630	
Valid Breath Tests	1,251 [1,2]	76.7%
No Test / Insufficient Breath Sample	229 [1]	14.0%
Refused	150	9.2%
Distribution of BACs		
.00	1,167	92.4%
.01-.05	61	4.8%
.051-.079	17	1.3%
.08+	18 [3,4]	1.4%

[1] Combined count of compliant drivers yields a total of 1,492 of 1,654 (90.2%).
[2] Combined count of drivers who provided a valid BAC yields a total of 1,263 of 1,654 (76.4%).
[3] Actual values collected by researchers were .080, .080, .081, .085, .091, .091, .094, .103, .103, .123, .129, .142, .181, .208.
[4] Actual values collected by police were .080, .093, .141, .144.

In Tables 39 and 40, we compare the year-to-year results of the roadside surveys conducted in Delaware and Virginia respectively. A similar comparison was not made for Maryland because the surveys were conducted in different areas of the State in each year and thus could not be meaningfully compared. Unfortunately, in Maryland the cooperating law enforcement agency in the first year did not wish to conduct the survey the next year. Examination of Table 39 reveals that for the Delaware survey, there was a reduction in the proportion of all drivers with positive BACs at all levels in 2005 relative to 2004. An ordinal χ^2 of 6.38 with a p value of .012 indicates that this reduction was statistically significant and also indicates that the higher the BAC category the greater the improvement. Separately, there was a statistically significant reduction in the proportion of drivers testing above .05 ($\chi^2 = 6.64$, $p = .010$).

Table 39. Roadside Survey BAC Distributions in Delaware by Year

	2004		2005	
	Number	Percentage	Number	Percentage
.00	212	82.8%	170	91.9%
.01-.05	27	10.5%	11	5.9%
.051-.079	6	2.3%	2	1.1%
.08+	11	4.3%	2	1.1%
TOTAL	256		185	

In Virginia, there was also some indication of reductions in the proportion of drivers at the two higher BAC levels from 2004 to 2005, but virtually none for the .01-.05 category ($\chi^2 = 3.32$, $p = .068$).

However, when all those above .05 were grouped and considered as a whole, there was a statistically significant reduction in the proportion of drivers above the .05 BAC level ($\chi^2 = 3.904$, $p = .048$).

Table 40. Roadside Survey BAC Distributions in Virginia by Year

	2004		2005	
	Number	Percentage	Number	Percentage
.00	1,170	90.8%	1,167	92.4%
.01-.05	65	5.0%	61	4.8%
.051-.079	29	2.3%	17	1.3%
.08+	26	1.9%	18	1.4%
TOTAL	1,289		1,263	

Crash Data

Effects on Crashes

The ultimate measure of the effectiveness of a program such as *CPSF* is whether it has an effect on alcohol-related crashes. To gain insight into whether this goal is being accomplished, we examined fatal crashes from the FARS file from the period 1991 through 2004 using interrupted time series analysis procedures. This approach allowed for an examination of the trends leading up to the intervention period, which began in July 2002. It also allowed an examination of the effect on crashes during the last 6 months of 2002 and continuing through the end of 2004, for a total of 30 months post- (or, "during-") intervention.

We analyzed FARS data for all the States in the Mid-Atlantic Region (and for the rest of the United States, as a comparison) for the period of 1991–2004, inclusive. A period of this length was selected in order to provide a number of 6-month (July through December) periods prior to the initial intervention period of July through December 2002 so that the seasonal patterns of alcohol-related crashes could be well established in the statistical model we were using to test for program effect. This insured that we would not mistakenly attribute any change which might occur during the intervention period to the intervention which was really just a matter of a seasonal (or other time-related) variation in alcohol-related crashes. We selected all drivers involved in fatal crashes during this period, separated them into alcohol-involved drivers (any measured or imputed BAC of .01 or above) (see Table 41) and sober drivers (see Table 42). The proportion of alcohol-involved driver as a function of all drivers is presented in Table 43. Examination of these raw data on a year-to-year basis can be somewhat misleading because it does not take into account the long-term patterns (such as trends) or other time-related dynamics in the full 14-year series. This is particularly true when one looks at single States, where the numbers are smaller, and inherently more variable. Thus the need to conduct interrupted time series analyses, as described below. We use drivers in fatal crashes as the unit of analysis because the specific behavior the program is intended to modify is that of alcohol-involved driving. Because not all drivers in fatal crashes are tested for the presence of alcohol, NHTSA has developed a procedure for categorizing non-tested drivers as alcohol-involved or non-alcohol-involved based on characteristics of the driver and the crash (Rubin, Schaffer, & Subrananian, 1998). We used that imputation procedure for these analyses.

We aggregated the alcohol-involved and non-alcohol-involved driver groups into monthly counts for each State in the Mid-Atlantic region. We then analyzed the monthly series of alcohol-involved drivers using ARIMA[6] intervention models, using the monthly counts of sober drivers involved in fatal crashes for that same State as a regressor series in the model. Annual (or "cyclical" effects) were accounted for by modeling seasonal ARIMA parameters where necessary. The intervention was tested using a dichotomous variable, modeled as an

[6] ARIMA (used for example in some time series intervention analyses) is the mathematical modeling of the dynamics within a time series to account for stochastic processes that produce time-related patterns in the series. The term ARIMA is a three-part acronym (AR, I, MA) that stands for the three types of dynamics that are accounted for by the model parameters: auto-regressive (AR), integration (I), and moving average (MA). An ARIMA process is the composite result made up of the sums of any auto-regressive and moving-average components, as well as any trend or drift (integration) that causes the series to not be stationary (i.e., not constant level).

abrupt / persistent change—which was a single step function beginning at July 2002, and continuing for the remaining 30 months through the end of the series.

These analyses allow us to take into account the existing patterns and trends in alcohol-involved crashes and then see if the intervention (the implementation of *CPSF*) altered that pattern. By incorporating non-alcohol-involved drivers into the analysis, we can control for other factors that may influence the pattern / trend, such as weather factors and economic influences. Finally, the separate series for all the States for this region were aggregated into an overall regional series, which also was analyzed using the same methods. Table 43 presents these data on an annual basis expressed as a percentage of alcohol-involved crashes.

Table 41. FARS Data 1991-2004: Alcohol-Involved Drivers in Fatal Crashes*

	DC			DELAWARE			MARYLAND			PENNSYLVANIA			VIRGINIA			WEST VIRGINIA		
YEAR	Jan-Jun	Jul-Dec	*Total*	Jan-Jun	Jul-Dec	*Total*	Jan-Jun	Jul-Dec	*Total*	Jan-Jun	Jul-Dec	*Total*	Jan-Jun	Jul-Dec	*Total*	Jan-Jun	Jul-Dec	*Total*
1991	25	15	***40***	13	7	***20***	98	107	***205***	341	388	***729***	153	199	***352***	81	99	***180***
1992	18	32	***50***	7	11	***18***	76	122	***198***	308	342	***650***	139	179	***318***	72	92	***164***
1993	18	30	***48***	11	9	***20***	82	99	***181***	280	344	***624***	151	185	***336***	85	76	***161***
1994	22	29	***51***	7	20	***27***	77	108	***185***	239	324	***563***	129	182	***311***	59	88	***147***
1995	15	24	***39***	15	14	***29***	108	93	***201***	257	283	***540***	148	165	***313***	62	85	***147***
1996	17	25	***42***	12	12	***24***	71	87	***158***	238	280	***518***	140	171	***311***	54	69	***123***
1997	21	32	***53***	16	11	***27***	80	110	***190***	257	302	***558***	161	185	***346***	65	65	***130***
1998	20	16	***36***	13	14	***27***	92	83	***175***	247	318	***565***	129	164	***293***	67	61	***128***
1999	14	18	***32***	13	7	***20***	81	93	***174***	244	291	***535***	110	167	***277***	71	52	***123***
2000	29	25	***54***	10	7	***17***	79	115	***194***	245	318	***563***	131	179	***310***	78	80	***158***
2001	16	35	***51***	16	16	***32***	107	139	***246***	241	334	***575***	144	158	***302***	60	65	***125***
2002	15	25	***40***	15	8	***23***	112	115	***227***	273	307	***580***	169	146	***315***	81	80	***161***
2003	23	33	***56***	13	16	***28***	97	130	***227***	247	298	***545***	145	162	***307***	59	69	***128***
2004	22	27	***49***	14	6	***20***	125	139	***264***	262	325	***587***	161	173	***334***	58	78	***136***

* These are crashes where at least on driver in the crash had a BAC of .01 or higher.

Table 42. FARS Data 1991-2004: Drivers in Fatal Crashes, BAC = .00

	DC			DELAWARE			MARYLAND			PENNSYLVANIA			VIRGINIA			WEST VIRGINIA		
YEAR	Jan-Jun	Jul-Dec	*Total*	Jan-Jun	Jul-Dec	*Total*	Jan-Jun	Jul-Dec	*Total*	Jan-Jun	Jul-Dec	*Total*	Jan-Jun	Jul-Dec	*Total*	Jan-Jun	Jul-Dec	*Total*
1991	61	47	***108***	39	29	***68***	340	384	***724***	674	848	***1522***	351	482	***833***	157	193	***350***
1992	65	79	***144***	26	24	***50***	295	393	***688***	659	739	***1398***	405	412	***817***	166	191	***357***
1993	54	69	***123***	25	37	***62***	305	371	***676***	668	875	***1543***	419	409	***828***	175	201	***376***
1994	52	62	***114***	20	36	***56***	309	431	***740***	649	824	***1473***	361	492	***853***	142	205	***347***
1995	52	81	***133***	24	23	***47***	395	344	***739***	736	754	***1490***	401	482	***883***	149	195	***344***
1996	89	56	***145***	27	32	***59***	311	386	***697***	717	840	***1557***	417	482	***899***	170	174	***344***
1997	66	68	***134***	25	31	***56***	363	357	***720***	761	878	***1639***	497	497	***994***	169	231	***400***
1998	60	74	***134***	27	23	***50***	310	380	***690***	671	805	***1476***	420	511	***931***	161	177	***338***
1999	65	55	***120***	19	18	***37***	313	372	***685***	697	892	***1589***	418	464	***882***	188	202	***390***
2000	54	71	***125***	18	27	***45***	320	359	***679***	694	853	***1547***	441	532	***973***	169	193	***362***
2001	58	74	***132***	20	34	***54***	299	395	***694***	680	880	***1560***	524	511	***1035***	158	224	***382***
2002	55	78	***133***	30	19	***49***	321	410	***731***	795	815	***1610***	441	455	***896***	179	236	***415***
2003	91	86	***177***	30	39	***69***	370	400	***770***	818	857	***1675***	475	523	***998***	189	225	***414***
2004	73	90	**163**	37	25	***62***	342	379	***721***	803	885	***1,689***	433	545	***978***	213	247	***459***

Table 43. FARS Data 1991-2004: Percentage of Drivers in Fatal Crashes Who Were Alcohol-Involved

YEAR	DC	DE	MD	PA	VA	WV
1991	27.0%	22.7%	22.1%	32.4%	29.7%	34.0%
1992	25.8%	26.5%	22.3%	31.7%	28.0%	31.5%
1993	28.1%	24.4%	21.1%	28.8%	28.9%	30.0%
1994	30.9%	32.5%	20.0%	27.7%	26.7%	29.8%
1995	22.7%	38.2%	21.4%	26.6%	26.2%	29.9%
1996	22.5%	28.9%	18.5%	25.0%	25.7%	26.3%
1997	28.3%	32.5%	20.9%	25.4%	25.8%	24.5%
1998	21.2%	35.1%	20.2%	27.7%	23.9%	27.5%
1999	21.1%	35.1%	20.3%	25.2%	23.9%	24.0%
2000	30.2%	27.4%	22.2%	26.7%	24.2%	30.4%
2001	27.9%	37.2%	26.2%	26.9%	22.6%	24.7%
2002	23.1%	31.9%	23.7%	26.5%	26.0%	28.0%
2003	24.0%	28.9%	22.8%	24.5%	23.5%	23.6%
2004	23.1%	24.4%	26.8%	25.8%	25.5%	22.9%

Similar models were analyzed for a time series representing the rest of the United States (i.e., excluding the Mid-Atlantic States) pooled together, as a comparison group. To strengthen external validity against finding spurious Mid-Atlantic changes (i.e., to account for potential extraneous changes general to the nation), results for the individual States in the Mid-Atlantic Region, as well as for the entire region pooled, were contrasted with the analogous results for the rest-of-the-United-States comparison series. These contrasts were examined against the pooled standard error term, to determine whether any change found in the intervention States' series were significantly greater than observed changes for the rest of the Nation.

The intervention parameter (July 2002) for the contrast series (the rest of the United States) showed a 1.68% increase, which was non-significant (p=.682). To be conservative in attributing any effect to the *CPSF* program, any significant changes in the intervention (Mid-Atlantic Region) States should be significantly less than any national decrease, but the Nation actually *increased* instead, making the interpretation of any State decrease more straightforward and confident. The results, relative to zero change (one-tailed / directional tests) and those relative to the (non-significant) national increase are both shown in Table 44.

Table 44. Results of ARIMA Intervention Analyses: Change in the Alcohol-Positive Drivers Involved in Fatal Crashes in the Mid-Atlantic States Versus the Rest of the United States (1991-2004)

States	Percentage	Significance Value	Percentage, Relative to Rest of Country	Significance Value
Washington, DC	3.49%	(p=.372)	1.78%	(p=.438)
Delaware	-8.10%	(p=.204)	-9.63%	(p=.180)
Maryland	12.52%	(p=.069)	10.65%	(p=.130)
Pennsylvania	-3.62%	(p=.262)	-5.22%	(p=.227)
West Virginia	-15.32%	(p=.014)	-16.72%	(p=.018)
Virginia	-4.47%	(p=.245)	-6.06%	(p=.213)
Region, pooled	-5.48%	(p=.107)	-7.05%	(p=.119)
Rest of United States	+1.68%	(p=.682)		

Note: Intervention = July 1, 2002

Because the intervention parameter for the rest of the United States actually increased slightly, the contrast against this comparison group (instead of against zero change) actually strengthens the case that the Mid-Atlantic Region improved slightly more, relative to national patterns and trends for 1991-2004. While the contrasted effect size ("net" percentage change, State or region compared to the rest of the Nation) is slightly more favorable than those shown in second and third columns of Table 44, the significance values do not change much (as it involves a slightly larger standard error). The larger contrasted or "net" result for the region (-7.05%) is not statistically significant (p=.119) but the result for West Virginia is a statistically significant (p=.018).

Because some of these jurisdictions are of relatively small size, with relatively few fatal crashes, a shift in just a few drivers with or without alcohol can create series that fluctuate widely. Thus, discerning a significant change is difficult to do with confidence for these smaller jurisdictions. Therefore, it is important to examine the region as a whole, both because this is a regionwide program and because the larger sample size provides greater stability to the data and facilitates identifying true changes when they are present. The region as a whole did not show statistically significant evidence of a decrease in alcohol-involved drivers in fatal crashes beginning in July 2002 through 2004 compared with what would have been expected based on the regional trend for the previous 10 years, but the pattern of possible change observed for the Mid-Atlantic Region is that the Region might be improving on this measure to a greater degree than the rest of the United States. Some of the individual State's non-significant decreases (Pennsylvania, Virginia, and Delaware, when contrasted with the national pattern) might be statistically significant with another year's data post-intervention, if current trends continue.

The reader should note that the ARIMA analyses detect and model (account for) dynamic patterns in the measure (in this case, drivers who were alcohol-involved) which may be seasonal (cyclical) and / or nonseasonal, as well as trends and auto-correlated drift, which were already present before the intervention and are statistical predictors of what the measure would have continued to look like even had there been no intervention. Simply comparing the unadjusted totals (raw numbers of drivers or fatalities) in the pre- and post- periods can be deceiving and even counter-productive, because such a simplistic comparison does not take into account the various time-related patterns (what many non-statisticians loosely call "trends") developing within the data over time. For example, a higher number of fatalities in

the post period may actually be a relative *decrease* from expected levels, when plotted against the projections from pre-intervention trends.

In an attempt to better understand the pattern of findings for alcohol-related fatal crashes in Table 45 we present the percentage change observed in each jurisdiction and regionwide relative to the rest of the country beside the checkpoint implementation rate discussed in our earlier presentation of enforcement activity. As mentioned earlier, Tennessee in its *Checkpoint Tennessee* program attained a checkpoint implementation rate of 9.04 per 100,000 population. Thus, for example, Washington, DC, had an increase of 1.78% relative to the rest of the country in alcohol-related fatal crashes while conducting 6.12 checkpoints per 100,000 population. The 6.12 checkpoint rate was less than the 9.04 achieved in Tennessee and this may be a partial explanation of why there was not a measurable decrease in alcohol-related fatalities in the District. However, as discussed above, the smaller jurisdictions such as Washington, DC, and Delaware experience relatively few fatal crashes and thus this measure fluctuates quite a bit. However, it is useful to examine this relationship for the States and the Region as a whole. The one larger State that experienced a significant reduction in alcohol-related crashes (16.72%), West Virginia, achieved a very high rate of checkpoint activity, 13.33, well above the Tennessee rate. Similarly, Maryland, which experienced an increase in alcohol-related crashes, had the lowest rate of checkpoint activity. The pattern is fairly consistent among the larger States and the Region as a whole, which had an overall, non-significant, reduction of 7.05% and achieved a checkpoint implementation rate of 3.35 per 100,000 persons.

Table 45. Changes in Alcohol-Related Fatalities by Checkpoint Intensity

States	Percentage, Relative to Rest of Country	Significance Value	Checkpoints per 100,000 Population
Washington, DC	1.78%	(p=.438)	6.12
Delaware	-9.63%	(p=.180)	14.68
Maryland	10.65%	(p=.130)	1.40
Pennsylvania	-5.22%	(p=.227)	3.20
West Virginia	-16.72%	(p=.018)	13.33
Virginia	-6.06%	(p=.213)	3.17
REGION, pooled	-7.05%	(p=.119)	3.35

When we examine all alcohol-involved crashes, including alcohol-involved property damage, injury and fatal crashes in States where current enough data at those levels are available, we see additional evidence of a change associated with the initiation of *CPSF*, partly because the criterion threshold for a crash being counted is more broad (i.e., need not be so severe as to produce a fatality) and thus the numbers of crashes are much larger, producing series that are more amenable to detecting change via time series modeling. We examined data for two States for which we have sufficient crash data at all levels of severity. Maryland showed non-significant increases when crashes of all levels of severity were examined. West Virginia showed signs of reductions in alcohol-involved drivers on this broader measure. These patterns are consistent with the directional pattern displayed by the analyses of fatal crash data. These data and results of the ARIMA analysis appear in Tables 46-48. Analyses were conducted on data beginning in 1998 and ending in 2002 in Maryland and from 1999 through the first seven months of 2005 in West Virginia because those were years for which consistent reporting thresholds and the most current data were available.

Table 46. Maryland Data on Alcohol-Related (A-R) Crashes and Non-A-R Crashes and A-R as a Ratio to Non-A-R Crashes at All Levels of Severity (1998-2002)

	MARYLAND								
	Non-Alcohol Crashes			Alcohol-Related Crashes			Alcohol-Related as a Ratio to Non-Alcohol-Related Crashes		
Year	Jan-Jun	Jul-Dec	*Total*	Jan-Jun	Jul-Dec	*Total*	Jan-Jun	Jul-Dec	*Total*
1998	42,836	43,636	**86,472**	3,627	3,725	**7,352**	8.55%	8.48%	**8.51%**
1999	42,790	47,156	**89,946**	3,575	3,854	**7,429**	8.18%	8.37%	**8.28%**
2000	44,866	47,011	**91,877**	3,661	4,003	**7,664**	8.51%	8.24%	**8.38%**
2001	45,370	48,459	**93,829**	3,782	3,861	**7,643**	7.99%	8.35%	**8.17%**
2002	47,203	50,465	**97,668**	3,638	4,172	**7,810**	8.29%	7.71%	**8.00%**

Table 47. West Virginia Data on Alcohol-Related (A-R) Crashes and Non-A-R Crashes and A-R as a Ratio to Non-A-R Crashes at All Levels of Severity (1999-2005)

	WEST VIRGINIA								
	Non-Alcohol Crashes			Alcohol-Related Crashes			Alcohol-Related as a Ratio to Non-Alcohol-Related Crashes		
Year	Jan-Jun	Jul-Dec	*Total*	Jan-Jun	Jul-Dec	*Total*	Jan-Jun	Jul-Dec	*Total*
1999	22,261	24,571	**46,832**	1,176	1,238	**2,414**	5.06%	5.31%	**5.19%**
2000	22,556	24,696	**47,252**	1,222	1,370	**2,592**	5.56%	5.43%	**5.49%**
2001	23,497	24,806	**48,303**	1,242	1,278	**2,520**	5.16%	5.32%	**5.24%**
2002	24,084	24,737	**48,821**	1,278	1,342	**2,620**	5.40%	5.33%	**5.36%**
2003	24,631	25,589	**50,220**	1,143	1,253	**2,396**	4.90%	4.68%	**4.79%**
2004	24,294	27,412	**51,706**	1,279	1,305	**2,584**	4.84%	5.28%	**5.06%**
2005	23,205	3,795	**27,000**	1,160	192	**1,352**	**5.**00%	5.06%	**5.01%**

Table 48. Results of ARIMA Intervention Analyses: Change in Alcohol-Related Crashes in Maryland (1998-2002) and West Virginia (1999-2004)

	Coefficient	Change	Standard Error	*t*	*P - value*	Model Degrees of Freedom
MD A/R Crashes	0.04402	4.50%	0.02824	1.559	0.062	57
WV A/R Crashes	-0.04105	-4.02%	0.02554	-1.607	0.056	72

We also examined Delaware's Crash Outcome Data Evaluation System (CODES) data to see if injury data collected in that system could shed light on the effects of the *CPSF* program on alcohol involved injuries. We found that the year-to-year variation in that data set was too great for us to be able to draw any meaningful conclusions.

Summary

Checkpoint Strikeforce is a highly focused, zero-tolerance, continuous, border-to-border multi-State initiative involving frequent sobriety checkpoints in five States (Delaware, Maryland, Pennsylvania, Virginia, West Virginia) and the District of Columbia that comprise the Mid-Atlantic Region of the NHTSA. The goal is to realize meaningful reductions in alcohol-related crashes through general deterrence brought on by increased presence and awareness of DWI enforcement activities. The program involves a coalition of NHTSA and State and local transportation and law enforcement agencies from the Mid-Atlantic States, working together in a seamless effort to enforce DWI laws. Each State committed to conduct at least one checkpoint per week throughout each 6-month program period. The States and the NHTSA regional office also committed to publicize the enforcement effort through both paid and earned media efforts throughout the program period.

Media Activities

The region as a whole made extensive efforts to generate media coverage through both earned and paid media efforts. Through funds garnered from State-controlled resources in the District of Columbia, Maryland, and Virginia, $600,000 was spent on radio advertisements using stations that target the principal target group of the program (18- to 34-year-old males). Delaware appeared to have more *CPSF* articles, and Pennsylvania had more DWI enforcement related articles. While the classification of articles has not been standardized, this finding is consistent with the fact that survey results showed that respondents in Delaware were more likely to have seen or heard of a checkpoint than respondents in Maryland.

Law Enforcement Activities

The region as a whole has increased its enforcement activity associated with *CPSF* from year to year, though there has been some variation from that pattern on a State-by-State basis. In the 2004 *CPSF* period, over 900 checkpoints resulting in over 3,000 arrests were conducted. Overall, these data indicate that the States have been able to sustain an intensive anti-DWI enforcement effort throughout the three years of *CPSF*. It should be noted that the *CPSF* supplemented existing DWI enforcement activities throughout the Region, including both sobriety checkpoints and saturation patrols, along with enforcement conducted in the context of normal patrol activities.

DMV Survey Data

Examination of surveys conducted in motor vehicles offices in three of the States indicates a slight increase in the perceived likelihood of being stopped by the police if one drives after having too much to drink, as well as an increase in having seen or heard of checkpoint activity. Similarly, recognition of the *CPSF* name has increased over time from an initial value of 4% to a more recent value of around 10%. The national tagline at the time of this study, *You Drink & Drive. You Lose.*, also increased in recognition from about 18% in 2002 to around 33% in 2004.

Roadside BAC Measurements

Research with breath tests of nighttime drivers was integrated into checkpoint activities at the beginning of the 2004 program. A second round of data collection was conducted in 2005 and

comparisons of those results with 2004 results from Delaware and Virginia indicate a reduction in the proportion of drivers with positive BACs.

Crash Data

To evaluate the impact of the intervention on fatal crashes we analyzed 14 years of FARS data (1991 thru 2004, inclusive) for each State using time series intervention models. Drivers involved in fatal crashes were aggregated into semi-annual counts, separated by alcohol-involvement status of the driver. This resulted in two time series for each State: alcohol involved drivers, and drivers without alcohol ('sober' drivers).

For each State, ARIMA intervention models were fit for the alcohol-involvement series, using that State's series for sober drivers as a regressor series in the model. Annual cyclical effects were accounted for by modeling seasonal ARIMA parameters where necessary. The intervention was tested using a dichotomous variable, modeled as an abrupt/persistent change, which was a single-step function beginning at July 2002, and continuing for the remaining 30 months through the end of the series.

Similar models were analyzed for a series representing the rest of the United States pooled together. To protect against spurious findings, the intervention parameters for each Mid-Atlantic State were contrasted against the analogous results for the rest of the Nation with a pooled standard error term, to determine whether any change found in the intervention States' series were significantly greater than potential changes in the rest of the Nation. Results indicated 7.05% reduction in alcohol-related fatal crashes in the region relative to the Nation as a whole. This reduction was not statistically significant (p=.119). However, one State, West Virginia, when analyzed alone, demonstrated a statistically significant 16.72% reduction (p=.018).

We also examined the intensity of the checkpoint program implemented in each jurisdiction as measured by checkpoints per 100,000 population as it relates to the effect observed on alcohol-related crashes. We found that generally the more intensive the checkpoint program, the more beneficial the effect. Both Delaware and West Virginia showed higher intensity levels of checkpoints, as measured by number per 100,000 population, but West Virginia was the only state showing a significant (p<.05) reduction in A-R fatal crashes relative to the Nation as a whole.

Lessons Learned

Lessons learned from this program should help guide subsequent regionwide efforts currently being planned, both in terms of implementation and evaluation. The "lessons" listed below reflect observations of the research staff along with those of persons implementing the program at the regional and State level.

- Efforts should be made to ensure that media efforts reach the target audience (21- to 34-year-old males) who account for most of the impaired driving.
- In some jurisdictions a team approach, involving several agencies, is a productive way to generate increased checkpoint activity. However, it is important that the team leader be a senior police officer, ideally a chief, to insure adequate responsiveness from all involved.

- To motivate police, use equipment and recognition such as awards ceremonies as incentives. Equipment is particularly useful in motivating smaller agencies.
- Conduct major police training activities before the increased enforcement activity begins rather than during that period.
- For training material, such as that about how to conduct checkpoints, reproduce the material on CDs rather than paper. They are less bulky, costly, and easier to revise and keep current.
- Low-staff checkpoints can get a larger number of smaller agencies (and larger) involved and can result in a much larger volume of checkpoints.
- Ghost, phantom, or "flexible" checkpoints can use officers who might not otherwise participate and expand awareness of enforcement activity.
- Combining checkpoints with saturation patrols in the same area on the same evening can help remedy officer burnout and increase media interest.
- If using a BATmobile,[7] park it in the median if possible so that traffic going in both directions will recognize that the enforcement activity is a sobriety checkpoint.
- Delegate management of the program so that local agencies can coordinate with regional managers, which shifts the burden off the State-level managers.
- Consolidate activity reporting in one or just a few individuals so that accountability can be ensured.
- Adjacent States should consider both joint checkpoint operations and joining resources together for media buys and activities.

Overall Summary

The C*PSF* initiative is clearly demonstrating that a regionwide intensified sobriety checkpoint initiative can be established and maintained over an extended period of time. This program is characterized by continuous rather than sporadic (blitz) enforcement. This report summarizes activity through the third year and the Mid-Atlantic Region effort is continuing.

In terms of media, Delaware seemed to have more C*FSF* newspaper articles, and Pennsylvania had more related articles. While these have not been normalized in any way, the DMV survey results showed that respondents in Delaware were more likely to have seen or heard of a checkpoint compared with respondents in Maryland.

Examination of regionwide fatal crash trends reveals a decrease of 7.05% when compared with the Nation as a whole, but this reduction is not statistically significant. It may be that an increase in intensity of the program may be required to attain a more meaningful effect. Both Delaware and West Virginia showed higher intensity levels of checkpoints (i.e., checkpoints per 100,000 population). West Virginia was the only State showing a reduction in alcohol-related fatal crashes relative to the Nation as a whole.

[7] A BATmobile (breath alcohol testing mobile) is a mobile law enforcement vehicle designed as a self-contained booking station for DWI and other offenses. BATmobiles typically have breath testing devices, communication technology (phone, fax), arrest and processing forms, holding facilities, and other needed equipment to test and temporarily detain DWI offenders.

In the future, continued and greater attention should be paid to both increasing enforcement intensity and visibility, and media coverage.

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Appendices

EVALUATION OF *CHECKPOINT STRIKEFORCE* PROGRAM

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Appendix A:

Evaluation of *Checkpoint Strikeforce* Program: Media Information Report

***CHECKPOINT STRIKEFORCE* MEDIA INFORMATION**
(Please complete for the previous month and return by the 15th of the current month.)

Agency name: **Today's Date:**

Street:

City: **State:** **Zip:**

Contact person name:

Phone: **E-mail:** **MONTH REPORTED ON:**

The following questions pertain to the July 2004 to January 2005 *Checkpoint Strikeforce* publicity efforts.

1. Is your agency publicizing *Checkpoint Strikeforce* activities (circle one)? **YES NO**

2. How much is your budget for *Checkpoint Strikeforce* media-related activities this year?_____

3. How is that budget allocated? (Please indicate either dollar amounts or percentages.)

Production	Personnel
Printing	Paid media buys
Other (explain)	

4. How much of your media-related budget has been spent so far (dollar amount)?_____

5. Please fill in appropriate amounts.

VENUE	**In dollar amounts, how much did you plan to spend on this campaign?**	**In dollar amounts, how much did you spend this month?**	**How many spots or articles did this month's dollars buy you?**
Radio			
TV			
Print (newspaper)			
Other			
TOTAL	**$**	**$**	

6. **How much earned media (in spots) did you get…**

VENUE	**THIS MONTH?**	**TO DATE?**
Radio		
TV		
Print (newspaper)		
Other		
TOTAL SPOTS		

7. What promotional materials have you used to promote *Checkpoint Strikeforce*?

Checkpoint Strikeforce name	**YES**	**NO**	Press release examples	**YES**	**NO**
Logo	**YES**	**NO**	Prerecorded radio PSAs	**YES**	**NO**
Brochures/handouts/flyers	**YES**	**NO**	Prerecorded TV PSAs	**YES**	**NO**
Posters	**YES**	**NO**	Prerecorded radio paid ads	**YES**	**NO**
Billboards	**YES**	**NO**	Prerecorded TV paid ads	**YES**	**NO**
Scripts for radio PSAs	**YES**	**NO**	Banner/Signs	**YES**	**NO**
Other (please list)					

8. Please indicate any special publicity activities undertaken or other highlights ***this month*** (attach another piece of paper if necessary).

9. Please attach copy of any print news stories about *Checkpoint Strikeforce*.

If you have any questions please call or email: Katharine Brainard Tara Kelley-Baker

Appendix B:

Evaluation of *Checkpoint Strikeforce* Program: Creative Radio Ads

Checkpoint Strikeforce
Radio Spot Scripts
August 11, 2004

Core Message

- Increase driver awareness of sobriety checkpoints and the severe penalties and consequences of a drunk driving arrest: arrest, jail time, lose of license, legal and other costs, social and job related problems.
- Increase awareness of *Checkpoint Strikeforce* as a mid-Atlantic-wide effort to stop drunk drivers. Using sobriety checkpoints and patrols, when and where drunk driving is most likely to occur, *Checkpoint Strikeforce* deters motorists from driving under the influence. With zero tolerance, it identifies and arrests those who get behind the wheel while impaired.

DC, Maryland, and Virginia are running joint and separate *Checkpoint Strikeforce* campaigns with the same radio spots that follow. The three spots run in rotation in their respective market ad buys. The spots are individualized for each State and DC Metro using announcer and tag voiceovers.

SPOT #1 – *"MOM"*
:60 A vignette of a sing-songy, badgering Mom and a slacker guy. An announcer voice at the end wraps up the message.

MOM: (sing song) "Timmy! Time to get to work…!

TIM: (annoyed) "Mom, it's Tim. I'm twenty-four."

MOM: "And twenty-four weeks away from getting your driver's license back. While I have to drive you everywhere."

TIM: "Don't remind me…"

MOM: "Don't get all grumpy-pants with me. Just 'cause Mr. Big-Time Party Animal had to go out and drink and drive and lose his license…"

TIM: "Mom. Let it go?"

MOM: (imitating) "I just had a few beers, he says. I wasn't drunk, he says… You could've killed someone."

TIM: "I'm sorry!"

MOM: "You are sorry. A young man who can't even drive himself anywhere – That's what's sorry! You should've thought before going out drinking and driving… (her harping on him fades out and into Announcer VO)"

ANNOUNCER: "Checkpoint Strikeforce is out there – every week, everywhere – stopping drunk drivers with sobriety checkpoints and patrols. When you get caught drinking and driving, you could lose your license and your car. So if you're going to drink, plan not to drive."
INSERT REGIONAL/LOCAL TAG: (DC, Maryland and Virginia are); (Maryland is); (Virginia is); (This is Officer_____ of_____ and we're) getting tough on drunk drivers. Drink and Drive. You lose."

SPOT #2 – *"LOSING YOUR LICENSE"*
Using "Alex" from July spot, this script uses him talking directly to the audience. Interspersed with his voice are several effects, which work with the voice, with no pauses in between.

VOICEOVER: "You got it good huh? Cool job. In shape. Nice car. Great girlfriend. Yeah… But then you go out one night and get nailed at a sobriety checkpoint…"
SFX: "…anything you say can and will be used…" cop radio, muffled talk)
VOICEOVER: "Yeah, I know. Only had a few beers…"
SFX: (clinking glasses, bar laughter)
VOICEOVER: "But now it's over. Checkpoint got you. So you get a night in jail…"
SFX: (cell doors clang)
VOICEOVER: "You lose your license – and your car."
SFX: (girlfriend voice: " ah… maybe we should start seeing other people.")
VOICEOVER: "…and that's just the start. Then you gotta hire a lawyer."
VOICEOVER: "Cost you five thousand bucks…"
VOICEOVER: "Go to court…"
SFX: (gavel – voice: "All rise.")
VOICEOVER: "Trouble at work. Can't drive. Criminal record. What a mess. Man, when you drink and drive, you could lose your life. But you'll absolutely lose your license."

ANNOUNCER: "Checkpoint Strikeforce is out there – every week, everywhere – stopping drunk drivers with sobriety checkpoints and patrols. When you get caught drinking and driving, you could lose your license and your car. So if you're going to drink, plan not to drive."

INSERT REGIONAL/LOCAL TAG: (DC, Maryland and Virginia are); (Maryland is); (Virginia is); (This is Officer_____ of_____ and we're) getting tough on drunk drivers. Drink and Drive. You lose."

SPOT #3 – *"CHECKPOINT STRIKEFORCE – THE MOVIE"*

This spot uses sound effects wound into a parody of the super-deep dramatic voiceover used in so many movie trailers. The spot itself sounds just like a movie promo:

SFX: Party noises, laughter, glasses clinking.

VOICEOVER: "In a world where good times are a given…"

SFX: Wa-hoo, loud laughter.

VOICEOVER: "One man makes a fateful decision…"

SFX: (background voice) "I'm outta here…"

VOICEOVER: "Another takes an unpopular stand…"

SFX: (background voice) "Lemme drive man, I'm okay…"

VOICEOVER: "Drinking – and driving…"

SFX: Keys, starting engine.

VOICEOVER: "Suddenly, life is no longer his own…"

SFX: Short siren bit.

VOICEOVER: "His world, as he knows it, is changed forever…"

SFX: Cell doors slamming. (background voice) "Do you swear to tell the truth…"

VOICEOVER: "A few moments at a sobriety checkpoint one night and he pays for years. No license. No car. No freedom…"

SFX: (music swell)

ANNOUNCER: "Checkpoint Strikeforce is out there – every week, everywhere – stopping drunk drivers with sobriety checkpoints and patrols. When you get caught

drinking and driving, you could lose your license and your car. So if you're going to drink, plan not to drive."

INSERT REGIONAL/LOCAL TAG: (DC, Maryland and Virginia are); (Maryland is); (Virginia is); (This is Officer_____ of_____ and we're) getting tough on drunk drivers. Drink and Drive. You lose."

Appendix C:

Evaluation of *Checkpoint Strikeforce* Program: Delaware Radio Ad (Script)

Delaware Radio Ad (Script)

ATTENTION ALL DRIVERS. IF YOU GET BEHIND THE WHEEL OF YOUR VEHICLE AND YOU'VE BEEN DRINKING - EXPECT TO GET CAUGHT. THAT'S BECAUSE THE STATE OF DELAWARE AND SURROUNDING STATES HAVE CREATED A DUI ENFORCEMENT PROGRAM CALLED CHECKPOINT STRIKEFORCE. FROM NOW THROUGH NEW YEAR'S, THE STATE OF DELAWARE'S OFFICE OF HIGHWAY SAFETY WILL BE COORDINATING WITH STATE AND LOCAL POLICE IN NEW CASTLE, KENT AND SUSSEX COUNTIES TO TAKE IMPAIRED DRIVERS OFF THE ROAD. THERE WILL BE AT LEAST ONE SOBRIETY CHECKPOINT EACH WEEK TO KEEP OUR ROADWAYS SAFE. IF YOU'RE CAUGHT BY A MEMBER OF OUR CHECKPOINT STRIKEFORCE TEAM - EXPECT TO SUFFER THE CONSEQUENCES INCLUDING ARREST, SEVERE FINES AND LOSS OF YOUR DRIVER'S LICENSE. PLEASE DRIVE RESPONSIBLY AND SAFELY - IF YOU ARE GOING TO DRINK - DON'T EVEN THINK ABOUT DRIVING. AND WHEN YOU MEET THE OFFICER AT THE CHECKPOINT REMEMBER TO THANK HIM FOR HELPING ENSURE THE SAFETY OF ALL DRIVERS ON DELAWARE ROADWAYS. THIS MESSAGE IS BROUGHT TO YOU BY THE DELAWARE OFFICE OF HIGHWAY SAFETY.

Appendix D:

Evaluation of *Checkpoint Strikeforce* Program: Selected Media Efforts

PENNSYLVANIA

Mobile Awareness Checkpoint

In Pennsylvania, an officer drives the DUI Checkpoint Trailer, which is clearly marked, to high-visibility locations. On a 5-hour shift, the trailer might be seen in five or more locations, and the team targets rush hour on Friday or Saturday evenings. No actual checkpoint is held; however, the presence of the trailer is intended to suggest the possibility of DUI checkpoints to the public. This one-person operation is obviously less expensive than running an actual checkpoint, which requires from 12 to 20 officers.

Mix-Off Non-Alcoholic Recipe Contest

The Lehigh Valley Team DUI Task Force joined with the local hospital to hold a non-alcoholic drink recipe contest before the holidays. The event was held at the hospital, where drinks were made and tasted. This was successful in getting press coverage, getting an anti-drinking-and-driving message out for the holidays.

Other Media Events

Pennsylvania submitted a progress report for the period July 1, 2002, to January 1, 2003. During this time the State held 17 press conferences, generated 11 TV news stories, and earned 2 radio news stories and 45 print stories.

Appendix E:

Evaluation of *Checkpoint Strikeforce* Program: West Virginia Radio Script

West Virginia:

Checkpoint Strikeforce Radio PSA Script

Not sure if you've had too much to drink? Then don't drive. Drunk driving is no accident. It's a serious crime that kills every 32 minutes. The Governor's Highway Safety Program reminds you law enforcement will be out in full force this holiday season looking for impaired drivers. The choice is yours. Designate a sober driver or one will be appointed for you – straight to jail. Remember –

You Drink You Drive You Lose.

Appendix F:

Evaluation of *Checkpoint Strikeforce* Program: Enforcement Activity Report

CHECKPOINT STRIKEFORCE
You drink & drive. You lose.

ACTIVITY REPORT
DELAWARE

Checkpoint Date	**Lead Law Enforcement Agency**
Checkpoint Street Address/Intersection **City**	**County**
Starting Time	**Site Supervisor**
Ending Time	**Contact Phone #**

List ALL Participating Law Enforcement Agencies (Other than Your Own)

AGENCY	# SWORN	# NON-SWORN	# VOLUNTEERS
State Police Barrack (include name):			
County Police:			
City Police:			
Sheriff's Office:			
Municipality:			
Other:			

List Other Participating Government/Non Government Entities (e.g., MADD)

Entity:
Entity:

LAW ENFORCEMENT ACTIVITY

Number of Vehicles Passing Thru Checkpoint _____	Number of Stolen Vehicles Recovered _____
Number of Vehicles Pulled Aside With Suspected Impaired Driver _____	Number of Felony Arrests _____ (explain below)
Number of DWI Arrests _____	Number of Other Traffic Arrests/Citations/ Warnings _____ (explain below)
Number of Seat Belt Citations _____ Number of Seat Belt Warnings _____	Number of Weapons Seized _____
Number of Child Restraint Citations _____ Number of Child Restraint Warnings _____	Total # juveniles cited for underage drinking violations _____ Total # juveniles arrested for zero tolerance (DWI) violations _____
Did you distribute the "Checkpoint Strikeforce Fact Sheet?" ☐ YES ☐ NO	Grand total # citations issued at the checkpoint (traffic, civil and criminal) _____

PRESS ACTIVITY

Number of Press Notifications Sent TV _____ Radio _____ Print Media _____
Number of Press Present at Checkpoint TV _____ Radio _____ Print Media _____

Remarks (please use other side if necessary)

_____
Site Supervisor Signature, Date

Appendix G:

Evaluation of *Checkpoint Strikeforce* Program: DMV Survey – English & Spanish

55869

D E 0 5

The Division of Motor Vehicles is assisting in a study about highway safety in Delaware. Your answers to the following questions are voluntary and anonymous. Please complete the survey and then put it in the drop box.

When filling in the bubbles, shade them like this >>>>> ●

Please use the #2 pencil provided or a black pen only.
(Do not use pens with ink that soaks through the paper)

1. What is your sex? ○ Male ○ Female

2. What is your age? ○ 16 - 20 ○ 21 - 29 ○ 30 - 45 ○ 46 - 64 ○ 65 or older

3. What is your race? ○ White ○ African-American ○ Asian ○ Native American ○ Other

4. Are you of Spanish/Hispanic origin? ○ Yes ○ No

5. What is your Zip Code? ☐☐☐☐☐

6. How often do you usually drive a car or other motor vehicle?
○ Every day ○ Several days a week ○ Once a week or less ○ Only certain times a year ○ Never

7. How often do you use seat belts when you drive or ride in a car, van, sport utility vehicle or pick-up?
○ Always ○ Nearly Always ○ Sometimes ○ Seldom ○ Never

8. During the past 30 days, how often did you usually drink any alcoholic beverages, including beer, wine, or liquor? Would you say you usually drank alcoholic beverages? (check one)
○ Every day
○ Several days a week
○ Once a week or less
○ Weekends only
○ Celebrations/Special occasions
○ Never
○ Don't know

9. In the past 30 days, how many times have you driven a motor vehicle within two hours after drinking alcoholic beverages? Enter number of times: ☐☐

10. On the most recent occasion when you drove within two hours after drinking alcoholic beverages, how many drinks (of beer, wine, liquor) did you have? Enter number of drinks: ☐☐

11. About how many times in the past 30 days did you drive when you thought you had too much to drink? Enter number of times: ☐☐

12. If you drove after having too much to drink, how likely are you to be stopped by a police officer?
○ Almost certain ○ Very likely ○ Somewhat likely ○ Somewhat unlikely ○ Very unlikely

13. Compared with 3 months ago, are you now driving after drinking: (check one)
○ More often ○ Less often ○ About the same ○ Do not drive after drinking

Please turn over

55869

14. Compared with 3 months ago, have you been using your seat belt: (check one)

⬭ More often ⬭ Less often ⬭ About the same ⬭ Not sure

15. Compared with 3 months ago, do you see police on the roads you normally drive: (check one)

⬭ More often ⬭ Less often ⬭ About the same ⬭ Not sure

16. In your opinion, do you think enforcement of drinking and driving laws in your community is too strong, too weak, or about right?

⬭ Too strong ⬭ Too weak ⬭ About right ⬭ Don't know

17. In your opinion, do you think enforcement of the seat belt law in your community is too strong, too weak, or about right?

⬭ Too strong ⬭ Too weak ⬭ About right ⬭ Don't know

18. The effect of alcohol can vary from one person to another, depending on body weight. For classification purposes only, what is your approximate weight? ☐☐☐ pounds

19. In the past 30 days, have you seen or heard about a checkpoint where police were looking for impaired drivers? ⬭ Yes ⬭ No

20. In the past 30 days, have you gone through a checkpoint where police were looking for impaired drivers? ⬭ Yes ⬭ No

21. Have you recently read, seen, or heard anything about impaired driving in Delaware?

⬭ Yes ⬭ No

If yes, where did you see or hear about it? (check all that apply)

⬭ Newspaper ⬭ Radio ⬭ TV ⬭ Poster ⬭ Brochure ⬭ Police checkpoint ⬭ Other

22. Have you recently read, seen, or heard anything about the seat belt law in Delaware?

⬭ Yes ⬭ No

If yes, where did you see or hear about it? (check all that apply)

⬭ Newspaper ⬭ Radio ⬭ TV ⬭ Poster ⬭ Brochure ⬭ Police checkpoint ⬭ Other

23. Do you know the name of any impaired driving enforcement program(s) in Delaware? (check all that apply)

⬭ You Drink, You Drive, You Lose
⬭ Checkpoint Strikeforce
⬭ Team DUI
⬭ Please Step Away From Your Vehicle
⬭ Friends Don't Let Friends Drive Drunk

24. Do you know the name of any seat belt program(s) in Delaware? (check all that apply)

⬭ No Excuses, Buckle Up
⬭ No Exceptions, No Excuses
⬭ Buckle Up, Now
⬭ Operation 35, Buckle Up, Stay Alive
⬭ Click It or Ticket
⬭ Drive to Survive

17597

D E 0 5

La Division of Motor Vehicles participa de un estudio sobre seguridad en carreteras en Delaware. Sus respuestas al cuestionario que se adjunta son voluntarias y anónimas. Por favor, complete la encuesta y colóquela luego en el buzón. Gracias.

Cuendo rellene un círculo, hágalo así >>>>> ●

Por favor, use solamente un lápiz #2 como el que ponemos a su disposición, o una lapicera negra. (No use lapiceras de tinta que manchen el papel)

1. ¿Su sexo? ○ Hombre ○ Mujer

2. ¿Su edad? ○ 16 - 20 ○ 21 - 29 ○ 30 - 45 ○ 46 - 64 ○ 65+

3. ¿Su raza? ○ Blanca ○ Negra ○ Asiática ○ Indígena (US) ○ Otra

4. ¿Es usted Español o Hispano? ○ Sí ○ No

5. ¿Cuál es su código postal (Zip Code)? | | | | | |

6. ¿Frecuencia con que maneja?
○ Todos los días ○ Varios días a la semana ○ Un día de semana (o menos) ○ Sólo algunas veces por año ○ Nunca

7. ¿Frecuencia con que usa cinturón de seguridad al manejar o viaja en carro o similar?
○ Siempre ○ Casi siempre ○ Algunas veces ○ Rara vez ○ Nunca

8. ¿En los últimos 30 días, con qué frecuencia bebió usted alcohol (cerveza, vino, o licor)? Diría usted que bebió: (marque uno)

○ Todos los días
○ Varios días a la semana
○ Un vez de semana o menos
○ Sólo los fines de semana
○ En ocasiones especiales
○ Nunca
○ No sabe

9. ¿En los últimos 30 días, cuántas veces manejó un carro antes que pasaran dos horas de haber bebido alcohol? Escriba el número de veces: | |

10. Durante la última vez que usted bebió alcohol y manejó antes que pasaran dos horas de haber bebido, ¿cuántas bebidas (cerveza, vino, licor) consumió? Escriba el número de bebidas: | |

11. ¿Aproximadamente cuántas veces en los últimos 30 días usted manejó a pesar de creer que había bebido demasiado? Escriba el número de veces: | |

12. Si usted llegara a manejar luego de haber bebido en demasía, ¿cuán probable cree usted que la policía lo detuviera?
○ Casi seguro ○ Muy probable ○ Algo probable ○ Poco probable ○ Muy poco probable

13. En comparación con hace 3 meses, ¿cuánto más está usted ahora manejando luego de beber alcohol? (marque uno)
○ Con mayor frecuencia ○ Con menor frecuencia ○ Igual ○ No maneja luego de beber alcohol

Por favor, dé vuelta la página

17597

14. Comparando con hace 3 meses, ¿cuánto más está usted usando el cinturón de seguridad? (marque uno)

⬭ Con mayor frecuencia ⬭ Con menor frecuencia ⬭ Igual ⬭ No está seguro/segura

15. Comparando con hace 3 meses, ¿cuánto más policía está usted viendo en las rutas y calles por donde maneja? (marque uno)

⬭ Con mayor frecuencia ⬭ Con menor frecuencia ⬭ Igual ⬭ No está seguro/segura

16. En su opinión, ¿piensa que la aplicación de las leyes de beber y conducir en su comunidad es muy dura, muy débil, o justa?

⬭ Muy dura ⬭ Muy débil ⬭ Justa ⬭ No sabe

17. En su opinión, ¿piensa que la aplicación de las leyes sobre el uso de cinturones de seguridad en su comunidad es muy dura, muy débil, o justa?

⬭ Muy dura ⬭ Muy débil ⬭ Justa ⬭ No sabe

18. El efecto del alcohol varia en las personas, dependiendo del peso corporal. Sólo con un objetivo estadístico, ¿cuál es su peso? ☐☐☐ libras

19. En los últimos 30 días, ¿ha usted visto u oído de algún punto de inspección (checkpoint) donde la policía busca conductores alcoholizados? ⬭ Sí ⬭ No

20. En los últimos 30 días, ¿ha sido usted detenido por algún punto de inspección (checkpoint) donde la policía busca conductores alcoholizados? ⬭ Sí ⬭ No

21. ¿Ha usted recientemente leído, visto, o escuchado algo acerca de manejar alcoholizado en Delaware?

⬭ Sí ⬭ No

Si responde si, ¿dónde lo vió o escuchó? (marque todo lo que corresponda)

⬭ Diario ⬭ Radio ⬭ TV ⬭ Poster ⬭ Catálogo ⬭ Puesto de control policial ⬭ Otro

22. ¿Ha usted recientemente leído, visto, o escuchado algo acerca del uso del cinturón de seguridad en Delaware?

⬭ Sí ⬭ No

Si responde si, ¿dónde lo vió o escuchó? (marque todo lo que corresponda)

⬭ Diario ⬭ Radio ⬭ TV ⬭ Poster ⬭ Catálogo ⬭ Puesto de control policial ⬭ Otro

23. ¿Conoce usted el nombre de algún programa contra el manejar alcoholizado en Delaware? (marque todo lo que corresponda)

⬭ Usted bebe, usted maneja, usted pierde
⬭ Team DUI
⬭ Los amigos no dejan que los amigos manejen borrachos
⬭ Fuerza de Control Checkpoint
⬭ Por favor, salga de su vehículo

24. ¿Conoce usted el nombre de algún programa sobre el uso de cinturón de seguridad en Delaware? (marque todo lo que corresponda)

⬭ Sin Excusa, Abróchese
⬭ Abróchese Ahora
⬭ Abróchese, o Multa
⬭ Sin Excepciones, Sin Excusas
⬭ Operación 35, Abrochate y Mantente Vivo
⬭ Manejar Para Sobrevivir

Appendix H:

Evaluation of *Checkpoint Strikeforce* Program: DMV Survey Protocol

Protocol for DMV Survey

Checkpoint Strikeforce **- DRIVER SURVEY DIRECTIONS AND SCHEDULE**

DMV/MVA Driver Licensing Offices are participating in a study of *Checkpoint Strikeforce* program. We are asking each office to conduct the survey according to the DIRECTIONS and SCHEDULE below.

DIRECTIONS

Who The survey is for all persons who qualify for a driver license including new drivers, license reinstatements, transfers from other states and license renewals.

How Since we want to be very careful to minimize disrupting the operations of the Driver Licensing Office, we would appreciate it if Office Managers work out when and where in their system would be best to give drivers the survey (our preference is while a photo license is being processed).

How Many Hand out all of the surveys that you are provided.

Pick-up Place completed forms in FedEx mailers provided; date the shipping label and keep the top copy of the label, ***Sender's Copy***, as a record. Put the sealed FedEx mailer in a FedEx mailbox (note that a FedEx mailbox is not the same as a US Post Office mailbox, nor a Priority Mail mailbox). If easier, call FedEx at 1-800-463-3339 for pick-up. All shipping charges will be billed directly to Pacific Institute for Research and Evaluation (PIRE).

SCHEDULE

1) Hand out surveys Monday, June 21st – Friday, June 25th. Send completed surveys to PIRE on Monday, June 28th.

For more information or answers to your questions, call [redacted], and ask for [redacted].

QUESTIONS THAT MIGHT BE ASKED BY DRIVERS FILLING OUT THE SURVEY

What is this for?

The DMV/VMA is helping to collect information on drivers':

- driving after drinking patterns and seatbelt usage;
- perception and attitudes concerning enforcement of drinking and driving and seat belt law;

- recent exposure to impaired driving campaigns and seat belt use 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 <u>my</u> 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 put it in the survey drop box. 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 I:

Evaluation of *Checkpoint Strikeforce* Program: DMV Survey Data

DMV Survey Data

Language by State

Language of Administration by State				
		Language		
		English	Spanish	Total
STATE	DE	1,174	18	1,192
	MD	6,042	119	6,161
	WV	4,918	4	4,922
TOTAL		12,134	141	12,275

Respondent Demographics

1. What is your sex?

Gender by Wave; Delaware, Maryland, and West Virginia

Gender Category				
			Gender	
STATE			Male	Female
DE	WAVE	1	50.2% (160)	49.8% (159)
		2	57.8% (52)	42.2% (38)
		3	54.7% (35)	45.3% (29)
		4	42.7% (41)	57.3% (55)
		5	54.2% (128)	45.8% (108)
		6	49.2% (122)	50.8% (126)
		7	47.1% (56)	52.9% (63)
	Total		50.7% (594)	49.3% (578)
MD	WAVE	1	50.7% (384)	49.3% (374)
		2	52.8% (537)	47.2% (481)
		3	49.2% (480)	50.8% (495)
		4	51.8% (274)	48.2% (255)
		5	49.6% (526)	50.4% (535)
		6	48.2% (329)	51.8% (353)
		7	50.5% (530)	49.5% (519)
	Total		50.4% (3,060)	49.6% (3,012)
WV	WAVE	1	47.0% (740)	53.0% (835)
		2	48.8% (917)	51.2% (961)
		3	49.3% (713)	50.7% (734)
	Total		48.4% (2,370)	51.6% (2,530)

2. What is your age?

Age Category by WAVE; Delaware and Maryland

		Age Category				
STATE	**WAVE**	**16-20**	**21-29**	**30-45**	**46-64**	**65 or Older**
DE	**1 - 2002**	7.7% (25)	18.9% (61)	35.0% (113)	31.6% (102)	*6.8%* (22)
	2 - 2002	3.3% (3)	*6.7%* (6)	36.7% (33)	37.8% (34)	15.6% (14)
	3 - 2003	4.6% (3)	**29.2%** (19)	36.9% (24)	23.1% (15)	6.2% (4)
	4 - 2003	**12.5%** (12)	21.9% (21)	35.4% (34)	21.9% (21)	8.3% (8)
	5 - 2004	8.5% (20)	17.4% (41)	30.2% (71)	27.2% (64)	**16.6%** (39)
	6 - 2004	6.0% (15)	14.9% (37)	29.8% (74)	34.7% (86)	14.5% (36)
	7 - 2005	7.5% (9)	18.3% (22)	33.3% (40)	28.3% (34)	12.5% (15)
	Overall	7.4% (87)	17.6% (207)	33.1% (389)	30.2% (356)	11.7% (138)
MD	**1 - 2002**	*6.6%* (50)	19.1% (145)	36.2% (275)	29.4% (223)	8.7% (66)
	2 - 2002	9.8% (100)	19.9% (204)	33.2% (340)	26.2% (268)	**10.9%** (112)
	3 - 2003	12.3% (119)	22.1% (214)	*30.4%* (295)	26.7% (259)	8.6% (83)
	4 - 2003	**18.8%** (100)	20.0% (106)	32.4% (172)	*22.8%* (121)	*6.0%* (32)
	5 - 2004	12.1% (129)	18.9% (201)	34.8% (370)	25.5% (271)	8.7% (93)
	6 - 2004	11.4% (77)	19.0% (129)	31.9% (216)	29.6% (201)	8.1% (55)
	7 - 2005	*8.8%* (92)	**25.0%** (261)	33.2% (347)	27.5% (287)	*5.5%* (57)
	Overall	11.0% (667)	20.8% (1,260)	33.2% (2,015)	26.9% (1,630)	8.2% (498)

Note: Bold indicates statistically significantly higher than average.
Underlined italics indicates statistically significantly lower than average.

3. What is your race?

Combined Demographic Data by WAVE; Delaware and Maryland

		Race				
STATE	**WAVE**	**White**	**African-American**	**Asian**	**Native American**	**Other**
DE	**1 - 2002**	**78.9%** (251)	*9.1%* (29)	**3.8%** (12)	1.6% (5)	6.6% (21)
	2 - 2002	**85.4%** (76)	12.4% (11)	0.00% (0)	1.1% (1)	1.1% (1)
	3 - 2003	71.9% (46)	21.9% (14)	1.6% (1)	0.0% (0)	4.7% (3)
	4 - 2003	67.7% (63)	21.5% (20)	0.00% (0)	2.2% (2)	8.6% (8)
	5 - 2004	*64.5%* (149)	**26.8%** (62)	1.7% (4)	2.2% (5)	4.8% (11)
	6 - 2004	77.5% (183)	15.7% (37)	1.3% (3)	1.3% (3)	4.2% (10)
	7 - 2005	71.6% (83)	23.3% (27)	0.9% (1)	1.7% (2)	2.6% (3)
	Overall	74.2% (851)	17.4% (200)	1.8% (21)	1.6% (18)	5.0% (57)
MD	**1 - 2002**	74.0% (551)	17.4% (130)	4.2% (31)	1.2% (9)	3.2% (24)
	2 - 2002	74.0% (743)	*16.4%* (165)	4.5% (45)	0.7% (7)	4.4% (44)
	3 - 2003	**75.7%** (728)	17.2% (165)	4.0% (38)	0.5% (5)	*2.7%* (26)
	4 - 2003	*62.5%* (330)	**26.5%** (140)	4.4% (23)	1.3% (7)	5.3% (28)
	5 - 2004	69.2% (725)	18.2% (191)	5.4% (57)	1.0% (10)	**6.1%** (64)
	6 - 2004	70.1% (472)	**22.1%** (149)	3.7% (25)	0.6% (4)	3.4% (23)
	7 - 2005	*65.6%* (675)	**22.4%** (230)	4.6% (47)	0.5% (5)	**7.0%** (72)
	Overall	70.5% (4,224)	19.5% (1,170)	4.4% (266)	0.8% (47)	4.7% (281)

Note: Bold indicates statistically significantly higher than average.
Underlined italics indicates statistically significantly lower than average.

4. Are you of Spanish/Hispanic origin?

Combined Demographic Data by WAVE; Delaware, Maryland, and West Virginia

			Hispanic Origin	
			Hispanic	
STATE			1	2
DE	WAVE	1	5.9% (18)	94.1% (287)
		2	1.2% (1)	98.8% (83)
		3	8.2% (5)	91.8% (56)
		4	9.1% (8)	90.9% (80)
		5	3.7% (8)	96.3% (211)
		6	8.1% (19)	91.9% (217)
		7	4.1% (4)	95.9% (93)
	Total		5.8% (63)	94.2% (1027)
MD	WAVE	1	5.9% (43)	94.1% (682)
		2	4.6% (44)	95.4% (903)
		3	5.0% (45)	95.0% (854)
		4	9.0% (45)	91.0% (455)
		5	6.3% (63)	93.8% (945)
		6	4.2% (27)	95.8% (613)
		7	8.7% (86)	91.3% (897)
	Total		6.2% (353)	93.8% (5349)
WV	WAVE	1	1.7% (24)	98.3% (1356)
		2	1.6% (28)	98.4% (1747)
		3	2.6% (36)	97.4% (1326)
	Total		1.9% (88)	98.1% (4429)

5. What is your zip code?

Due to excessive variation of the zip codes in the DMV survey results this table is not included in this appendix.

Driving Frequency

6. How often do you usually drive a car or other motor vehicle?

Driving Frequency by WAVE; Delaware and Maryland

		Driving Frequency				
STATE	**WAVE**	**Everyday**	**Several Days a Week**	**Once a Week or Less**	**Only Certain Times a Year**	**Never**
DE	**1 - 2002**	84.9% (276)	7.7% (25)	1.5% (5)	0.9% (3)	4.9% (16)
	2 - 2002	85.6% (77)	11.1% (10)	0.0% (0)	2.2% (2)	1.1% (1)
	3 - 2003	84.6% (55)	12.3% (8)	1.5% (1)	0.0% (0)	1.5% (1)
	4 - 2003	81.4% (79)	7.2% (7)	3.1% (3)	3.1% (3)	5.2% (5)
	5 - 2004	*77.6%* (184)	12.2% (29)	3.0% (7)	0.8% (2)	**6.3%** (15)
	6 - 2004	80.3% (196)	12.7% (31)	4.5% (11)	0.4% (1)	2.0% (5)
	7 - 2005	79.8% (95)	15.1% (18)	0.8% (1)	1.7% (2)	2.5% (3)
	Total	81.7% (962)	10.9% (128)	2.4% (28)	1.1% (13)	3.9% (46)
MD	**1 - 2002**	**79.5%** (599)	14.1% (106)	2.7% (20)	1.5% (11)	*2.3%* (17)
	2 - 2002	76.8% (782)	15.5% (158)	3.4% (35)	1.2% (12)	3.0% (31)
	3 - 2003	74.9% (727)	16.4% (159)	3.1% (30)	1.2% (12)	4.4% (43)
	4 - 2003	*72.3%* (382)	13.6% (72)	4.0% (21)	1.7% (9)	**8.3%** (44)
	5 - 2004	76.9% (817)	14.6% (155)	2.6% (28)	1.4% (15)	4.4% (47)
	6 - 2004	75.7% (514)	14.6% (99)	3.1% (21)	1.2% (8)	5.4% (37)
	7 - 2005	75.1% (783)	15.9% (166)	2.8% (29)	0.8% (8)	5.4% (56)
	Total	76.1% (4604)	15.1% (915)	3.0% (184)	1.2% (75)	4.5% (275)

Note: Bold indicates statistically significantly higher than average.
Underlined italics indicates statistically significantly lower than average.

Safety Belt Use

7. How often do you use seat belts when you drive or ride in a car, van, sport utility vehicle, or pick-up?

Reported Safety Belt Use by WAVE; Delaware and Maryland

		Seat Belt Use				
STATE	**WAVE**	**Always**	**Nearly Always**	**Sometimes**	**Seldom**	**Never**
DE	**1 - 2002**	74.7% (242)	11.4% (37)	6.8% (22)	**4.0%** (13)	**3.10%** (10)
	2 - 2002	78.7% (70)	12.4% (11)	7.9% (7)	0.0% (0)	1.10% (1)
	3 - 2003	*60.0%* (39)	20.0% (13)	10.8% (7)	**6.2%** (4)	3.10% (2)
	4 - 2003	*63.9%* (62)	**19.6%** (19)	**13.4%** (13)	2.1% (2)	1.00% (1)
	5 - 2004	**82.1%** (193)	10.6% (25)	5.1% (12)	1.7% (4)	0.40% (1)
	6 - 2004	**82.7%** (201)	12.3% (30)	*2.9%* (7)	1.2% (3)	0.80% (2)
	7 - 2005	80.5% (95)	8.5% (10)	8.5% (10)	1.7% (2)	0.8% (1)
	Total	77.0% (902)	12.4% (145)	6.7% (78)	2.4% (28)	1.5% (18)
MD	**1 - 2002**	88.5% (668)	7.7% (58)	2.5% (19)	0.7% (5)	0.70% (5)
	2 - 2002	88.4% (895)	7.6% (77)	2.7% (27)	0.8% (8)	0.60% (6)
	3 - 2003	88.7% (863)	6.7% (65)	2.4% (23)	1.3% (13)	0.90% (9)
	4 - 2003	88.9% (471)	7.0% (37)	2.5% (13)	0.6% (3)	1.10% (6)
	5 - 2004	91.0% (968)	6.6% (70)	1.9% (20)	0.4% (4)	*0.20%* (2)
	6 - 2004	**92.5%** (629)	*5.0%* (34)	1.3% (9)	0.6% (4)	0.60% (4)
	7 - 2005	90.0% (940)	6.2% (65)	2.3% (24)	0.4% (4)	1.1% (11)
	Total	89.7% (5,434)	6.7% (406)	2.2% (135)	0.7% (41)	0.7% (43)

Note: Bold indicates statistically significantly higher than average.
Underlined italics indicates statistically significantly lower than average.

Drinking and Driving Frequency

8. During the past 30 days, how often did you usually drink any alcoholic beverages, including beer, wine, or liquor? Would you say you usually drank alcoholic beverages (check one)…

Drinking Frequency by Wave; Delaware, Maryland, and West Virginia

Drinking Frequency									
			Drinking frequency						
STATE			Every day	Several days a week	Once a week or less	Weekends only	Celebrations/Special occasions	Never	Don't know
DE	WAVE	1	2.2% (7)	7.5% (24)	12.7% (41)	4.7% (15)	28.0% (90)	43.2% (139)	1.9% (6)
		2	1.1% (1)	6.7% (6)	10.1% (9)	1.1% (1)	20.2% (18)	57.3% (51)	3.4% (3)
		3	1.5% (1)	1.5% (1)	6.2% (4)	9.2% (6)	36.9% (24)	44.6% (29)	0.0% (0)
		4	7.2% (6)	15.7% (13)	14.5% (12)	9.6% (8)	15.7% (13)	37.3% (31)	0.0% (0)
		5	3.4% (8)	9.7% (23)	13.6% (32)	3.8% (9)	19.5% (46)	49.2% (116)	.8% (2)
		6	3.3% (8)	7.0% (17)	13.1% (32)	6.6% (16)	24.2% (59)	44.3% (108)	1.6% (4)
		7	3.4% (4)	5.1% (6)	10.2% (12)	6.8% (8)	18.6% (22)	54.2% (64)	1.7% (2)
	Total		3.0% (35)	7.8% (90)	12.3% (142)	5.4% (63)	23.5% (272)	46.5% (538)	1.5% (17)
MD	WAVE	1	.7% (5)	6.1% (46)	13.9% (105)	6.1% (46)	25.2% (191)	46.8% (354)	1.3% (10)
		2	1.8% (18)	5.7% (58)	14.9% (150)	7.0% (71)	22.8% (230)	46.3% (467)	1.5% (15)
		3	1.1% (11)	5.8% (56)	13.1% (127)	4.7% (46)	24.9% (242)	49.2% (477)	1.1% (11)
		4	3.9% (19)	4.3% (21)	10.2% (50)	6.7% (33)	22.4% (110)	49.9% (245)6	2.6% (13)
		5	.8% (9)	6.1% (65)	13.8% (147)	6.1% (65)	23.4% (249)	49.1% (522)	.6% (6)
		6	2.2% (15)	4.3% (29)	13.7% (93)	6.3% (43)	23.4% (159)	49.3% (335)	.9% (6)
		7	1.0% (11)	4.9% (52)	12.3% (129)	5.6% (59)	26.7% (281)	47.6% (501)	1.9% (20)
	Total		1.5% (88)	5.4% (327)	13.3% (801)	6.0% (363)	24.3% (1,462)	48.2% (2,901)	1.3% (81)
WV	WAVE	1	.8% (13)	4.8% (75)	9.9% (156)	4.4% (69)	16.3% (257)	62.8% (989)	1.1% (17)
		2	1.4% (27)	4.2% (79)	11.7% (219)	5.1% (95)	18.2% (340)	57.9% (1,085)	1.5% (28)
		3	2.1% (31)	4.4% (64)	9.8% (142)	5.5% (79)	18.0% (259)	58.5% (843)	1.7% (24)
	Total		1.5% (71)	4.5% (218)	10.6% (517)	5.0% (243)	17.5% (856)	59.6% (2,917)	1.4% (69)

9. In the past 30 days, how many times have you driven a motor vehicle within two hours after drinking alcoholic beverages?

Times Driving Within Two Hours of Drinking in Past 30 Days by WAVE; Delaware and Maryland

		Times Driving After Drinking in Past 30 days			
STATE	**WAVE**	**0**	**1**	**2**	**3 or More**
DE	**1 - 2002**	89.2% (263)	5.1% (15)	2.7% (8)	*3.1%* (9)
	2 - 2002	**93.8%** (75)	1.3% (1)	1.3% (1)	3.8% (3)
	3 - 2003	85.5% (47)	7.3% (4)	1.8% (1)	5.5% (3)
	4 - 2003	*73.8%* (59)	6.3% (5)	6.3% (5)	**13.8%** (11)
	5 - 2004	86.1% (192)	4.0% (9)	4.0% (9)	5.8% (13)
	6 - 2004	85.2% (196)	6.1% (14)	3.5% (8)	5.2% (12)
	7 - 2005	92.9% (104)	3.6% (4)	1.8% (2)	1.8% (2)
	Total	87.1% (936)	4.8% (52)	3.2% (34)	4.9% (53)
MD	**1 - 2002**	87.9% (582)	3.3% (22)	3.0% (20)	**5.7%** (38)
	2 - 2002	*87.8%* (819)	5.0% (47)	3.2% (30)	4.0% (37)
	3 - 2003	91.2% (818)	3.1% (28)	2.6% (23)	3.1% (28)
	4 - 2003	88.6% (398)	3.6% (16)	2.2% (10)	**5.6%** (25)
	5 - 2004	90.2% (882)	4.4% (43)	2.6% (25)	2.9% (28)
	6 - 2004	**91.9%** (601)	3.8% (25)	1.5% (10)	2.8% (18)
	7 - 2005	**91.7%** (920)	4.4% (44)	1.7% (17)	*2.2%* (22)
	Total	90.0% (5,020)	4.0% (225)	2.4% (135)	3.5% (196)

Note: Bold indicates statistically significantly higher than average.
Underlined italics indicates statistically significantly lower than average.

10. On the most recent occasion when you drove within two hours after drinking alcoholic beverages, how many drinks (beer, wine, liquor) did you have?

Number of Drinks Before Driving by Wave; Delaware, Maryland, and West Virginia

STATE	WAVE	Number of drinks before driving			
		0	1-2	3-5	6 or more
DE	1	80.6% (212)	11% (29)	6.5% (17)	2% (5)
	2	**87%** (67)	10.4% (8)	1.3% (1)	1.3% (1)
	3	80.8% (42)	13.4% (7)	3.8% (2)	1.9% (1)
	4	68% (51)	21.4% (16)	8% (6)	**2.6%** (2)
	5	81.3% (170)	15.3% (32)	1.9% (4)	1.5% (3)
	6	79.6% (168)	16.1% (34)	3.3% (7)	1% (2)
	7	91.2% (103)	6.2% (7)	1.8% (2)	.9% (1)
	Total	81.3% (813)	13.3% (133)	3.9% (39)	1.5% (15)
MD	1	80% (481)	14.6% (88)	2.4% (14)	**3.1%** (18)
	2	81.8% (700)	13.7% (117)	3.3% (28)	1.3% (11)
	3	85.5% (705)	10.8% (89)	3.3% (27)	.4% (4)
	4	84.1% (348)	10.4% (43)	3.6% (15)	**1.7%** (8)
	5	83.1% (744)	13.3% (119)	2.9% (26)	.6% (6)
	6	**83.9%** (523)	10.5% (65)	2.9% (18)	3.1% (17)
	7	**85.9%** (821)	10.5% (100)	2.8% (27)	.8% (8)
	Total	83.6% (4,322)	12% (621)	3% (155)	1.1% (72)
WV	1	85% (1,008)	10.2% (121)	2.8% (33)	2.3% (24)
	2	84.6% (1,365)	9.2% (148)	4.1% (66)	2.4% (35)
	3	84.8% (1,067)	8.2% (103)	3.4% (43)	3.8% (45)
	Total	84.8% (3,440)	9.2% (372)	3.6% (142)	2.1% (104)

Note: Bold indicates statistically significantly higher than average.
Underlined italics indicates statistically significantly lower than average.

11.About how many times did you drive in the past 30 days when you thought you had too much to drink?

Times of Driving After Too Much Drinking by WAVE; Delaware and Maryland

		Times of Driving After Too Much Drinking			
STATE	**WAVE**	**0**	**1**	**2**	**3 or More**
DE	**1 - 2002**	97.1% (272)	1.4% (4)	0.7% (2)	0.7% (2)
	2 - 2002	98.7% (77)	1.3% (1)	0.0% (0)	0.0% (0)
	3 - 2003	94.2% (49)	1.9% (1)	1.9% (1)	1.9% (1)
	4 - 2003	*91.0%* (71)	**5.1%** (4)	0.0% (0)	**3.8%** (3)
	5 - 2004	96.3% (207)	2.8% (6)	0.5% (1)	0.5% (1)
	6 - 2004	98.1% (211)	0.0% (0)	0.5% (1)	1.4% (3)
	7 - 2005	98.2% (112)	0.9% (1)	0.0% (0)	0.9% (1)
	Total	96.8% (999)	1.6% (17)	0.5% (5)	1.1% (11)
MD	**1 - 2002**	*95.5%* (600)	1.3% (8)	0.8% (5)	**2.4%** (15)
	2 - 2002	97.5% (881)	1.2% (11)	0.3% (3)	1.0% (9)
	3 - 2003	**98.7%** (861)	0.5% (4)	0.0% (0)	0.8% (7)
	4 - 2003	*95.2%* (412)	0.9% (4)	0.9% (4)	**3.0%** (13)
	5 - 2004	98.1% (931)	1.1% (10)	0.4% (4)	*0.4%* (4)
	6 - 2004	97.4% (625)	0.3% (2)	0.5% (3)	1.9% (12)
	7 - 2005	97.9% (963)	0.9% (9)	0.2% (2)	1.0% (10)
	Total	97.4% (5,273)	0.9% (48)	0.4% (21)	1.3% (70)

Note: Bold indicates statistically significantly higher than average.
Underlined italics indicate statistically significantly lower than average.

Enforcement

12. If you drove after having too much to drink, how likely are you to be stopped by a police officer?

Likelihood of Being Stopped by Police Officer by WAVE; Delaware and Maryland

		Likelihood of Being Stopped by Police Officer				
STATE	**WAVE**	**Almost Certain**	**Very Likely**	**Somewhat Likely**	**Somewhat Unlikely**	**Very Unlikely**
DE	**1 - 2002**	22.9% (58)	25.3% (64)	20.9% (53)	11.1% (28)	19.8% (50)
	2 - 2002	**30.8%** (20)	20.0% (13)	20.0% (13)	10.8% (7)	18.5% (12)
	3 - 2003	10.2% (5)	26.5% (13)	30.6% (15)	14.3% (7)	18.4% (9)
	4 - 2003	16.1% (10)	21.0% (13)	30.6% (19)	16.1% (10)	16.1% (10)
	5 - 2004	20.1% (37)	24.5% (45)	20.7% (38)	7.1% (13)	**27.7%** (51)
	6 - 2004	20.1% (37)	21.2% (39)	25.0% (46)	10.3% (19)	23.4% (43)
	7 - 2005	26.1% (24)	28.3% (26)	17.4% (16)	4.3% (4)	23.9% (22)
	Total	21.5% (191)	24.0% (213)	22.5% (200)	9.9% (88)	22.2% (197)
MD	**1 - 2002**	24.6% (124)	20.6% (104)	20.8% (105)	10.7% (54)	23.4% (118)
	2 - 2002	24.8% (178)	24.4% (175)	20.1% (144)	9.9% (71)	20.9% (150)
	3 - 2003	28.8% (197)	21.2% (145)	21.5% (147)	9.6% (66)	19.0% (130)
	4 - 2003	22.7% (80)	26.3% (93)	23.2% (82)	7.9% (28)	19.8% (70)
	5 - 2004	25.7% (192)	23.8% (178)	20.6% (154)	7.6% (57)	22.2% (166)
	6 - 2004	29.1% (141)	25.6% (124)	*16.7%* (81)	*5.4%* (26)	23.1% (112)
	7 - 2005	29.3% (229)	21.1% (165)	20.2% (158)	6.8% (53)	22.5% (176)
	Total	26.7% (1,141)	23.0% (984)	20.4% (871)	8.3% (355)	21.6% (922)

Note: Bold indicates statistically significantly higher than average.
Underlined italics indicates statistically significantly lower than average.

13. Compared with 3 months ago, are you now driving after drinking… (check one)?

Driving after Drinking Compared to 3 Months Ago by Wave; Delaware, Maryland, and West Virginia

Driving after Drinking Compared to 3 Months Ago						
			Driving after drinking compared to 3 mos. ago			
STATE			More often	Less often	About the same	Do not drive after drinking
DE	WAVE	1	1.1% (3)	4.3% (12)	13.3% (37)	81.3% (226)
		2	0.0% (0)	1.4% (1)	9.7% (7)	88.9% (64)
		3	1.9% (1)	3.8% (2)	11.3% (6)	83.0% (44)
		4	3.0% (2)	6.0% (4)	16.4% (11)	74.6% (50)
		5	.5% (1)	4.9% (10)	7.8% (16)	86.8% (177)
		6	0.0% (0)	6.8% (14)	6.8% (14)	86.4% (178)
		7	0.0% (0)	3.0% (3)	11.9% (12)	85.1% (86)
	Total		.7% (7)	4.7% (46)	10.5% (103)	84.1% (825)
MD	WAVE	1	.5% (3)	4.1% (25)	9.6% (58)	85.8% (519)
		2	.5% (4)	3.0% (26)	10.6% (91)	85.9% (738)
		3	.3% (2)	2.4% (19)	7.9% (63)	89.4% (712)
		4	1.0% (4)	3.8% (15)	11.1% (44)	84.1% (333)
		5	.3% (3)	2.9% (26)	9.0% (80)	87.7% (777)
		6	.3% (2)	2.6% (15)	7.3% (42)	89.7% (513)
		7	.8% (7)	4.1% (37)	6.2% (56)	89.0% (808)
	Total		.5% (25)	3.2% (163)	8.6% (434)	87.6% (4,400)
WV	WAVE	1	.3% (3)	3.0% (36)	7.2% (85)	89.6% (1,064)
		2	.3% (4)	4.3% (66)	9.3% (141)	86.2% (1,313)
		3	.8% (10)	4.3% (52)	10.9% (131)	84.0% (1,010)
	Total		.4% (17)	3.9% (154)	9.1% (357)	86.5% (3,387)

14. Compared with 3 months ago, have you been using your seat belt…(check one)?

Seat Belt Use Compared to 3 Months Ago by Waver; Delaware, Maryland, and West Virginia

Seat Belt Use Compared to 3 Months Ago						
			Seat belt use compared to 3 mos. ago			
STATE			More often	Less often	About the same	Not sure
DE	WAVE	1	35.0% (103)	.7% (2)	63.3% (186)	1.0% (3)
		2	27.1% (23)	1.2% (1)	69.4% (59)	2.4% (2)
		3	25.8% (16)	3.2% (2)	61.3% (38)	9.7% (6)
		4	33.3% (32)	4.2% (4)	62.5% (60)	0.0% (0)
		5	43.9% (98)	1.3% (3)	52.5% (117)	2.2% (5)
		6	36.6% (87)	2.5% (6)	59.2% (141)	1.7% (4)
		7	39.6% (44)	2.7% (3)	57.7% (64)	0.0% (0)
	Total		36.3% (403)	1.9% (21)	60.0% (665)	1.8% (20)
MD	WAVE	1	28.3% (187)	.6% (4)	70.8% (467)	.3% (2)
		2	30.7% (294)	.6% (6)	67.5% (647)	1.1% (11)
		3	32.7% (296)	1.1% (10)	65.9% (597)	.3% (3)
		4	32.2% (167)	2.5% (13)	64.0% (332)	1.3% (7)
		5	33.5% (335)	.5% (5)	65.0% (650)	1.0% (10)
		6	31.7% (201)	.8% (5)	66.7% (423)	.8% (5)
		7	34.5% (339)	.7% (7)	62.4% (613)	2.4% (24)
	Total		32.1% (1,819)	.9% (50)	65.9% (3,729)	1.1% (62)
WV	WAVE	1	36.5% (523)	.4% (6)	62.1% (889)	1.0% (14)
		2	33.4% (573)	1.5% (25)	63.9% (1,096)	1.2% (21)
		3	29.0% (393)	2.5% (34)	66.5% (901)	1.9% (26)
	Total		33.1% (1,489)	1.4% (65)	64.1% (2,886)	1.4% (61)

15. Compared with 3 months ago, do you see police on the roads you normally drive?

Police Seen Compared to 3 Months Ago by Wave; Delaware, Maryland

Police Seen Compared to 3 Months Ago						
			Police seen compared to 3 mos. ago			
STATE			More often	Less often	About the same	Not sure
DE	WAVE	1	35.8% (106)	4.7% (14)	54.7% (162)	4.7% (14)
		2	15.5% (13)	11.9% (10)	64.3% (54)	8.3% (7)
		3	24.2% (15)	6.5% (4)	58.1% (36)	11.3% (7)
		4	35.4% (34)	5.2% (5)	52.1% (50)	7.3% (7)
		5	35.2% (81)	5.2% (12)	55.7% (128)	3.9% (9)
		6	32.2% (78)	6.2% (15)	57.4% (139)	4.1% (10)
		7	42.1% (48)	8.8% (10)	44.7% (51)	4.4% (5)
	Total		33.4% (375)	6.2% (70)	55.2% (620)	5.2% (59)
MD	WAVE	1	28.5% (190)	5.2% (35)	62.7% (418)	3.6% (24)
		2	26.2% (251)	6.1% (58)	60.9% (583)	6.8% (65)
		3	29.7% (272)	5.3% (49)	60.0% (550)	5.0% (46)
		4	35.0% (186)	7.5% (40)	52.5% (279)	4.9% (26)
		5	29.8% (302)	4.3% (44)	60.2% (609)	5.6% (57)
		6	33.3% (211)	4.6% (29)	56.2% (356)	6.0% (38)
		7	29.6% (294)	5.1% (51)	57.9% (574)	7.4% (73)
	Total		29.9% (1,706)	5.4% (306)	59.0% (3,369)	5.8% (329)
WV	WAVE	1	29.4% (426)	6.1% (88)	61.5% (892)	3.0% (44)
		2	23.5% (410)	9.0% (157)	64.2% (1120)	3.3% (57)
		3	20.8% (285)	9.6% (131)	64.6% (883)	5.0% (68)
	Total		24.6% (1,121)	8.2% (376)	63.5% (2,895)	3.7% (169)

16. In your opinion, do you think enforcement of drinking and driving laws in your community is too strong, too weak, or about right?

Drinking and Driving Enforcement by WAVE; Delaware and Maryland

		Drinking and Driving Enforcement		
STATE	**WAVE**	**Too Strong**	**Too Weak**	**About Right**
DE	**1 - 2002**	5.8% (15)	35.9% (93)	58.3% (151)
	2 - 2002	4.3% (3)	27.1% (19)	68.6% (48)
	3 – 2003	8.0% (4)	42.0% (21)	50.0% (25)
	4 - 2003	7.1% (6)	38.1% (32)	54.8% (46)
	5 - 2004	6.4% (12)	35.6% (67)	58.0% (109)
	6 - 2004	10.0% (21)	33.5% (70)	56.5% (118)
	7 - 2005	7.9% (8)	25.7% (26)	66.3% (67)
	Total	7.2% (69)	34.1% (328)	58.7% (564)
MD	**1 - 2002**	4.9% (29)	39.5% (232)	55.5% (326)
	2 - 2002	6.9% (56)	35.5% (290)	57.6% (470)
	3 – 2003	5.5% (43)	36.6% (284)	57.9% (449)
	4 - 2003	6.9% (32)	37.1% (172)	56.0% (260)
	5 - 2004	4.1% (34)	37.7% (312)	58.2% (482)
	6 - 2004	4.5% (25)	*30.6%* (171)	**64.9%** (362)
	7 - 2005	5.9% (48)	33.5% (272)	60.6% (493)
	Total	5.5% (267)	35.8% (1,733)	58.7% (2,842)

Note: Bold indicates statistically significantly higher than average.
Underlined italics indicates statistically significantly lower than average.

17. In your opinion, do you think enforcement of the seat belt law in your community is too strong, too weak, or about right?

Seat Belt Law Enforcement by Wave; Delaware, Maryland, and West Virginia

Seat Belt Law Enforcement						
			Seat belt law enforcement			
STATE			Too strong	Too weak	About right	Don't know
DE	WAVE	1	9.9% (29)	21.1% (62)	59.5% (175)	9.5% (28)
		2	9.6% (8)	14.5% (12)	60.2% (50)	15.7% (13)
		3	24.6% (15)	24.6% (15)	36.1% (22)	14.8% (9)
		4	20.8% (20)	20.8% (20)	50.0% (48)	8.3% (8)
		5	15.0% (34)	16.3% (37)	59.0% (134)	9.7% (22)
		6	13.9% (34)	20.1% (49)	59.4% (145)	6.6% (16)
		7	12.5% (14)	18.8% (21)	62.5% (70)	6.3% (7)
	Total		13.8% (154)	19.3% (216)	57.7% (644)	9.2% (103)
MD	WAVE	1	11.1% (75)	18.5% (125)	58.9% (398)	11.5% (78)
		2	8.2% (79)	17.6% (169)	61.7% (592)	12.5% (120)
		3	10.2% (92)	17.3% (156)	59.1% (534)	13.5% (122)
		4	10.2% (54)	18.7% (99)	59.5% (315)	11.5% (61)
		5	8.1% (82)	17.9% (182)	59.5% (605)	14.5% (147)
		6	8.3% (53)	18.7% (120)	62.0% (398)	11.1% (71)
		7	8.0% (80)	18.0% (180)	57.9% (578)	16.1% (161)
	Total		9.0% (515)	18.0% (1,031)	59.7% (3,420)	13.3% (760)
WV	WAVE	1	9.2% (134)	27.3% (398)	50.8% (740)	12.6% (184)
		2	8.6% (150)	27.1% (471)	53.5% (931)	10.9% (189)
		3	10.0% (136)	26.5% (361)	53.7% (730)	9.8% (133)
	Total		9.2% (420)	27.0% (1,230)	52.7% (2,401)	11.1% (506)

18. The effect of alcohol can vary from person to person, depending on body weight. For classification purposes only, what is your approximate weight?

Approximate Weight by Wave; Delaware, Maryland, and West Virginia

Approximate Weight by Wave								
STATE		WAVE						
		1	2	3	4	5	6	7
DE	under 100	0.02% (5)	0.0% (0)	0.50% (0)	2.80% (2)	0.50% (1)	0.80% (2)	1.90% (2)
	100-150	29.00% (78)	33.20% (25)	28.10% (18)	37.10% (27)	28.10% (57)	24.90% (58)	26.10% (28)
	151-200	48.40% (131)	46.50% (35)	51.80% (30)	31.70% (23)	51.80% (105)	45.90% (107)	44.00% (47)
	201 & above	21.10% (57)	19.80% (15)	20.50% (8)	29.00% (21)	20.50% (41)	28.20% (66)	27.10% (29)
MD	under 100	0.90% (5)	0.70% (7)	0.50% (5)	1.50% (7)	0.00% (4)	0.40% (2)	1.00% (10)
	100-150	34.50% (211)	35.30% (323)	37.40% (321)	36.50% (158)	37.50% (362)	35.90% (217)	34.80% (332)
	151-200	44.80% (273)	41.70% (383)	42.30% (364)	43.70% (189)	39.00% (375)	45.90% (279)	43.90% (418)
	201 & above	21.10% (125)	21.10% (195)	18.50% (160)	16.80% (73)	22% (212)	19.10% (114)	19.40% (187)
WV	under 100	0.20% (2)	0.01% (8)	0.80% (10)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	100-150	31.50% (366)	34.30% (546)	34.20% (419)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	151-200	46.00% (535)	43.30% (690)	43.20% (533)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	201 & above	23.50% (267)	22.80% (360)	23% (278)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)

Seen or Heard of an Impaired Driving Checkpoint

19. In the past 30 days, have you seen or heard of a checkpoint where police were looking for impaired drivers?

Seen or Heard of Checkpoint by WAVE; Delaware and Maryland

		Seen or Heard of Checkpoint	
STATE	**WAVE**	**No**	**Yes**
DE	**1 - 2002**	**64.8%** (190)	*35.2%* (103)
	2 - 2002	66.7% (56)	33.3% (28)
	3 - 2003	66.7% (40)	33.3% (20)
	4 - 2003	61.5% (59)	38.5% (37)
	5 - 2004	60.8% (138)	39.2% (89)
	6 - 2004	*49.0%* (120)	**51.0%** (125)
	7 - 2005	*33.9%* (38)	**66.1%** (74)
	Total	57.4% (641)	42.6% (476)
MD	**1 - 2002**	73.2% (488)	26.8% (179)
	2 - 2002	70.1% (653)	29.9% (278)
	3 - 2003	70.1% (618)	29.9% (263)
	4 - 2003	*63.6%* (336)	**36.4%** (192)
	5 - 2004	**75.6%** (765)	*24.4%* (247)
	6 - 2004	69.8% (448)	30.2% (194)
	7 - 2005	*66.5%* (661)	**33.5%** (333)
	Total	70.2% (3,969)	29.8% (1,686)

Note: Bold indicates statistically significantly higher than average.
Underlined italics indicate statistically significantly lower than average.

20. In the past 30 days, have you gone through a checkpoint where police were looking for impaired drivers?

Gone Through Checkpoint by Wave; Delaware, Maryland, and West Virginia

Gone Through Checkpoint				
			Gone through checkpoint	
STATE			Yes	No
DE	WAVE	1	9.0% (26)	91.0% (263)
		2	6.0% (5)	94.0% (78)
		3	8.3% (5)	91.7% (55)
		4	8.4% (8)	91.6% (87)
		5	11.8% (27)	88.2% (202)
		6	13.9% (34)	86.1% (210)
		7	22.9% (25)	77.1% (84)
	Total		11.7% (130)	88.3% (979)
MD	WAVE	1	7.5% (50)	92.5% (613)
		2	10.1% (94)	89.9% (841)
		3	9.2% (81)	90.8% (803)
		4	12.9% (68)	87.1% (459)
		5	9.1% (91)	90.9% (912)
		6	11.4% (73)	88.6% (570)
		7	8.3% (82)	91.7% (902)
	Total		9.6% (539)	90.4% (5,100)
WV	WAVE	1	13.9% (195)	86.1% (1,206)
		2	13.2% (228)	86.8% (1,501)
		3	15.1% (204)	84.9% (1,144)
	Total		14.0% (627)	86.0% (3,851)

21. Have you recently read, seen, or heard anything about impaired driving in your State?

Aware of Recent News About Impaired Driving WAVE; Delaware and Maryland

		Aware of Recent News About Impaired Driving	
STATE	**WAVE**	**No**	**Yes**
DE	**1 - 2002**	50.0% (146)	50.0% (146)
	2 - 2002	50.6% (42)	49.4% (41)
	3 - 2003	43.3% (26)	56.7% (34)
	4 - 2003	39.8% (37)	60.2% (56)
	5 - 2004	50.2% (115)	49.8% (114)
	6 - 2004	*39.8%* (96)	**60.2%** (145)
	7 - 2005	37.6% (41)	62.4% (68)
	Total	45.4% (503)	54.6% (604)
MD	**1 - 2002**	51.5% (343)	48.5% (323)
	2 - 2002	55.0% (518)	45.0% (423)
	3 - 2003	**57.6%** (505)	*42.4%* (371)
	4 - 2003	51.0% (266)	49.0% (256)
	5 - 2004	52.3% (527)	47.7% (480)
	6 - 2004	*46.2%* (298)	**53.8%** (347)
	7 - 2005	*48.4%* (480)	**51.6%** (511)
	Total	52.0% (2,937)	48.0% (2,711)

Note: Bold indicates statistically significantly higher than average.
Underlined italics indicate statistically significantly lower than average.

If yes, where did you read, see, or hear about it (check all that apply).

Media (Newspaper) Category by Wave; Delaware, Maryland, and West Virginia

Newspaper (Impaired Driving)				
			Newspaper (impaired driving)	
STATE			Not source	Source
DE	WAVE	1	47.7% (73)	52.3% (80)
		2	69.0% (29)	31.0% (13)
		3	44.1% (15)	55.9% (19)
		4	75.5% (74)	24.5% (24)
		5	71.7% (170)	28.3% (67)
		6	72.3% (183)	27.7% (70)
		7	66.1% (80)	33.9% (41)
	Total		66.5% (624)	33.5% (314)
MD	WAVE	1	66.1% (216)	33.9% (111)
		2	64.4% (277)	35.6% (153)
		3	61.7% (232)	38.3% (144)
		4	85.2% (462)	14.8% (80)
		5	83.3% (890)	16.7% (179)
		6	81.0% (562)	19.0% (132)
		7	83.2% (886)	16.8% (179)
	Total		78.3% (3,525)	21.7% (978)
WV	WAVE	1	57.2% (429)	42.8% (321)
		2	52.5% (502)	47.5% (454)
		3	58.0% (432)	42.0% (313)
	Total		55.6% (1,363)	44.4% (1,088)

Media (Radio) Category by Wave; Delaware, Maryland, and West Virginia

Radio (Impaired Driving)					
			Radio (impaired driving)		
STATE			Not source	Source	Miscoded
DE	WAVE	1	68.2% (101)	31.8% (47)	
		2	76.2% (32)	23.8% (10)	
		3	76.5% (26)	23.5% (8)	
		4	78.6% (77)	21.4% (21)	
		5	83.5% (198)	16.5% (39)	
		6	83.8% (212)	16.2% (41)	
		7	73.6% (89)	26.4% (32)	
	Total		78.8% (735)	21.2% (198)	
MD	WAVE	1	71.6% (235)	28.4% (93)	
		2	69.8% (301)	30.2% (130)	
		3	72.9% (275)	27.1% (102)	
		4	84.7% (459)	15.1% (82)	.2% (1)
		5	84.6% (904)	15.4% (165)	
		6	84.0% (583)	16.0% (111)	
		7	84.7% (902)	15.3% (163)	
	Total		81.2% (3,659)	18.8% (846)	.0% (1)
WV	WAVE	1	63.9% (484)	36.1% (274)	
		2	75.7% (726)	24.3% (233)	
		3	70.1% (526)	29.9% (224)	
	Total		70.4% (1,736)	29.6% (731)	

Media (TV) Category by Wave; Delaware, Maryland, and West Virginia

TV (Impaired Driving)				
			TV (impaired driving)	
STATE			Not source	Source
DE	WAVE	1	50.3% (79)	49.7% (78)
		2	53.7% (22)	46.3% (19)
		3	76.5% (26)	23.5% (8)
		4	71.4% (70)	28.6% (28)
		5	72.2% (171)	27.8% (66)
		6	76.7% (194)	23.3% (59)
		7	66.1% (80)	33.9% (41)
	Total		68.2% (642)	31.8% (299)
MD	WAVE	1	31.4% (103)	68.6% (225)
		2	26.9% (117)	73.1% (318)
		3	37.0% (142)	63.0% (242)
		4	69.4% (376)	30.6% (166)
		5	71.7% (766)	28.3% (303)
		6	69.5% (482)	30.5% (212)
		7	66.4% (707)	33.6% (358)
	Total		59.6% (2,693)	40.4% (1,824)
WV	WAVE	1	37.6% (288)	62.4% (477)
		2	44.6% (433)	55.4% (537)
		3	35.4% (267)	64.6% (487)
	Total		39.7% (988)	60.3% (1,501)

Media (Poster) Category by Wave; Delaware, Maryland, and West Virginia

Poster (Impaired Driving)				
			Poster (impaired driving)	
STATE			Not source	Source
DE	WAVE	1	84.9% (124)	15.1% (22)
		2	76.7% (33)	23.3% (10)
		3	91.2% (31)	8.8% (3)
		4	84.7% (83)	15.3% (15)
		5	91.6% (217)	8.4% (20)
		6	92.5% (234)	7.5%(19)
		7	98.3% (119)	1.7% (2)
	Total		90.2% (841)	9.8% (91)
MD	WAVE	1	90.5% (294)	9.5%(31)
		2	92.7% (394)	7.3% (31)
		3	89.5% (334)	10.5% (39)
		4	96.5% (523)	3.5% (19)
		5	94.1% (1,006)	5.9% (63)
		6	94.8% (658)	5.2% (36)
		7	95.2% (1,014)	4.8% (51)
	Total		94.0% (4,223)	6.0% (270)
WV	WAVE	1	85.5% (630)	14.5% (107)
		2	87.4% (831)	12.6% (120)
		3	85.4% (631)	14.6% (108)
	Total		86.2% (2,092)	13.8% (335)

Media (Brochure) Category by Wave; Delaware, Maryland, and West Virginia

Brochure (Impaired Driving)				
			Brochure (impaired driving)	
STATE			Not source	Source
DE	WAVE	1	93.2% (137)	6.8% (10)
		2	100.0% (41)	0.0% (0)
		3	94.1% (32)	5.9% (2)
		4	95.9% (94)	4.1% (4)
		5	97.0% (230)	3.0% (7)
		6	98.8% (250)	1.2% (3)
		7	98.3% (119)	1.7% (2)
	Total		97.0% (903)	3.0% (28)
MD	WAVE	1	96.6% (312)	3.4% (11)
		2	95.1% (405)	4.9% (21)
		3	94.9% (354)	5.1% (19)
		4	98.5% (534)	1.5% (8)
		5	97.8% (1,046)	2.2% (23)
		6	97.1% (674)	2.9% (20)
		7	98.3% (1,047)	1.7% (18)
	Total		97.3% (4,372)	2.7% (120)
WV	WAVE	1	95.8% (703)	4.2% (31)
		2	95.2% (901)	4.8% (45)
		3	94.0% (690)	6.0% (44)
	Total		95.0% (2,294)	5.0% (120)

Media (Police Checkpoint) Category by Wave; Delaware, Maryland, and West Virginia

Police Checkpoint (Impaired Driving)				
			Police checkpoint (impaired driving)	
STATE			Not source	Source
DE	WAVE	1	95.9% (140)	4.1% (6)
		2	97.6% (41)	2.4% (1)
		3	94.1% (32)	5.9% (2)
		4	92.9% (91)	7.1% (7)
		5	95.8% (227)	4.2% (10)
		6	93.7% (237)	6.3% (16)
		7	94.2% (114)	5.8% (7)
	Total		94.7% (882)	5.3% (49)
MD	WAVE	1	96.9% (315)	3.1% (10)
		2	95.1% (404)	4.9% (21)
		3	95.7% (356)	4.3% (16)
		4	98.2% (532)	1.8% (10)
		5	96.7% (1034)	3.3% (35)
		6	96.5% (670)	3.5% (24)
		7	97.5% (1,038)	2.5% (27)
	Total		96.8% (4,349)	3.2% (143)
WV	WAVE	1	94.8% (698)	5.2% (38)
		2	91.3% (866)	8.7% (83)
		3	91.7% (675)	8.3% (61)
	Total		92.5% (2,239)	7.5% (182)

Media (Other) Category by Wave; Delaware, Maryland, and West Virginia

Other (Impaired Driving)				
			Other (impaired driving)	
STATE			Not source	Source
DE	WAVE	1	76.8% (119)	23.2% (36)
		2	81.0% (34)	19.0% (8)
		3	85.7% (30)	14.3% (5)
		4	82.7% (81)	17.3% (17)
		5	92.4% (219)	7.6% (18)
		6	90.9% (230)	9.1% (23)
		7	95.0% (115)	5.0% (6)
	Total		88.0% (828)	12.0% (113)
MD	WAVE	1	84.7% (283)	15.3% (51)
		2	86.2% (382)	13.8% (61)
		3	81.3% (321)	18.7% (74)
		4	92.4% (501)	7.6% (41)
		5	92.4% (988)	7.6% (81)
		6	92.5% (642)	7.5% (52)
		7	93.1% (992)	6.9% (73)
	Total		90.5% (4,109)	9.5% (433)
WV	WAVE	1	87.6% (659)	12.4% (93)
		2	84.2% (826)	15.8% (155)
		3	85.7% (647)	14.3% (108)
	Total		85.7% (2,132)	14.3% (356)

22. Have you recently read, seen, or heard anything about a seat belt law in your State?

Aware of Recent News about Seat Belt Law by Wave; Delaware, Maryland, and West Virginia

Aware of Recent News about Seat Belt Law				
			Aware of recent news about seat belt law	
STATE			Yes	No
DE	WAVE	1	83.3% (244)	16.7% (49)
		2	63.4% (52)	36.6% (30)
		3	50.0% (30)	50.0% (30)
		4	85.7% (72)	14.3% (12)
		5	83.3% (189)	16.7% (38)
		6	73.3% (178)	26.7% (65)
		7	71.2% (79)	28.8% (32)
	Total		76.7% (844)	23.3% (256)
MD	WAVE	1	57.7% (378)	42.3% (277)
		2	53.9% (499)	46.1% (426)
		3	49.6% (431)	50.4% (438)
		4	77.1% (391)	22.9% (116)
		5	66.2% (665)	33.8% (340)
		6	57.9% (372)	42.1% (270)
		7	52.4% (516)	47.6% (469)
	Total		58.2% (3,252)	41.8% (2,336)
WV	WAVE	1	83.1% (1,157)	16.9% (236)
		2	75.5% (1,297)	24.5% (420)
		3	62.7% (843)	37.3% (502)
	Total		74.0% (3,297)	26.0% (1,158)

If yes, where did you read, see, or hear about it (check all that applies).

Media (Newspaper) Category by Wave; Delaware, Maryland, and West Virginia

Newspaper (seat belt law)				
			Newspaper (seat belt law)	
STATE			Not source	Source
DE	WAVE	1	64.5% (160)	35.5% (88)
		2	75.0% (39)	25.0% (13)
		3	56.7% (17)	43.3% (13)
		4	69.4% (68)	30.6% (30)
		5	64.6% (153)	35.4% (84)
		6	75.9% (192)	24.1% (61)
		7	77.7% (94)	22.3% (27)
	Total		69.6% (723)	30.4% (316)
MD	WAVE	1	79.7% (303)	20.3% (77)
		2	76.7% (385)	23.3% (117)
		3	79.1% (344)	20.9% (91)
		4	84.3% (457)	15.7% (85)
		5	85.1% (910)	14.9% (159)
		6	88.5% (614)	11.5% (80)
		7	89.8% (956)	10.2% (109)
	Total		84.7% (3,969)	15.3% (718)
WV	WAVE	1	64.5% (749)	35.5% (413)
		2	66.6% (868)	33.4% (435)
		3	70.3% (597)	29.7% (252)
	Total		66.8% (2,214)	33.2% (1,100)

Media (Radio) Category by Wave; Delaware, Maryland, and West Virginia

Radio (seat belt law)				
			Radio (seat belt law)	
STATE			Not source	Source
DE	WAVE	1	69.2% (171)	30.8% (76)
		2	73.1% (38)	26.9% (14)
		3	70.0% (21)	30.0% (9)
		4	66.3% (65)	33.7% (33)
		5	64.1% (152)	35.9% (85)
		6	75.9% (192)	24.1% (61)
		7	80.2% (97)	19.8% (24)
	Total		70.9% (736)	29.1% (302)
MD	WAVE	1	68.2% (259)	31.8% (121)
		2	70.2% (355)	29.8% (151)
		3	77.5% (334)	22.5% (97)
		4	79.0% (428)	21.0%(114)
		5	78.5% (839)	21.5% (230)
		6	84.1% (584)	15.9% (110)
		7	85.3% (908)	14.7% (157)
	Total		79.1% (3,707)	20.9% (980)
WV	WAVE	1	64.2% (756)	35.8% (422)
		2	75.8% (988)	24.2% (316)
		3	73.0% (623)	27.0% (230)
	Total		71.0% (2367)	29.0% (968)

Media (TV) Category by Wave; Delaware, Maryland, and West Virginia

TV (seat belt law)				
			TV (seat belt law)	
STATE			Not source	Source
DE	WAVE	1	61.9% (153)	38.1% (94)
		2	55.8% (29)	44.2% (23)
		3	53.3% (16)	46.7% (14)
		4	62.2% (61)	37.8% (37)
		5	60.8% (144)	39.2% (93)
		6	68.4% (173)	31.6% (80)
		7	69.4% (84)	30.6% (37)
	Total		63.6% (660)	36.4% (378)
MD	WAVE	1	38.6% (149)	61.4% (237)
		2	38.5% (195)	61.5% (312)
		3	43.5% (193)	56.5% (251)
		4	53.3% (289)	46.7% (253)
		5	62.6% (669)	37.4% (400)
		6	68.6% (476)	31.4% (218)
		7	72.5% (772)	27.5% (293)
	Total		58.3% (2,743)	41.7% (1,964)
WV	WAVE	1	37.0% (439)	63.0% (747)
		2	41.4% (543)	58.6% (768)
		3	42.5% (363)	57.5% (492)
	Total		40.1% (1,345)	59.9% (2,007)

Media (Poster) Category by Wave; Delaware, Maryland, and West Virginia

Poster (seat belt law)				
			Poster (seat belt law)	
STATE			Not source	Source
DE	WAVE	1	63.3% (155)	36.7% (90)
		2	56.6% (30)	43.4% (23)
		3	90.0% (27)	10.0% (3)
		4	78.6% (77)	21.4% (21)
		5	73.8% (175)	26.2% (62)
		6	76.7% (194)	23.3% (59)
		7	84.3% (102)	15.7% (19)
	Total		73.3% (760)	26.7% (277)
MD	WAVE	1	79.1% (303)	20.9% (80)
		2	79.0% (398)	21.0% (106)
		3	76.6% (333)	23.4% (102)
		4	83.4% (452)	16.6% (90)
		5	79.4% (849)	20.6% (220)
		6	84.9% (589)	15.1% (105)
		7	85.6% (912)	14.4% (153)
	Total		81.8% (3,836)	18.2% (856)
WV	WAVE	1	70.6% (820)	29.4% (342)
		2	72.3% (941)	27.7% (361)
		3	73.5% (624)	26.5% (225)
	Total		72.0% (2,385)	28.0% (928)

Media (Brochure) Category by Wave; Delaware, Maryland, and West Virginia

Brochure (seat belt law)				
			Brochure (seat belt law)	
STATE			Not source	Source
DE	WAVE	1	93.0% (227)	7.0% (17)
		2	94.2% (49)	5.8% (3)
		3	93.3% (28)	6.7% (2)
		4	99.0% (97)	1.0% (1)
		5	93.2% (221)	6.8% (16)
		6	93.7% (237)	6.3% (16)
		7	97.5% (118)	2.5% (3)
	Total		94.4% (977)	5.6% (58)
MD	WAVE	1	95.2% (360)	4.8% (18)
		2	95.2% (476)	4.8% (24)
		3	94.0% (405)	6.0% (26)
		4	97.6% (529)	2.4% (13)
		5	97.1% (1038)	2.9% (31)
		6	97.0% (673)	3.0% (21)
		7	96.8% (1,031)	3.2% (34)
	Total		96.4% (4,512)	3.6% (167)
WV	WAVE	1	96.3% (1,114)	3.7% (43)
		2	95.3% (1,237)	4.7% (61)
		3	94.2% (796)	5.8% (49)
	Total		95.4% (3,147)	4.6% (153)

Media (Police Checkpoint) Category by Wave; Delaware, Maryland, and West Virginia

Police checkpoint (seat belt law)				
			Police checkpoint (seat belt law)	
STATE			Not source	Source
DE	WAVE	1	87.3% (213)	12.7% (31)
		2	94.3% (50)	5.7% (3)
		3	100.0% (30)	0.0% (0)
		4	90.8% (89)	9.2% (9)
		5	90.7% (215)	9.3% (22)
		6	93.7% (237)	6.3% (16)
		7	94.2% (114)	5.8% (7)
	Total		91.5% (948)	8.5% (88)
MD	WAVE	1	93.7% (354)	6.3% (24)
		2	97.4% (487)	2.6% (13)
		3	96.8% (417)	3.2% (14)
		4	97.4% (528)	2.6% (14)
		5	97.0% (1,037)	3.0% (32)
		6	96.7% (671)	3.3% (23)
		7	97.0% (1,033)	3.0% (32)
	Total		96.8% (4,527)	3.2% (152)
WV	WAVE	1	93.0% (1,078)	7.0% (81)
		2	93.4% (1,211)	6.6% (86)
		3	95.3% (803)	4.7% (40)
	Total		93.7% (3,092)	6.3% (207)

Media (Other) Category by Wave; Delaware, Maryland, and West Virginia

Other (seat belt law)				
			Other (seat belt law)	
STATE			Not source	Source
DE	WAVE	1	80.1% (197)	19.9% (49)
		2	82.7% (43)	17.3% (9)
		3	80.6% (25)	19.4% (6)
		4	88.8% (87)	11.2% (11)
		5	87.3% (207)	12.7% (30)
		6	89.7% (227)	10.3% (26)
		7	93.4% (113)	6.6% (8)
	Total		86.6%(899)	13.4%(139)
MD	WAVE	1	80.6% (307)	19.4% (74)
		2	84.3% (431)	15.7% (80)
		3	81.8% (365)	18.2% (81)
		4	90.2% (489)	9.8% (53)
		5	90.7% (970)	9.3% (99)
		6	90.3% (627)	9.7% (67)
		7	90.0% (958)	10.0% (107)
	Total		88.1% (4,147)	11.9% (561)
WV	WAVE	1	83.9% (983)	16.1% (188)
		2	84.4% (1,111)	15.6% (206)
		3	82.8% (713)	17.2% (148)
	Total		83.8% (2,807)	16.2% (542)

23. Do you know the name of any impaired driving enforcement program(s) in your State?

Checkpoint Strikeforce by Name, by WAVE; Delaware and Maryland

		Checkpoint Strikeforce	
STATE	**WAVE**	**Don't Know Name**	**Know Name**
DE	**1 - 2002**	**95.1%** (312)	*4.9%* (16)
	2 - 2002	92.2% (83)	7.8% (7)
	3 - 2003	89.2% (58)	10.8% 7()
	4 - 2003	94.9% (93)	5.1% (5)
	5 - 2004	91.6% (217)	8.4% (20)
	6 - 2004	*83.0%* (210)	**17.0%** (43)
	7 - 2005	*74.4%* (90)	**25.6%** (31)
	Total	89.2% (1,063)	10.8% (129)
MD	**1 - 2002**	**96.8%** (752)	*3.2%* (25)
	2 - 2002	95.5% (986)	4.5% (47)
	3 - 2003	95.4% (936)	4.6% (45)
	4 - 2003	95.0% (515)	5.0% (27)
	5 - 2004	95.1% (1,017)	4.9% (52)
	6 - 2004	*92.4%* (641)	**7.6%** (53)
	7 - 2005	*92.5%* (985)	**7.5%** (80)
	Total	94.7% (5,832)	5.3% (329)

Note: Bold indicates statistically significantly higher than average.
Underlined italics indicate statistically significantly lower than average.

Aware of *You Drink & Drive. You Lose.* by Name; Delaware and Maryland

		"You Drink & Drive. You Lose."	
STATE	**WAVE**	**Don't Know Name**	**Know Name**
DE	**1 - 2002**	**82.9%** (272)	*17.1%* (56)
	2 - 2002	74.4% (67)	25.6% (23)
	3 - 2003	*56.9%* (37)	**43.1%** (28)
	4 - 2003	73.5% (72)	26.5% (26)
	5 - 2004	70.5% (167)	29.5% (70)
	6 - 2004	*59.3%* (150)	**40.7%** (103)
	7 - 2005	*60.3%* (73)	**39.7%** (48)
	Total	70.3% (838)	29.7% (354)
MD	**1 - 2002**	**81.9%** (636)	*18.1%* (141)
	2 - 2002	**81.8%** (845)	*18.2%* (188)
	3 - 2003	**84.0%** (824)	*16.0%* (157)
	4 - 2003	78.4% (425)	21.6% (117)
	5 - 2004	*73.1%* (781)	**26.9%** (288)
	6 - 2004	*63.3%*(439)	**36.7%** (255)
	7 - 2005	*68.3%* (727)	**31.7%** (338)
	Total	75.9% (4,677)	24.1% (1,484)

Note: Bold indicates statistically significantly higher than average.
Underlined italics indicate statistically significantly lower than average.

24. Do you know the name of any seat belt program(s) in your State?

Seat Belt Programs (Team DUI) by Wave; Delaware, Maryland, and West Virginia

Team DUI				
			Team DUI	
STATE			Don't know name	Know name
DE	WAVE	1	95.7% (314)	4.3% (14)
		2	93.3% (84)	6.7% (6)
		3	100.0% (65)	0.0% (0)
		4	93.9% (92)	6.1% (6)
		5	91.6% (217)	8.4% (20)
		6	91.7% (232)	8.3% (21)
		7	95.0% (115)	5.0% (6)
	Total		93.9% (1,119)	6.1% (73)
MD	WAVE	1	98.2% (763)	1.8% (14)
		2	97.7% (1,009)	2.3% (24)
		3	96.7% (949)	3.3% (32)
		4	96.9% (525)	3.1% (17)
		5	96.3% (1,029)	3.7% (40)
		6	96.7% (671)	3.3% (23)
		7	96.9% (1,032)	3.1% (33)
	Total		97.0% (5,978)	3.0% (183)
WV	WAVE	1	97.7% (1,549)	2.3% (36)
		2	98.0% (1,848)	2.0% (38)
		3	96.5% (1,400)	3.5% (51)
	Total		97.5% (4,797)	2.5% (125)

Seat Belt Programs (Friends Don't Let Friends Drive Drunk) by Wave; Delaware, Maryland, and West Virginia

Friends Don't Let Friends Drive Drunk				
			Friends Don't Let Friends Drive Drunk	
STATE			Don't know name	Know name
DE	WAVE	1	40.9% (134)	59.1% (194)
		2	46.7% (42)	53.3% (48)
		3	46.2% (30)	53.8% (35)
		4	37.8% (37)	62.2% (61)
		5	43.9% (104)	56.1% (133)
		6	37.5% (95)	62.5% (158)
		7	44.6% (54)	55.4% (67)
	Total		41.6% (496)	58.4% (696)
MD	WAVE	1	45.2% (351)	54.8% (426)
		2	46.7% (482)	53.3% (551)
		3	46.6% (457)	53.4% (524)
		4	43.5% (236)	56.5% (306)
		5	42.0% (449)	58.0% (620)
		6	42.8% (297)	57.2% (397)
		7	41.7% (444)	58.3% (621)
	Total		44.1% (2,716)	55.9% (3,445)
WV	WAVE	1	40.3% (639)	59.7% (946)
		2	35.8% (675)	64.2% (1,211)
		3	35.0% (508)	65.0% (943)
	Total		37.0% (1,822)	63.0% (3,100)

Seat Belt Programs (Please Step Away from Your Vehicle) by Wave; Delaware, Maryland, and West Virginia

Please Step Away from Your Vehicle				
			Please Step Away from Your Vehicle	
STATE			Don't know name	Know name
DE	WAVE	1	98.2% (322)	1.8% (6)
		2	98.9% (89)	1.1% (1)
		3	100.0% (65)	0.0% (0)
		4	95.9% (94)	4.1% (4)
		5	96.6% (229)	3.4% (8)
		6	94.1% (238)	5.9% (15)
		7	95.9% (116)	4.1% (5)
	Total		96.7% (1,153)	3.3% (39)
MD	WAVE	1	97.3% (756)	2.7% (21)
		2	97.0% (1,002)	3.0% (31)
		3	95.9% (941)	4.1% (40)
		4	96.3% (522)	3.7% (20)
		5	96.2% (1,028)	3.8% (41)
		6	94.1% (653)	5.9% (41)
		7	96.5% (1,028)	3.5% (37)
	Total		96.3% (5,930)	3.7% (231)
WV	WAVE	1	97.4% (1,543)	2.6% (42)
		2	95.5% (1,802)	4.5% (84)
		3	94.4% (1,370)	5.6% (81)
	Total		95.8% (4,715)	4.2% (207)

Seat Belt Programs (No Excuses, Buckle Up) by Wave; Delaware, Maryland, and West Virginia

No Excuses, Buckle Up				
			No Excuses, Buckle Up	
STATE			Don't know name	Know name
DE	WAVE	1	91.8% (301)	8.2% (27)
		2	92.2% (83)	7.8% (7)
		3	89.2% (58)	10.8% (7)
		4	98.0% (96)	2.0% (2)
		5	91.1% (216)	8.9% (21)
		6	90.9% (230)	9.1% (23)
		7	88.4% (107)	11.6% (14)
	Total		91.5% (1,091)	8.5% (101)
MD	WAVE	1	85.3% (663)	14.7% (114)
		2	86.1% (889)	13.9% (144)
		3	87.3% (856)	12.7% (125)
		4	86.5% (469)	13.5% (73)
		5	89.1% (953)	10.9% (116)
		6	86.9% (603)	13.1% (91)
		7	86.9% (925)	13.1% (140)
	Total		87.0% (5,358)	13.0% (803)
WV	WAVE	1	90.7% (1,437)	9.3% (148)
		2	90.8% (1,712)	9.2% (174)
		3	91.0% (1,320)	9.0% (131)
	Total		90.8% (4,469)	9.2% (453)

Seat Belt Programs (Buckle Up, Now) by Wave; Delaware, Maryland, and West Virginia

Buckle Up, Now				
			Buckle Up, Now	
STATE			Don't know name	Know name
DE	WAVE	1	93.9% (308)	6.1% (20)
		2	90.0% (81)	10.0% (9)
		3	98.5% (64)	1.5% (1)
		4	94.9% (93)	5.1% (5)
		5	91.6% (217)	8.4% (20)
		6	90.1% (228)	9.9% (25)
		7	86.8% (105)	13.2% (16)
	Total		91.9% (1,096)	8.1% (96)
MD	WAVE	1	87.3% (678)	12.7% (99)
		2	85.5% (883)	14.5% (150)
		3	86.3% (847)	13.7% (134)
		4	88.4% (479)	11.6% (63)
		5	89.6% (958)	10.4% (111)
		6	88.6% (615)	11.4% (79)
		7	87.5% (932)	12.5% (133)
	Total		87.5% (5,392)	12.5% (769)
WV	WAVE	1	94.1% (1,492)	5.9% (93)
		2	93.7% (1,768)	6.3% (118)
		3	92.0% (1,335)	8.0% (116)
	Total		93.4% (4,595)	6.6% (327)

Seat Belt Programs (Click It or Ticket) by Wave; Delaware, Maryland, and West Virginia

Click It or Ticket				
			Click It or Ticket	
STATE			Don't know name	Know name
DE	WAVE	1	35.1% (115)	64.9% (213)
		2	36.7% (33)	63.3% (57)
		3	40.0% (26)	60.0% (39)
		4	24.5% (24)	75.5% (74)
		5	17.3% (41)	82.7% (196)
		6	25.3% (64)	74.7% (189)
		7	32.2% (39)	67.8% (82)
	Total		28.7% (342)	71.3% (850)
MD	WAVE	1	85.6% (665)	14.4% (112)
		2	81.3% (840)	18.7% (193)
		3	79.0% (775)	21.0% (206)
		4	48.7% (264)	51.3% (278)
		5	38.5% (412)	61.5% (657)
		6	43.1% (299)	56.9% (395)
		7	46.6% (496)	53.4% (569)
	Total		60.9% (3,751)	39.1% (2,410)
WV	WAVE	1	34.9% (553)	65.1% (1,032)
		2	30.9% (582)	69.1% (1,304)
		3	32.7% (475)	67.3% (976)
	Total		32.7% (1,610)	67.3% (3,312)

Seat Belt Programs (No Exceptions, No Excuses) by Wave; Delaware, Maryland, and West Virginia

No Exceptions, No Excuses				
			No Exceptions, No Excuses	
STATE			Don't know name	Know name
DE	WAVE	1	96.3% (316)	3.7% (12)
		2	97.8% (88)	2.2% (2)
		3	95.4% (62)	4.6% (3)
		4	100.0% (98)	0.0% (0)
		5	95.4% (226)	4.6% (11)
		6	93.7% (237)	6.3% (16)
		7	97.5% (118)	2.5% (3)
	Total		96.1% (1,145)	3.9% (47)
MD	WAVE	1	90.6% (704)	9.4% (73)
		2	91.4% (944)	8.6% (89)
		3	95.2% (934)	4.8% (47)
		4	95.4% (517)	4.6% (25)
		5	93.5% (1,000)	6.5% (69)
		6	93.7% (650)	6.3% (44)
		7	94.6% (1,008)	5.4% (57)
	Total		93.4% (5,757)	6.6% (404)
WV	WAVE	1	96.9% (1,536)	3.1% (49)
		2	96.2% (1,814)	3.8% (72)
		3	95.8% (1,390)	4.2% (61)
	Total		96.3% (4,740)	3.7% (182)

Seat Belt Programs (Operation 35, Buckle Up, Stay Alive) by Wave; Delaware, Maryland, and West Virginia

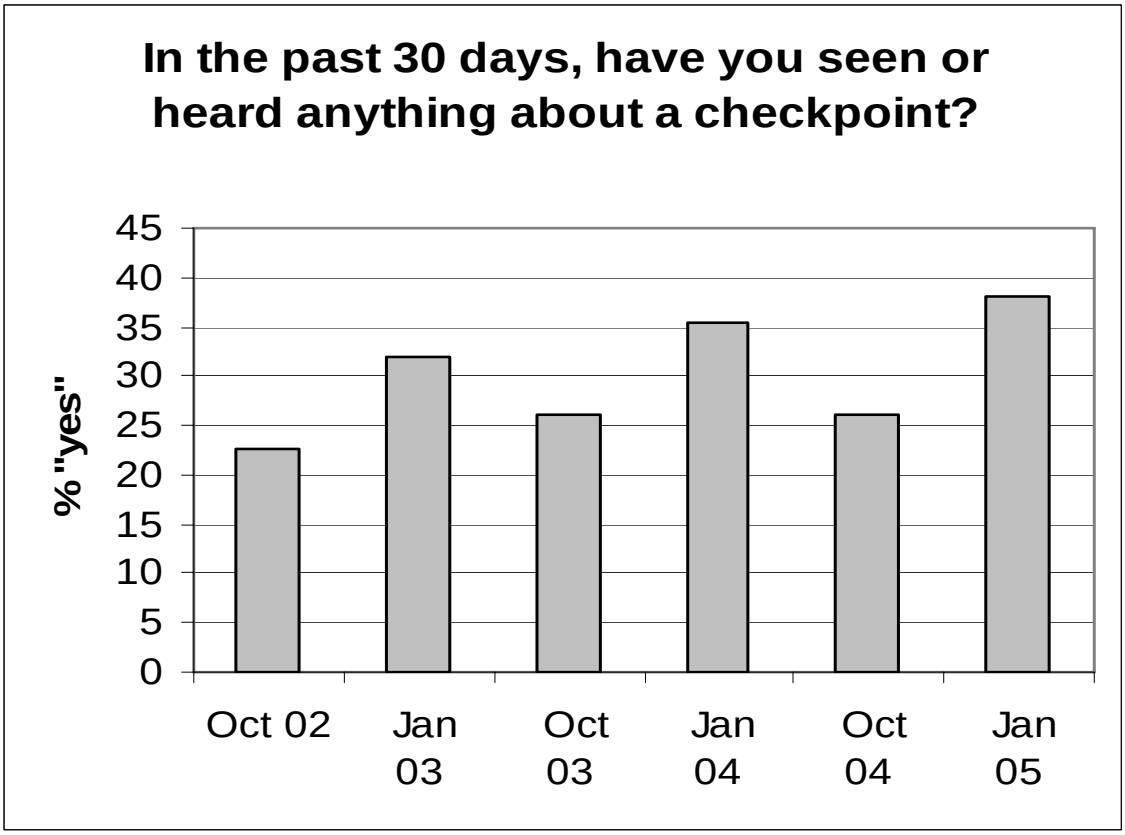
Operation 35, Buckle Up, Stay Alive				
			Operation 35, Buckle Up, Stay Alive	
STATE			Don't know name	Know name
DE	WAVE	1	97.0% (318)	3.0% (10)
		2	97.8% (88)	2.2% (2)
		3	98.5% (64)	1.5% (1)
		4	93.9% (92)	6.1% (6)
		5	98.3% (233)	1.7% (4)
		6	98.0% (248)	2.0% (5)
		7	92.6% (112)	7.4% (9)
	Total		96.9% (1,155)	3.1% (37)
MD	WAVE	1	97.3% (756)	2.7% (21)
		2	96.0% (992)	4.0% (41)
		3	97.5% (956)	2.5% (25)
		4	97.0% (526)	3.0% (16)
		5	97.9% (1,047)	2.1% (22)
		6	98.0% (680)	2.0% (14)
		7	98.1% (1,045)	1.9% (20)
	Total		97.4% (6,002)	2.6% (159)
WV	WAVE	1	97.8% (1,550)	2.2% (35)
		2	97.6% (1,841)	2.4% (45)
		3	95.5% (1,385)	4.5% (66)
	Total		97.0% (4,776)	3.0% (146)

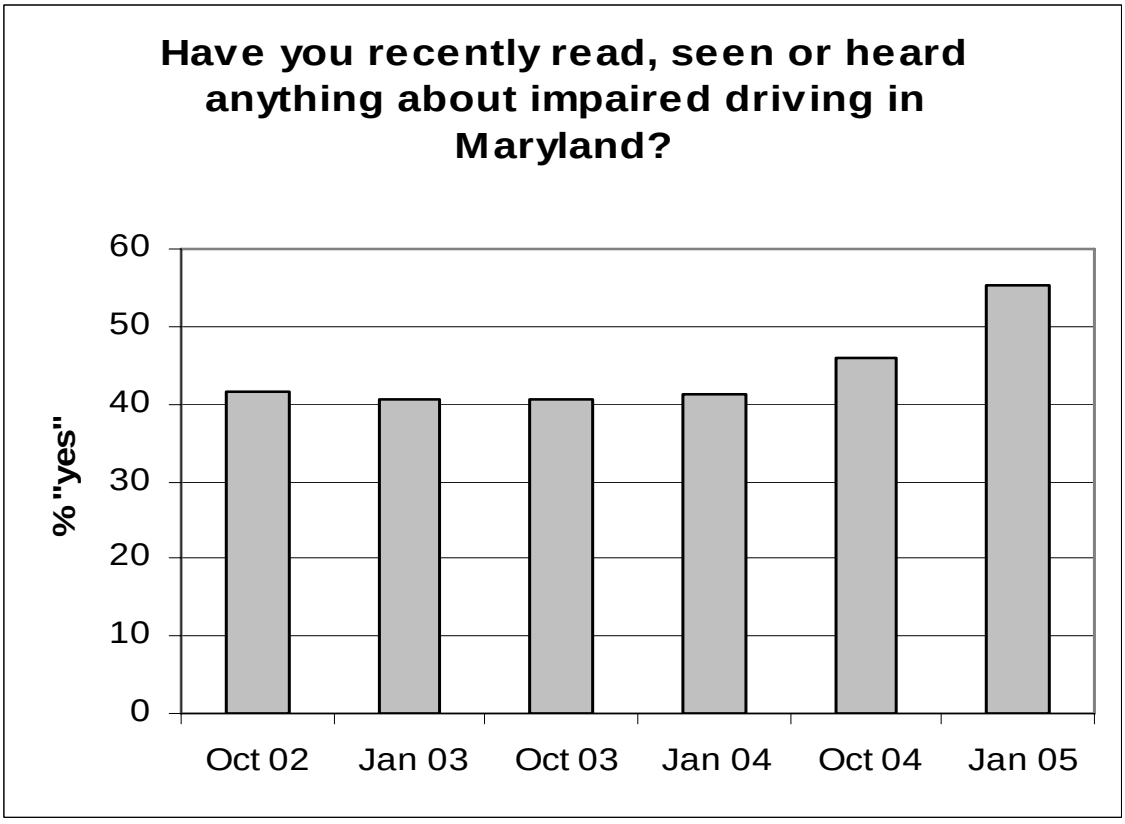
Seat Belt Programs (Drive to Survive) by Wave; Delaware, Maryland, and West Virginia

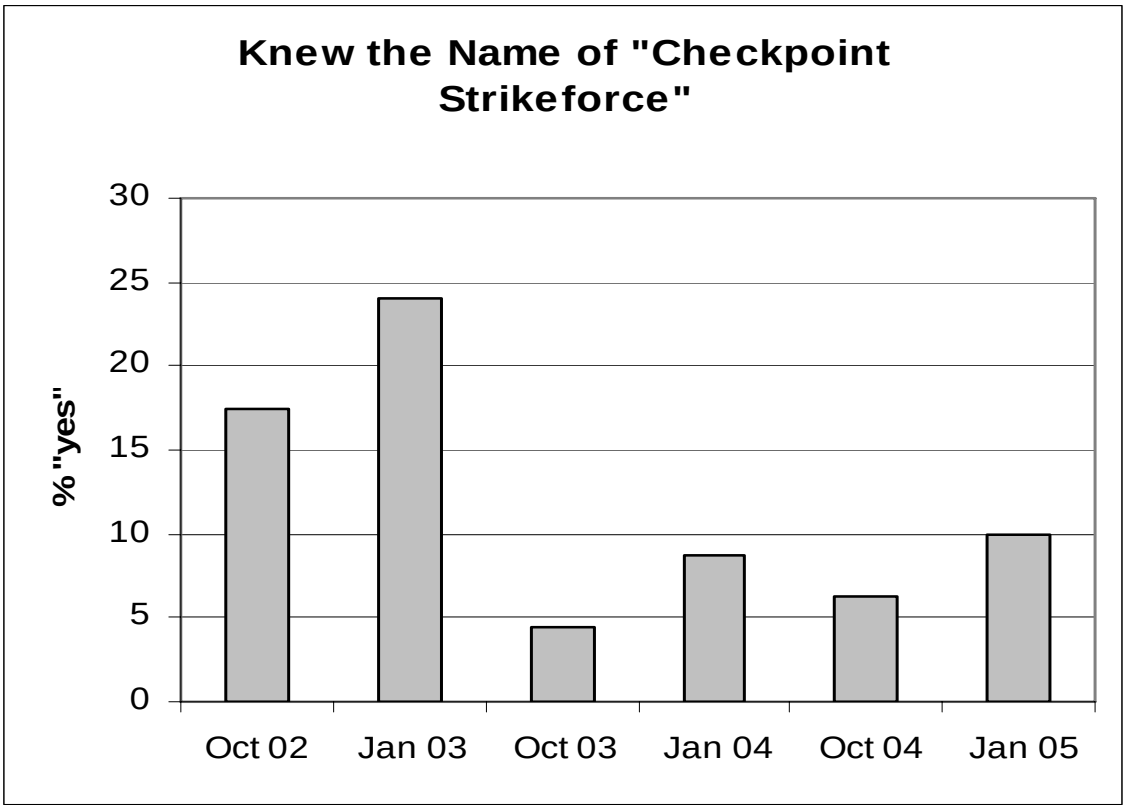
Drive to Survive				
			Drive to Survive	
STATE			Don't know name	Know name
DE	WAVE	1	90.9% (298)	9.1% (30)
		2	97.8% (88)	2.2% (2)
		3	95.4% (62)	4.6% (3)
		4	94.9% (93)	5.1% (5)
		5	91.1% (216)	8.9% (21)
		6	91.3% (231)	8.7% (22)
		7	94.2% (114)	5.8% (7)
	Total		92.4% (1,102)	7.6% (90)
MD	WAVE	1	74.8% (581)	25.2% (196)
		2	76.3% (788)	23.7% (245)
		3	75.5% (741)	24.5% (240)
		4	83.6% (453)	16.4% (89)
		5	80.9% (865)	19.1% (204)
		6	79.7% (553)	20.3% (141)
		7	81.4% (867)	18.6% (198)
	Total		78.7% (4,848)	21.3% (1,313)
WV	WAVE	1	94.9% (1,504)	5.1% (81)
		2	93.2% (1,757)	6.8% (129)
		3	95.2% (1,381)	4.8% (70)
	Total		94.3% (4,642)	5.7% (280)

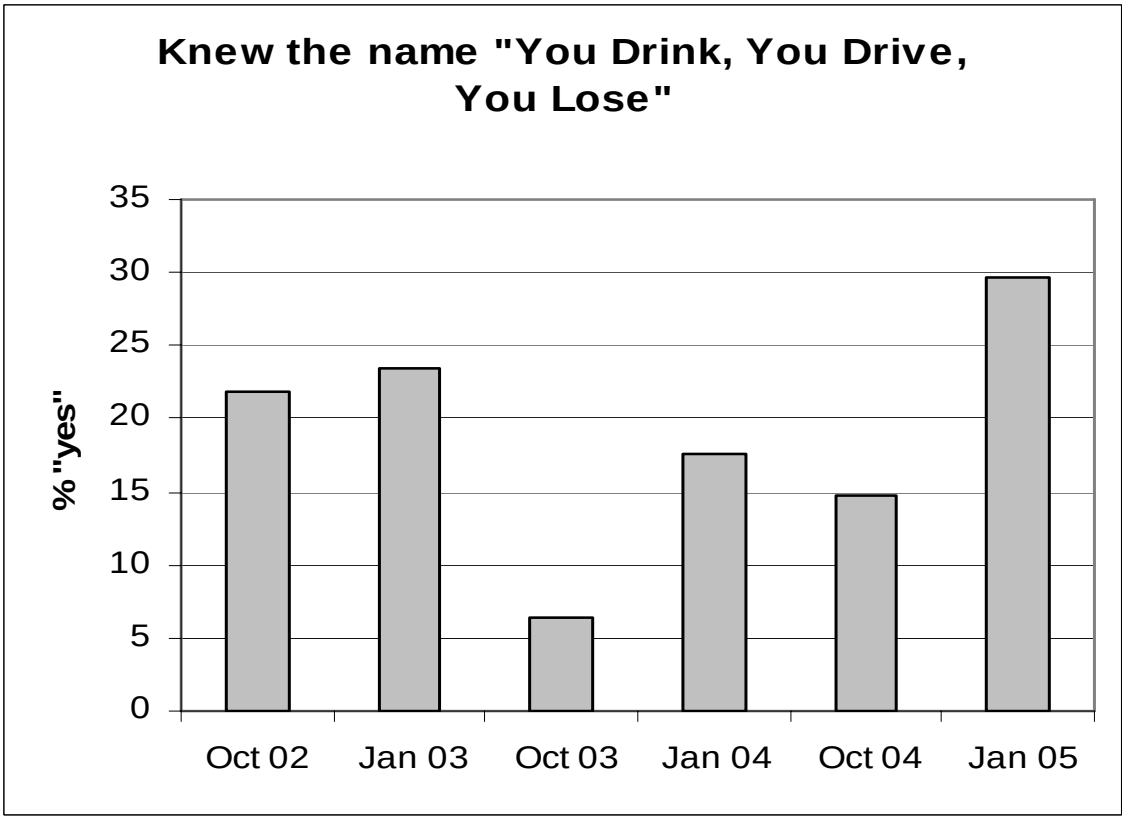
Appendix J:

Evaluation of *Checkpoint Strikeforce* Program: University of Maryland Telephone Survey Results

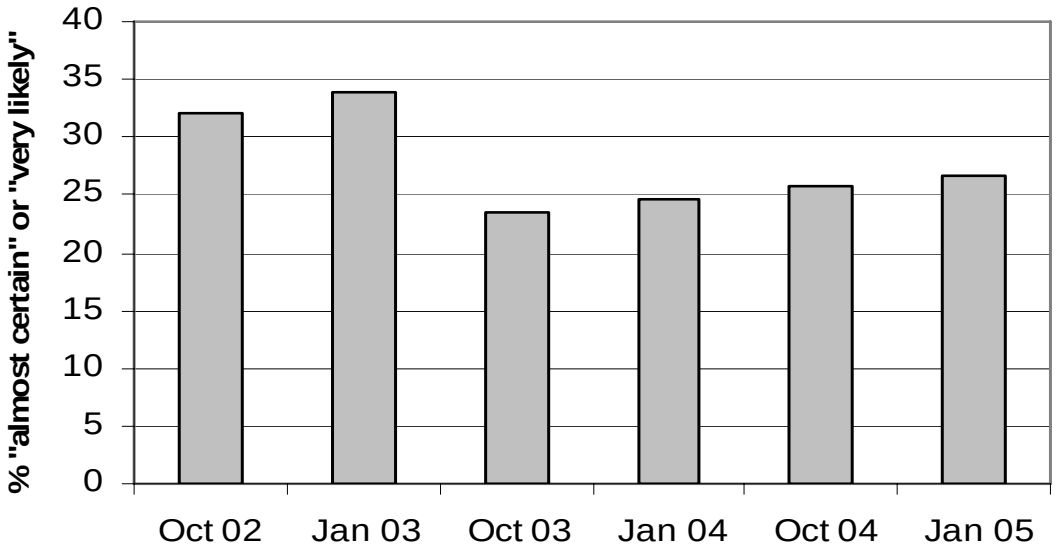

In the past 30 days, have you seen or heard anything about a checkpoint?
% "yes"
45
40
35
30
25
20
15
10
5
0
Oct 02
Jan 03
Oct 03
Jan 04
Oct 04
Jan 05


Have you recently read, seen or heard anything about impaired driving in Maryland?
% "yes"
60
50
40
30
20
10
0
Oct 02
Jan 03
Oct 03
Jan 04
Oct 04
Jan 05

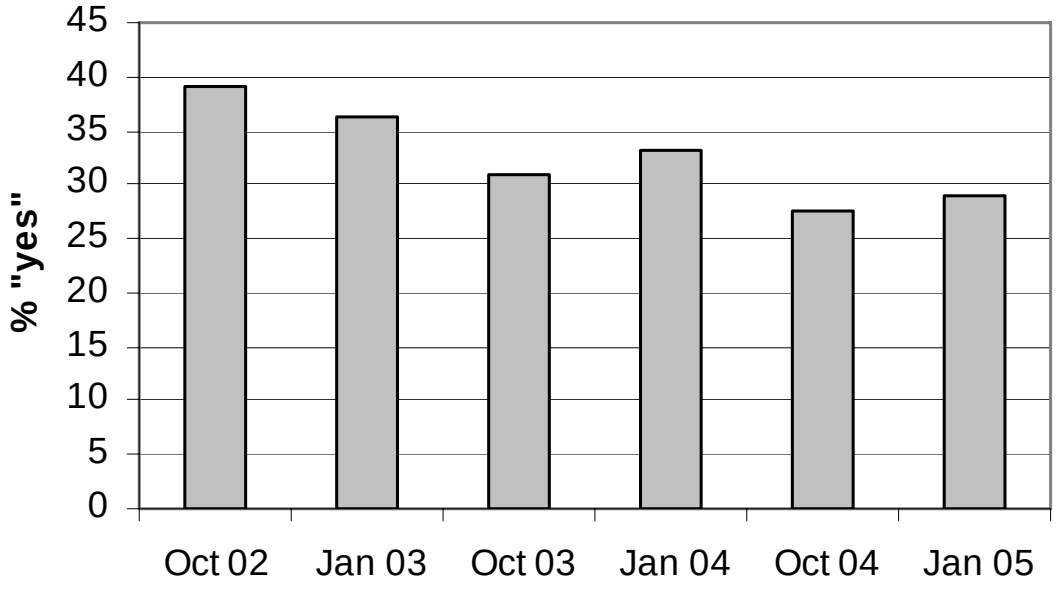

Knew the Name of "Checkpoint Strikeforce"
% "yes"
30
25
20
15
10
5
0
Oct 02
Jan 03
Oct 03
Jan 04
Oct 04
Jan 05

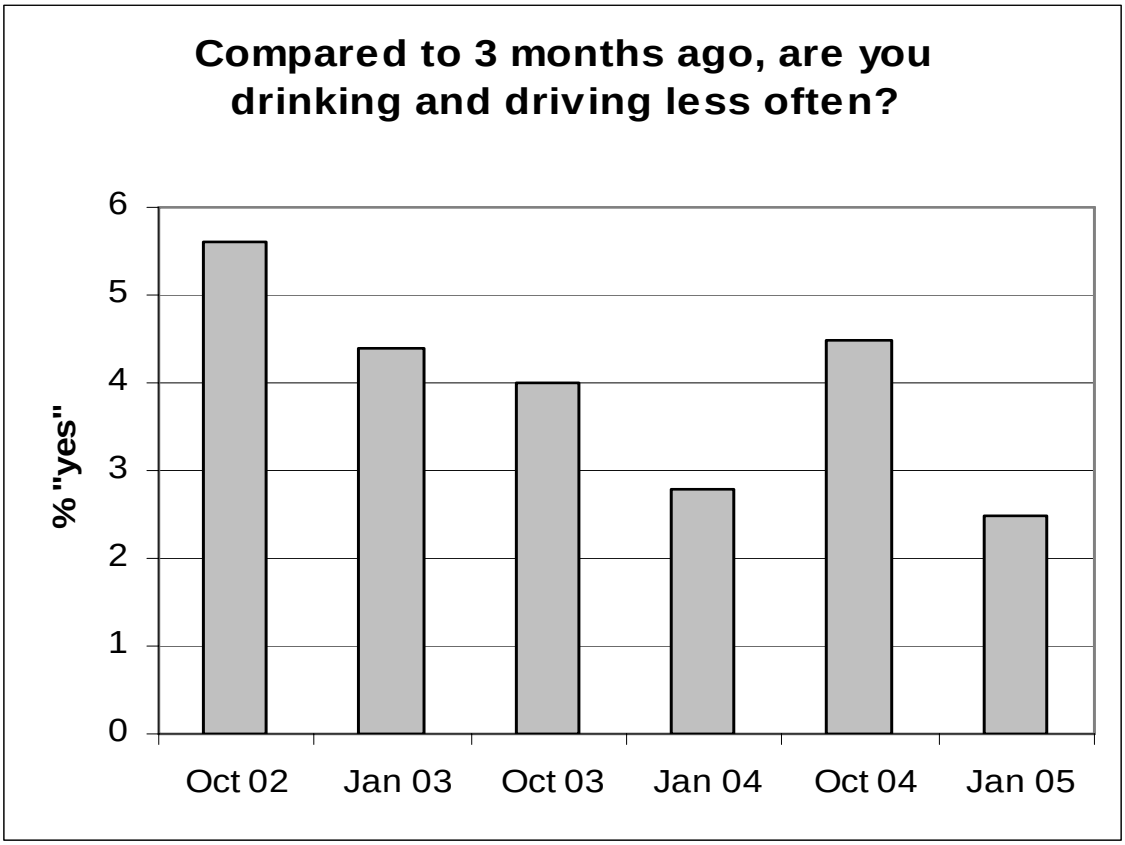

Knew the name "You Drink, You Drive, You Lose"
% "yes"
35
30
25
20
15
10
5
0
Oct 02
Jan 03
Oct 03
Jan 04
Oct 04
Jan 05

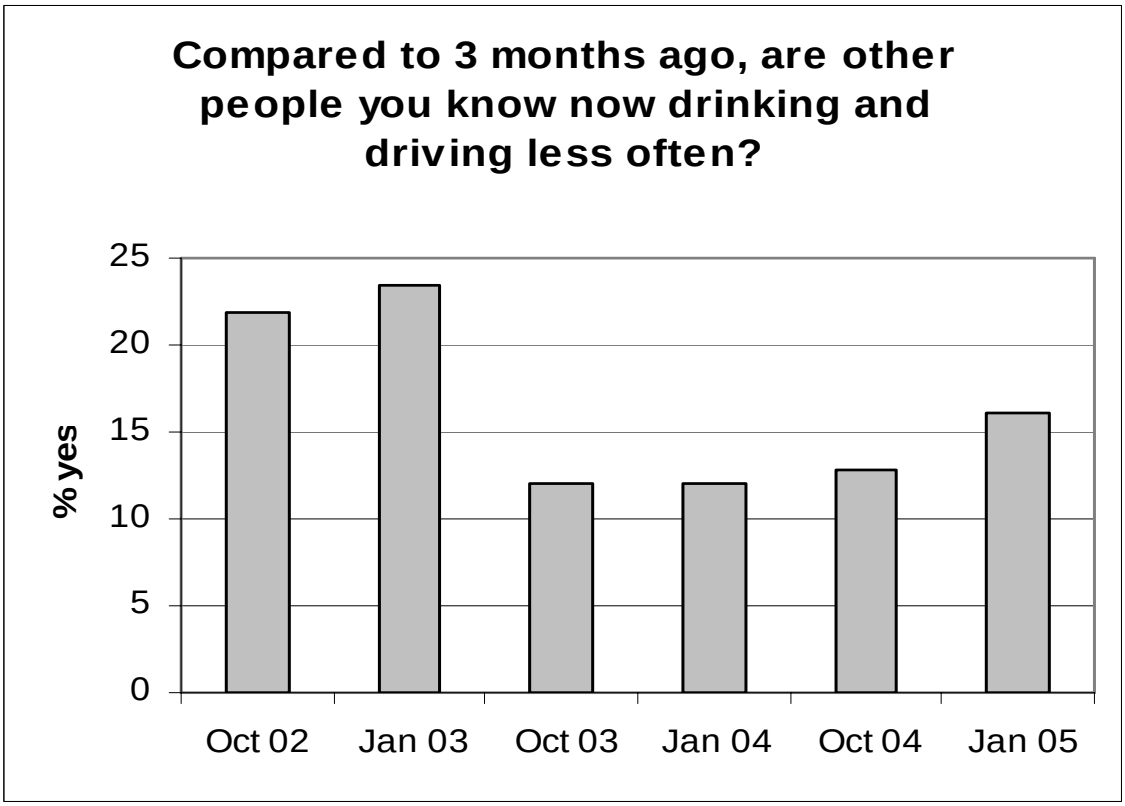
If you drove after having too much to drink, how likely are you to be stopped by the police?



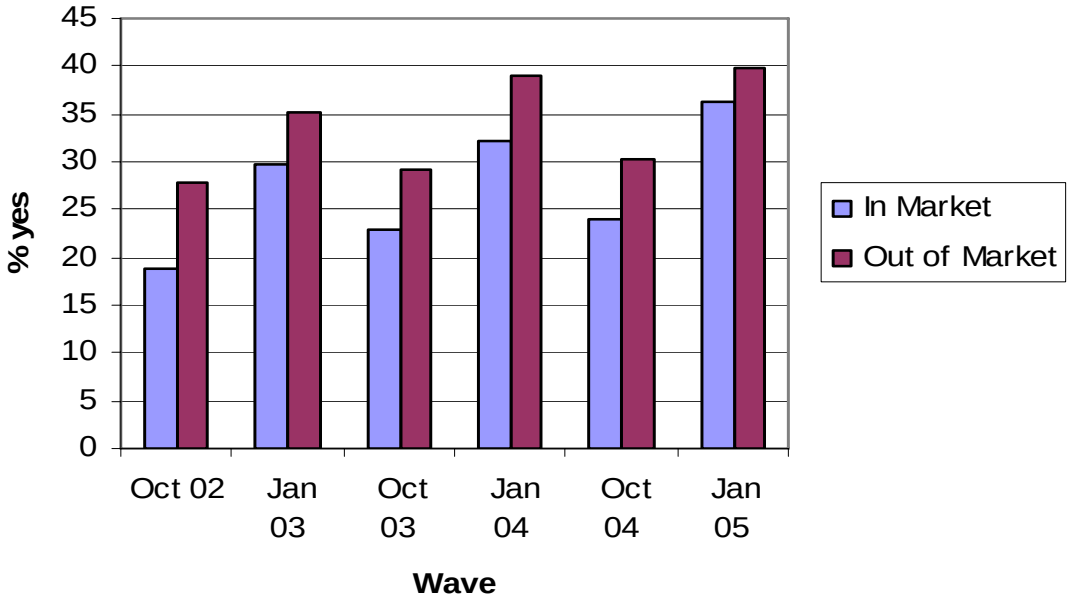
Compared to 3 months ago, is a drinking driver more likely to be stopped by the police?



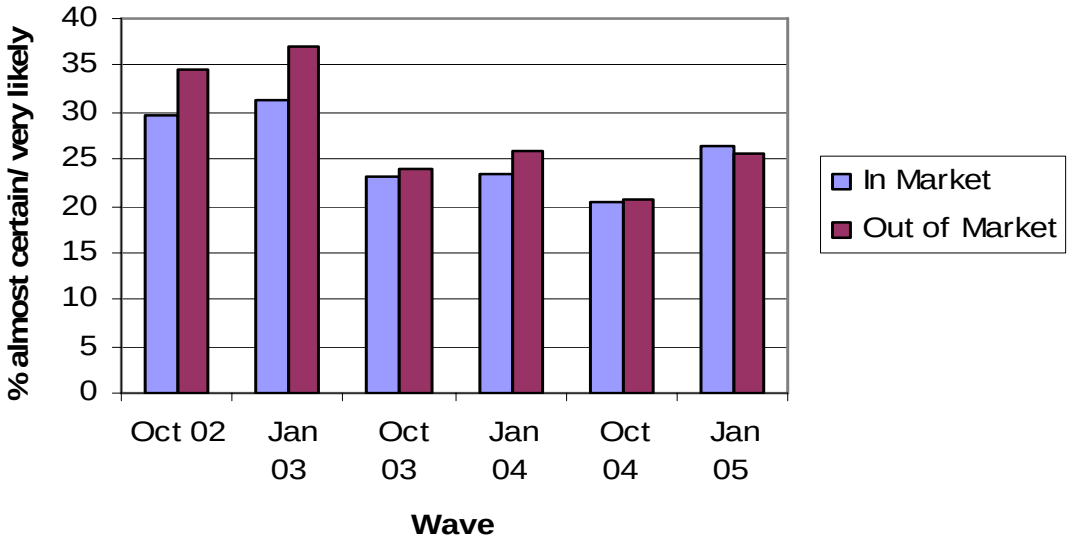

Compared to 3 months ago, are you drinking and driving less often?
% "yes"
6
5
4
3
2
1
0
Oct 02
Jan 03
Oct 03
Jan 04
Oct 04
Jan 05


Compared to 3 months ago, are other people you know now drinking and driving less often?
% yes
25
20
15
10
5
0
Oct 02
Jan 03
Oct 03
Jan 04
Oct 04
Jan 05

Past 30 Days Have you Seen/Heard Anything About a Checkpoint?



If you drove after having too much to drink, how likely are you to be stopped by the police?




If you drive after having too much to drink, how likely are you to be stopped by the police? (21 - 29 yr old drivers)
% "almost certain" or "very likely"
60
50
40
30
20
10
0
Oct 02
Jan 03
Oct 03
Jan 04
Oct 04
Jan 05
In Market
Out of Market

Appendix K:

Evaluation of *Checkpoint Strikeforce* Program: WRAP/Andres McKenna Research, Virginia Survey Results

Andres McKenna Research

January 2003

N = 400 interviews w/adults -- margin of error = ± 4.9%

400 interviews w/18-34 year olds – margin of error = ± 4.9%

PERSONAL/CONFIDENTIAL

Andres McKenna Research
412 1st Street, SE
Washington, DC 20003

Hello, my name is _____ and I am calling from _____, a market research firm. This is not a sales call; we are conducting a survey of people in Virginia and would just like to get your opinion on important issues. This is a short survey and will only take about four minutes.
[DO NOT PAUSE]

Q. First off, have you heard or read or seen anything in the media recently about the Checkpoint Strikeforce sobriety checkpoints in Virginia?

	7/02	1/03
YES	36%	50%
NO	64%	50%
DON'T KNOW/REFUSED **[NOT READ]**	1%	0%

Q. Sobriety checkpoints are events at which police stop vehicles to make sure that no one is driving under the influence of drugs or alcohol. In general, would you say that you… sobriety checkpoints?

	7/02		1/03	
STRONGLY SUPPORT	65%		71%	
SOMEWHAT SUPPORT	24%		20%	
TOTAL SUPPORT		**89%**		**91%**
SOMEWHAT OPPOSE	2%		4%	
STRONGLY OPPOSE	6%		3%	
TOTAL OPPOSE		**8%**		**7%**
HAVE NO OPINION	4%		2%	
DON'T KNOW/REFUSED **[NOT READ]**	1%		1%	

Q. Do you think that sobriety checkpoints reduce drunk driving?

	7/02	1/03
YES	62%	65%
NO	21%	23%
SOMEWHAT/TIMES **[NOT READ]**	12%	8%
DON'T KNOW/REFUSED **[NOT READ]**	6%	5%

Q. Some say such checkpoints are unlawful invasions of privacy. Others say that they are a useful tool in keeping drunk drivers off the road. Which comes closest to your view?

	7/02	1/03
USEFUL TOOL	80%	82%
UNLAWFUL INVASIONS OF PRIVACY	12%	11%
BOTH **[NOT READ]**	n/a	5%
DON'T KNOW/REFUSED **[NOT READ]**	8%	2%

Q. If you learned that deaths and injuries due to drunk driving were on the rise, and that an effort in Virginia resulted in the arrest of hundreds of people for impaired driving, would you be . . . to support them?

	7/02		1/03	
MUCH MORE LIKELY	69%		69%	
SOMEWHAT MORE LIKELY	17%		23%	
TOTAL MORE LIKELY		**86%**		**91%**
SOMEWHAT LESS LIKELY	3%		2%	
MUCH LESS LIKELY	2%		2%	
TOTAL LESS LIKELY		**5%**		**4%**
NO DIFFERENCE **[NOT READ]**	9%		4%	
DON'T KNOW/REFUSED **[NOT READ]**	1%		1%	

Q. How aware were you of the recent Checkpoint Strikeforce sobriety checkpoints conducted by the local law enforcement in Virginia?

	7/02	1/03
VERY AWARE	n/a	22%
SOMEWHAT AWARE	n/a	34%
NOT VERY AWARE	n/a	18%
NOT AT ALL AWARE [**SKIP NEXT 3 Q]**	n/a	26%
DON'T KNOW/REFUSED **[DNR/SKIP NEXT 3]**	n/a	1%

Q. Did you change your behavior as a result of being aware of the recent Checkpoint Strikeforce sobriety checkpoints?

	7/02	1/03
YES	n/a	10%
NO **[SKIP NEXT 2 Q]**	n/a	87%
DON'T KNOW/REFUSED [**SKIP NEXT 2 Q]** n/a	4%	

Q. In what ways did you change your activities?

	7/02	1/03
DID NOT DRINK OR DRANK LESS	n/a	32%
MADE SURE TO HAVE A DESIGNATED DRIVER	n/a	24%
TOOK A CAB OR OTHER RIDE HOME	n/a	5%
OTHER	n/a	31%
DON'T KNOW/REFUSED **[NOT READ]**	n/a	9%

Q. Do you plan to make these changes permanent?

	7/02	1/03
YES	n/a	83%
NO	n/a	4%
MAYBE	n/a	9%
DON'T KNOW/REFUSED **[NOT READ]**	n/a	5%

Q. Do you think that such sobriety checkpoints are a good investment of tax dollars?

	7/02	1/03
YES	n/a	81%
NO	n/a	13%
DON'T KNOW/REFUSED **[NOT READ]**	n/a	7%

Finally, we have a few questions for demographic purposes . . .

Q. What is your age please?

18 TO 21	7%
22 TO 34	56%
35 TO 54	21%
55 TO 70	12%
OVER 70	4%
DON'T KNOW/REFUSED	1%

Q. What is your race?

WHITE	79%
AFRICAN-AMERICAN	13%
HISPANIC	3%
ASIAN	3%
OTHER [NOT READ]	1%
DON'T KNOW/REFUSED [NOT READ]	1%

Q. Into which category does your annual household income fall? Just stop me when I get to the right category.

LESS THAN $30,000	17%
$30 TO $60,000	34%
MORE THAN $60,000	35%
DON'T KNOW/REFUSED [NOT READ]	14%

Q. *Area Code* ***(FROM SAMPLE)***

703	27%
757	23%
540	18%
804	17%
434	9%
276	5%
571	1%

Q. **Gender** [BY OBSERVATION]

MALE	48%
FEMALE	52%

Appendix L:

Evaluation of *Checkpoint Strikeforce* Program: Preusser Research Group, Pennsylvania and West Virginia Survey Results

Strategic Evaluation State – Pennsylvania
DMV Driver Survey, Summer 2003 – Preliminary Results

	June 2003 Pre	June 2003 Mid	July 2003 Post	Sig. $p<.01$*
	(653) %	(659) %	(604) %	
Reported "Always" using a seat belt	68	64	70	
Reported driving at least once within two hours of drinking	15	16	15	
Reported chance of arrests are "Always" if driving after drinking	19	17	16	
In past three months, rate of driving:				
Increased	1	1	1	
Decreased	6	9	7	
Stayed Same	10	11	10	
Reported police enforcement of drinking and driving laws as "Very Strict"	39	37	36	
Reported penalties for alcohol impaired driving are:				
Too Strict	7	7	7	
About Right	50	48	54	
Not Strict Enough	36	36	34	
Reported going through a police checkpoint targeting alcohol impaired drivers in past 30 days	8	7	9	
Reported recent exposure to alcohol impaired driving information	73	70	79	✓
Source of alcohol impaired driving information:				
Newspaper	31	26	35	✓
Radio	19	20	22	
TV	42	46	56	✓
Reported knowing the slogan:				
You Drink & Drive, You Lose	23	27	38	✓
Checkpoint Strikeforce	9	9	12	
Friends Don't Let Friends Drive Drunk	83	82	75	✓
Please Step Away From Your Vehicle	14	11	15	

* Chi-square test

Summary of Results

The following results are from a driver survey conducted in six Pennsylvania Driver License Offices. The survey was conducted in three intervals in the following locations: Altoona; Bensalem; Erie; Pittsburgh; Wilkes Barre; York.

Pre-surveys indicated that nearly three of every four respondents reported recent exposure to drinking and driving information; that proportion increased over the course of the July Mobilization (from 73 to 79 percent). Television was reported most often as the source of information, followed by newspaper, then radio. All three sources of information increased over time. Recognition of the Mobilization's slogan, You Drink & Drive, You Lose, also increased over time. The most widely known slogan continued to be Friends Don't Let Friends Drive Drunk although some slippage in recognition was measured.

Survey results indicated that nearly 8 percent of respondents reported going through an enforcement checkpoint focused on impaired drivers in the past 30 days. That proportion remained relatively unchanged over the course of the July 4th Mobilization.

Strategic Evaluation State – West Virginia
DMV Driver Survey, Summer 2003 – Preliminary Results

	June 2003 Pre	June 2003 Mid	July 2003 Post	Sig. $p<.01$*
	(645) %	(827) %	(676) %	
Reported "Always" using a seat belt	67	71	68	
Reported driving at least once within two hours of drinking	6	6	8	
Reported chance of arrests are "Always" if driving after drinking	18	17	26	✓
In past three months, rate of driving:				
Increased	1	1	2	
Decreased	4	4	5	
Stayed Same	7	7	6	
Reported police enforcement of drinking and driving laws as "Very Strict"	28	27	30	
Reported penalties for alcohol impaired driving are:				
Too Strict	5	7	6	
About Right	36	41	41	
Not Strict Enough	52	46	45	
Reported going through a police checkpoint targeting alcohol impaired drivers in past 30 days	12	9	14	✓
Reported recent exposure to alcohol impaired driving information	60	70	77	✓
Source of alcohol impaired driving information:				
Newspaper	25	21	30	✓
Radio	15	18	23	✓
TV	40	48	50	✓
Reported knowing the slogan:				
You Drink & Drive, You Lose	27	32	45	✓
Checkpoint Strikeforce	25	33	42	✓
Friends Don't Let Friends Drive Drunk	84	80	69	✓
Please Step Away From Your Vehicle	5	7	16	✓

* Chi-square test

Summary of Results

The following results are from a driver survey conducted in nine West Virginia Driver License Offices. The survey was conducted in three intervals in the following locations: Bridgeport; Charleston; Huntington; Logan; Martinsburg; Moundsville; Parkersburg; Princeton; Teays Valley.

Pre-survey results indicated a moderate level of exposure to alcohol related information in West Virginia. Nearly 60 percent of respondents reported recent exposure to drinking and driving information and that increased to 77 percent over the course of the July Mobilization. Television was reported most often as the source of information, followed by newspaper, then radio. Recognition of all three sources of information increased over time. Recognition of the Mobilization's slogan, You Drink & Drive, You Lose, and Checkpoint Strikeforce increased over time. The most widely known slogan continued to be Friends Don't Let Friends Drive Drunk, though some slippage in recognition was measured over the course of the Mobilization.

Respondents were more likely to report there is "Always" a chance of arrest after the Mobilization's enforcement and publicity occurred. Post survey results also indicated that personal experience with police enforcement focused on impaired drivers increased.

Appendix M:

Evaluation of *Checkpoint Strikeforce* Program: Field Data Collection Protocol

Evaluation of the Mid-Atlantic Region's *Checkpoint Strikeforce* Project

Field Supervisor Instructions

Objectives of the Project

PIRE is evaluating the effectiveness of the National Highway Traffic Safety Administration's (NHTSA's) Mid-Atlantic Region's *Checkpoint Strikeforce* program, which is a multi-State initiative involving frequent DUI/DWI checkpoints in each of the Mid-Atlantic Region's five States (Delaware, Maryland, Pennsylvania, Virginia, West Virginia) and the District of Columbia. We are evaluating whether it is feasible to repeatedly mount multi-State high-intensity checkpoint programs and whether these programs can realize meaningful reductions in the toll from alcohol-related crashes.

Figure 1. NHTSA's Mid-Atlantic Region: Delaware, the District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia.

We will be collecting:

- Department of Motor Vehicle (DMV) surveys
- DUI/DWI arrest data
- Crash and fatality data
- Paid and earned media
- Roadside data
- Other data

Field supervisors and data collectors are involved in the roadside data collection activities, which are integrated into police sobriety checkpoints. The general purpose is to obtain as many interviews and breathe samples as possible from a random sample of nighttime drivers. A team of two to six people will assist in conducting the data collection at each checkpoint.

Role of the Police Officers

This survey is being integrated into an enforcement sobriety checkpoint. Thus, the primary duties of the uniformed officer are to perform their normal enforcement duties. However, officers in the enforcement line will be asked to tell drivers at the conclusion of their investigation that the researcher in the white lab coat would like to talk to them. The officer will then step back and out

of direct view, and the data collector will request the anonymous breath test. Once the breath test is complete, the data collector will return the motorist to the officer's control for traffic direction.

Ideally, the officer at the first position will keep the driver in place until all positions are through and then all vehicles will be released at the same time. Additionally, officers who take vehicles out of the line for a further investigation will be given a pink card to fill in about the outcome of that subject (e.g., citation, arrest, etc.) when the investigation is complete.

The Data Collection Process

The data collection process consists of two parts:

1. Observations recorded on handheld computer (PDA) or on pencil/paper as backup
2. The breath sample

Pair each data collector with an officer who will be questioning the drivers. Position the data collector just behind the officer, to one side, observing the driver as the officer speaks to the driver and recording these observations into the handheld PDA.

When the officer steps back, he/she should say something like: "This researcher wants a few words with you and then you're free to go."

The data collector steps forwards and says: "I would like to ask you to provide a voluntary anonymous breath test for research purposes. The result is stored inside the device and cannot be read until tomorrow. Please take a deep breath and blow slow and steady into the tube."

The data collector should speak with authority, without a question in their voice. The goal is to obtain as many samples as possible in the evening's checkpoint. As they speak, they can pull the sanitary wrapper from the breath tube and position the PBT write out towards the mouth of the driver. There is, of course, no way to guarantee that the respondent will give a breath test. Interviewing methodology studies show that making requests in a calm, matter-of-fact, business-like manner is most likely to elicit cooperation and that the vast majority of respondents do try to be helpful.

It is extremely important in any social survey that there is as little variation in the data collection procedures as possible, so that respondents are responding to the same stimulus in giving their answers. For this survey, the most important data element is the PBT test.

Sometimes a respondent will not understand a request the first time it is asked. In this case, the data collector simply repeats the question word-for-word and a bit more slowly and clearly emphasizing that the breath test is anonymous and the results will not be known until the next day.

Because most respondents will be in some hurry to get back on their way, the interview should be conducted in a business-like and professional manner. There is little time for chit-chat and building up rapport with such a short interaction. It is important to not introduce long delays in the checkpoint process. Thus, if the driver refuses, one should only reiterate the request once. The highest priority is safety of the public, the police, and yourself.

Field Supervisor Duties

1. Meet with the police supervisors before the checkpoint begins. This can be at the police headquarters during a pre-checkpoint briefing or at the site if the officers are meeting at the site. Give the officer in charge of the checkpoint your letter or introduction. Go over the survey procedures with the officer and devise a plan of action of how to set up the site safely and how to handle intoxicated drivers.

2. Arrive at the survey site or meeting location in time to allow enough time to set-up the survey site. Distribute lab coats, safety vests, hats, PDAs and PBTs, trash bags and large handfuls of breath tubes. Have all data collectors stand in a circle, turn on the PDAs, and sign in at the same time, entering their names, the site, and PBT and PDA numbers. Once everyone is signed in and you have looked at *each* PDA to make sure log-in information is correct, review checkpoint/data collection procedures and answer any questions.

3. Decide on where the data collectors will stand, where to park vehicles (staff and possibly survey participants), and coordinate closely with the officer in charge of the checkpoint.

4. Complete the top identification information on the Activity Report Form on the clipboard and give it to the officer who will be clicker-counting the vehicles as they pass by the survey site. Write the names of the police officers and their badge numbers down on the Activity Report Form.

5. After making sure your staff is ready to begin, signal to the police that you are ready for the first vehicle(s).

6. Keep a constant eye on the data collectors, the police, and all drivers, thinking in terms of their safety first and also breaks in protocol. Handle all intoxicated drivers in a professional and courteous manner. Handle all questions from motorists, passengers, the police, and your staff professionally. Handle all equipment failures, and deliver additional supplies to the data collectors as needed.

7. Maintain contacts (with the police and any other contacts necessary to keep the survey operations flowing smoothly). Handle complaints should they arise. Should a motorist have a major complaint, provide him/her with one of John Lacey's business cards and encourage him/her to contact John. Make note of the names of any officers that are particularly helpful, so we can single them out for appreciation later.

8. When the survey is finished for the site, obtain the Activity Report Form (or arrange for it to be faxed to PIRE the next day), the clipboard, and traffic counter from the drivers or police officers; enter the traffic count, the ending time, and the other operational details on the form. File form, the completed questionnaires, and any used Participant Agreements in the expanding folder. Collect all equipment, trash, etc., before leaving.

9. In the car on the way home, have data collectors fill out Travel Vouchers for mileage reimbursement.

Field Supervisor's After-Survey Tasks

1. Make note of any problems with equipment/personnel that need to be discussed with Katharine. Complaints should be handled as they arise, for example, correct any problematic performance issues before the next survey. We want our data collectors to be happy, to want to work, and to do a good job, and to feel that we respect and value them. In this, they need our support, encouragement, and thanks. We need to let them know at each checkpoint that we're glad they are there, that they are very valuable to the study, and that they are doing a good thing for society.

2. Bring all equipment and supplies back to Katharine.

3. Ian will download breath test devices and PDA's and email data to Katharine and Tim. It is important to keep a backup electronic file of ALL data.

4. Reconcile all accounting matters (e.g., if money is spent on supplies, food for data collectors, taxis, hotel rooms, gas, etc.).

5. Discuss each checkpoint with Katharine. Either send her an email reporting on it afterwards, or come by her office to discuss it in person. Tell her what worked well, where you see potential problems, what she can help smooth things out for you, and how we can do this better the next time. We improve our system as we go along, so your feedback is very important.

Appendix N:

Evaluation of *Checkpoint Strikeforce* Program: Talking Points for Police Briefing

Field Supervisor's Talking Points for Pre-Checkpoint Police Briefing

INTRODUCTION

- We are from the Pacific Institute for Research and Evaluation in Calverton, MD. (Introduce team)
- We are part of a project evaluating the overall *Checkpoint Strikeforce* program.
- Our data collection is not evaluating your performance tonight; it is gathering information on people on the road. We are not evaluating the performance of officers; we are evaluating the *Checkpoint Strikeforce* program and the concept of regular checkpoints. We're not looking over your shoulder; rather, you are helping us gather information.
- We plan to do identical checkpoints next year at the same time, as a comparison.

HERE'S HOW WE PLAN TO DO IT:

- Our first priority is safety – ours, yours, and the public's.
- We don't want to interfere with what you're doing.
- We wear white lab coats to distinguish researchers from officers, and additionally, we wear orange safety vests and orange safety hats labeled RESEARCH TEAM.
- Our breath samples are completely anonymous – we don't know what the BAC is until it is downloaded back at the office next week.
- We'll probably start out with pairing our data collectors with your officers, and then shift to pairing single data collectors with an officer later in the evening.
- We aren't getting every single car – we get as many as our equipment allows us to.
- If you pull someone out of the line, we don't get them at all, but we do hand you a pink pass-off card, which you fill out and return to us, with anonymous information on it.
- At the end of the checkpoint, your supervisor will fill out an Activity Sheet for us, with total number of cars passing through, etc.

Supervisors' Pre-Survey Check List of Supplies & Equipment	
Outfits	
	White lab coats
	Lime-green safety vests
	"Research Team" hats
Equipment	
	PBTs - charged
	PDAs - charged
	Stylus pens
	Lanyards for PDAs
	Breath tubes
	Extra batteries – AA and C
	First aid kit
	Flashlight(s)
	Clicker counter
	Garbage bags for used breath tubes
	Clipboards w/lights for paper forms
	Pens/pencils
	Disposable rain ponchos
	Disposable medical gloves
Paper Supplies in expanding folder file	
	Paper forms for PDA backup
	Pink Cards
	Supervisor Report Forms
	Activity Report Forms
	Letter of introduction to police
	John's business cards
	Emergency phone number list
	$50.00 cash for snacks, etc.

NAME	CELL PHONE	HOME PHONE	WORK PHONE

DOT HS 811 056
November 2008

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

NHTSA
www.nhtsa.gov