Evaluation of the First Year

of the

Washington Nighttime Seat Belt Enforcement Program

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16. Abstract

The Washington Traffic Safety Commission (WTSC) received funding from the National Highway Traffic Safety Administration to conduct a high-visibility nighttime seat belt enforcement (NTSBE) program in Washington State. The two-year program is following the basic *Click It or Ticket* (CIOT) model by using highly visible enforcement combined with increased paid and earned media about the enforcement but is applying its efforts during the nighttime rather than the daytime hours. The activities of the first program year covered spring and fall campaigns in 2007 and a spring campaign in 2008. The first year evaluation reported here examined awareness of the campaign with a survey in driver license offices, observed seat belt use both day and night at 40 selected sites in five counties around the State, and the statewide annual observational surveys for 2007 and 2008. The awareness surveys showed that the program was effective in getting out its message through multiple media. The observations at the 40 sites showed a statistically significant increase in night belt use. Night belt use began at 94.6% before the NTSBE, peaked at 96.6% in September 2007, and finished at 95.7% in June 2008. The 2008 statewide daytime survey showed a small increase in belt use from 96.4% to 96.5%. Thus, there is no indication that focusing all CIOT efforts during the nighttime hours caused a decline in daytime seat belt use. The study also observed belted and unbelted drivers at four 24-hour gas stations around the State. Based on the information from these observations, the WTSC obtained driver abstract and criminal record histories for 1,715 drivers observed before the start of the program. In addition, records were accessed for 5,035 drivers who were cited, mostly for seat belt violations, by the patrols funded by NTSBE. Analyses of these records showed that the night unbelted driver had consistently more traffic violations and criminal arrests than belted drivers at night and either belted or unbelted drivers during the day. Crash involvements showed the same pattern as violations and criminal arrests but did not reach statistical significance. Based on the first year's activities, the NTSBE program appears to be meeting its goals and developing useful operational and research information that can assist future nighttime seat belt enforcement efforts.

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EXECUTIVE SUMMARY

Introduction

As seat belt use rates have increased, the strong suspicion has arisen that the "residual drivers"—those who resist buckling up—are different from those who respond to the laws, enforcement, and education by becoming regular users of seat belts. For years, it has been suspected that the unbuckled are more likely to be driving at night, to drive after drinking, and to be worse drivers in terms of crash and violation history. In order to examine methods to address low belt use and high fatality rates at night, the Washington Traffic Safety Commission (WTSC) received funding from the National Highway Traffic Safety Administration to conduct a high-visibility nighttime seat belt enforcement (NTSBE) program in Washington State. The two-year program is following the basic *Click It or Ticket* (CIOT) model by using highly visible enforcement combined with increased paid and earned media about the enforcement but is applying its efforts during the nighttime rather than the daytime hours.

This report describes the activities that took place in the first year of NTSBE (from May 2007 to May 2008), the corresponding evaluation data collection activities, and preliminary results. A variety of data collection activities were undertaken either by the project or by WTSC including observations of seat belt use at a sample of roadway and gas station locations, intercept interviews of attitudes and self-reported behaviors, Department of Licensing (DOL) surveys on awareness and exposure, citation data, focus groups with police, and driving and criminal records of belted and unbelted drivers.

NTSBE Program Activities

The NTSBE program used a combination of high-visibility enforcement enhanced by paid and earned media about the enforcement in an attempt to increase seat belt use via general deterrence. As part of the process evaluation, media and enforcement activity levels were closely monitored.

The NTSBE radio and television public service announcements feature the head of field operations for the Washington State Patrol (WSP). The WSP is highly visible and well known in Washington. The primary message of the ad is that "*extra seat-belt-focused law enforcement patrols are taking place at night because the death rate at night is four times higher than it is during the day*." The latter part was included to send an important message to the law-compliant population about why the project is taking place.

The WTSC worked with media buy firms to plan and purchase media placements for the NTSBE project. Being specialists in the field, the companies had the expertise and the media

buying leverage to obtain high numbers of media placements per dollar spent. The media firms negotiated to get one free PSA placement for every placement purchased. The bonus placements generally aired in the same periods as the purchased spots. WTSC spent $845,297 on media and received placements valued at an estimated $1,636,318. In addition, 2,882 public service announcement placements were "earned" on TV and radio and in newspapers.

The program spent $877,421 on law enforcement in the first year. In order to cover as much of the State as possible, law enforcement conducted patrols for no longer than five-hour shifts to spread out the patrol budget among as many law enforcement agencies as possible. During the first wave of NTSBE enforcement, 75 agencies participated. Fewer agencies participated in subsequent waves.

A total of 4,516 seat belt citations were issued during NTSBE activities in May 2007. A total of 3,822 seat belt citations were issued in November 2007, and 5,194 in May 2008. The NTSBE campaigns also resulted in the issuance of a wide variety of other citations, such as DUI, that added to the value of the activity.

Evaluation Design

The evaluation of the first year of the NTSBE program involved multiple data collection activities. Some of the evaluation activities were aimed at determining the overall effectiveness of the program at reaching its target audience and changing seat belt use behaviors. Other data collection activities were undertaken primarily for research purposes to answer questions that may help to improve such programs in the future. The evaluation activities included an awareness survey, observations of seat belt use at 40 sites across the State, observations and interviews at gas stations, driver abstract and criminal record searches, and process data relating to publicity and enforcement activities.

Awareness Survey Results

The data from the awareness survey in the DOL offices suggest that the media and enforcement campaigns achieved their basic objective of exposing Washington drivers to the intended message. After each of the intervention periods, there were dramatic increases in the percentages of survey respondents who said they had read, seen, or heard any media about nighttime time seat belt enforcement. Awareness, which started at 10.3% of survey respondents, peaked at 70.2% and finished the year at 50.1%.

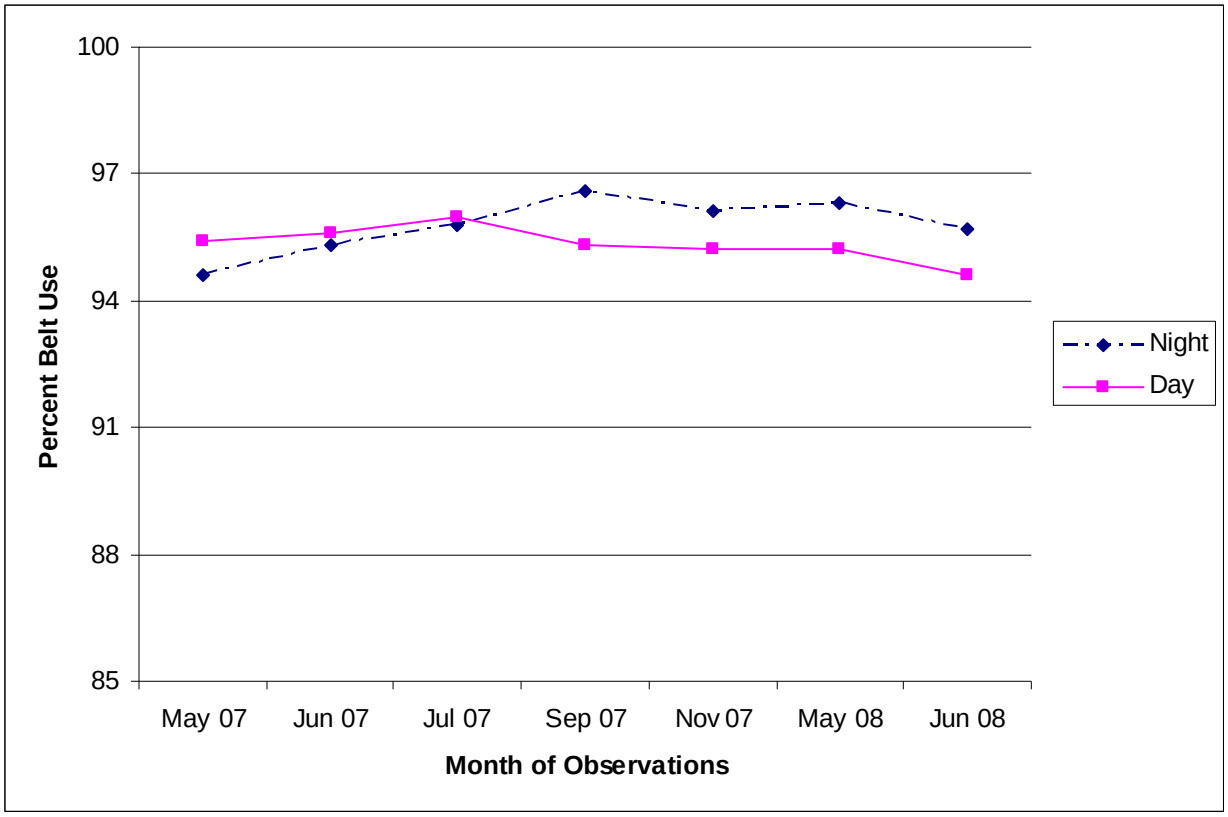
There were also large increases in the percentage of survey respondents who said they had noticed increased seat belt enforcement at night but not been stopped by the police (peaking at 26.1%). The interventions, though highly visible, did not appear to have a meaningful effect on self-reported belt use, which started and remained extremely high.

40-Site and Statewide Observation Results

A total of 40 observation positions in five counties (8 positions in each county) were used for day and night observations of seat belt usage. These 40 observation positions are a subsample of the larger statewide survey that the State conducts every year to calculate its statewide seat belt usage rate. The 40 sites used in this study are a convenience sample that has traditionally yielded a use rate similar to the value produced by the statewide survey. For the first wave of observations, the exact same 40 sites were used both day and night. Due to a lack of nighttime traffic and/or observation difficulties at some of the 40 observation positions during the nighttime baseline observations, however, observers were allowed to move to new nearby positions in the subsequent six waves of observations so long as they were viewing essentially the same or similar flow of traffic.

As shown in Figure ES-1, both day and night belt use at the 40 observation sites started and remained high (always in excess of 94%). The data suggest a trend for a slight increase in nighttime seat belt use over time (peaking at 96.6%) and a slight decrease in observed daytime seat belt use (bottoming at 94.6%) during the same time period. Over the same period, the annual statewide seat belt observational surveys showed that the statewide daytime use rate had a slight increase, moving from 96.4 % in 2007 to 96.5% in 2008. Although the 40-site subsample results suggested that daytime belt use might be decreasing slightly, the official statewide number suggests that the focus on nighttime seat belt enforcement was not counterproductive regarding seat belt usage during daylight hours.

Figure ES-1: Observed day and night seat belt use at 40 sites



Gas Station Observations: Analysis of Driving and Criminal Records

A specific research objective of this project is to identify and describe any differences between day and nighttime drivers who are belted and unbelted. In order to achieve this objective, drivers were observed entering 24-hour gas stations at four locations across the State (North Bend, Spokane, Yakima, and Fife). Two gas stations were selected as observation sites in each city in an attempt to capture a representative sample of drivers in those cities.

Although five waves of gas station observations were completed as part of the Year 1 activities, the driver and criminal histories are only presented for drivers observed during the baseline period (April 26 to May 1, 2007). Focusing on the baseline provides a description of the relative behavior of the four groups that is free of any influence from the NTSBE program. The WTSC accessed the driving and criminal records for 1,715 drivers observed at the gas stations. The driving records are contained in an Abstract of Driving Record (ADR) that is maintained by the Washington State Department of Licensing (DOL). Every violation, crash, or administrative action reported to DOL appears as a separate line item on a driver's ADR and typically remains on the ADR for at least five years before it is purged during a routine file update.

Criminal records are maintained by the Washington State Patrol on an annual basis. Every arrest in the State during a particular year is listed in that year's file. WSP provided criminal files for 11 years (1997 – 2007) that were used to examine the records of the 1,715 drivers. Individual criminal offenses were collapsed into analysis categories based on the severity and nature of the crime (e.g., felonies, misdemeanors).

The pattern of results was virtually uniform for all traffic and criminal offenses. In general, unbelted drivers at night had the worst records followed by belted drivers at night, unbelted drivers during the day, and belted drivers during the day. The relative magnitude of the differences among the groups varied somewhat and was not always statistically significant.

Tables ES-1 and ES-2 summarize the results for the baseline period only (April 26 to May 1, 2007). Table ES-1 covers the driving record data (N = 1926), and Table ES-2 addresses the criminal records (N = 1715). The tables provide the percentage of each group that committed one or more of the violations or criminal acts on their records. They also show the ratio of the percentage of each group to that of the day-belted subset of drivers. Groups with a ratio greater than 1 have higher involvement than the daytime belted group. Notably, night unbelted drivers are 2.7 times more likely than day-belted drivers to have a felony arrest on their criminal records and 3.0 times more likely to have an alcohol citation on their driving records.

Gas Station Intercept Survey

During the first wave of gas station observations (April 26 to May 1, 2007), WTSC conducted an intercept survey of drivers at the same gas stations where the observations of seat belt use were taking place. The survey included items covering self-reported seat belt usage, purpose of trip, perceptions of law enforcement actions observed, and alcohol consumption. Survey data were collected 24 hours a day for the full 6 days of the observations conducted. The intercept surveys were coordinated with the observations so survey responses were linked to

observed belt use and the time of day a driver was observed. A total of 2,515 surveys were collected and matched with observation data.

Only a few items showed any differences by time of day or belt use. Most notably, 29.9% of the daytime drivers said they had three or more drinks when drinking compared to 44.8% of the drivers interviewed at night. A significant difference was also found for belted and unbelted drivers at night. This is consistent with the larger number of alcohol offenses on their driving records as reported earlier. Other global findings of interest include the fact that most people think police stop drivers for speeding during the day and for drunk driving at night. Along the same lines, people think that the police are looking for drunk driving and other more egregious activities such as drugs or reckless driving at night. Seat belts were rarely mentioned when talking about traffic stops or police activities.

Almost all participants reported that they wore their seat belts regularly both day and night even if they were observed unbelted. This is not unexpected because of the high belt use rate in Washington and the many CIOT campaigns that almost surely were successful in conveying the message that failure to use seat belts is unacceptable.

WTSC Focus Groups with Law Enforcement

As part of the Year 1 NTSBE activities, three focus groups were conducted by WTSC on September 22, 2008, with representatives from several of the law enforcement agencies that participated in the enforcement program. One of the focus group sessions also included law enforcement personnel from agencies that had not participated in the program.

WTSC's focus on nighttime seat belt usage was well received by law enforcement even though it was new to many agencies. Law enforcement personnel unanimously agreed that the publicity campaign was critical and enhanced their enforcement efforts. The operational issues were relatively minor with most of them focusing on problems with the mandatory use of a stationary spotter. Most officers felt that using a stationary spotter was only effective when there was high traffic volume. Many agencies began using roving patrols to meet their contact targets for the campaigns. In response to these comments, WTSC relaxed the requirement for stationary patrols and permitted its grantees to have discretion in the way they operate their enforcement.

Overall, the focus group attendees indicated that they would highly recommend the nighttime seat belt program to other law enforcement agencies across the United States. They thought that with some minor adjustments and a little more flexibility, the program would continue to be effective in Washington even though seat belt use is already high. Even without additional overtime, most of the agencies indicated that they would continue to raise their level of seat belt enforcement at night, especially because it was an effective way to make additional contacts with drivers and to get "bad" people off the road.

Discussion

Although it is premature to draw any conclusions as to the effectiveness of the NTSBE activities, there are strong indications that the program is working and that the evaluation is collecting valuable information to answer the research questions of interest.

The NTSBE program will continue through May 2009, and evaluation data collection activities will continue into June 2009. After all evaluation data have been processed and analyzed, a full report of the activities and evaluation results will be prepared.

Table ES-1. Summary of key driving record offense categories by belt use and time of day for drivers observed during the baseline period (April 26 to May 1, 2007)

	One or More Alcohol Citations			One or More Moving Violations			One or More Speeding Citations			One or More Negligent or Reckless Citations			One or More License-related Citations		
Driver Group	**% of Group**	**Ratio***	**Difference Unbelted-Belted****	**% of Group**	**Ratio***	**Difference Unbelted-Belted**	**% of Group**	**Ratio***	**Difference Unbelted-Belted**	**% of Group**	**Ratio***	**Difference Unbelted-Belted**	**% of Group**	**Ratio***	**Difference Unbelted-Belted**
Night* Unbelted**	10.4	3.0	5.5	55.4	1.4	6.4	42.1	1.3	6.5	10.4	2.1	2.0	14.6	2.4	**3.6**
Night Belted	4.9	1.4		49.0	1.3		35.6	1.1		8.4	1.7		11.0	1.8	
Day Unbelted**	5.7	1.6	2.2	45.1	1.1	5.9	33.2	1.0	0.9	7.3	1.5	2.4	7.8	1.3	**1.8**
Day Belted	**3.5**	**1.0**		**39.2**	**1.0**		**32.3**	**1.0**		**4.9**	**1.0**		**6.0**	**1.0**	

*Ratio is the quotient of the percentage in each category divided by the percentage of Day-belted drivers
**Difference is the percentage of Unbelted minus the percentage of Belted calculated separately for Night and Day
***6 p.m. to 5:59 a.m.
****6 a.m. to 5:59 p.m.

Table ES-2. Summary of key criminal offense categories by belt use and time of day for drivers observed during the baseline period (April 26 to May 1, 2007)

Driver Group	One or More Criminal Offenses			One or More Felonies			One or More Violent Crimes		
	% of Group	Ratio*	Difference Unbelted-Belted**	% of Group	Ratio*	Difference Unbelted-Belted	% of Group	Ratio*	Difference Unbelted-Belted
Night* Unbelted**	19.8	2.1	6.2	8.3	2.7	1.4	9.1	2.2	**2.2**
Night Belted	13.6	1.4		6.9	2.2		6.9	1.7	
Day** Unbelted**	9.4	1.0	-0.2	3.2	1.0	0.1	3.5	0.9	**-0.6**
Day Belted	**9.6**	**1.0**		**3.1**	**1.0**		**4.1**	**1.0**	

*Ratio is the quotient of the percentage in each category divided by the percentage of Day-belted drivers
**Difference is the percentage of Unbelted minus the percentage of Belted calculated separately for Night and Day
***6 p.m. to 5:59 a.m.
****6 a.m. to 5:59 p.m.

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1 INTRODUCTION

Seat belt use rates in the United States have increased markedly in recent years in response to vigorous enforcement and education campaigns and the general understanding among drivers that belt use greatly reduces the risk of death or serious injury in a motor vehicle crash. The State of Washington has been a leader in the process of achieving high seat belt use rates.

As seat belt use rates increase, the strong suspicion has arisen that the "residual drivers"—those who resist buckling up—are different from those who respond to the laws, enforcement, and education by becoming regular users of seat belts. For years, it has been suspected that the unbuckled are more likely to be driving at night, to drive after drinking, and to be worse drivers in terms of crash and violation history. Anecdotal evidence from police suggests that the non-belt user may also more likely be male and be involved in other anti-social behaviors such as drug use and crime, but little empirical research has been conducted to examine differences among belted and unbelted drivers.

Most recently, the work of Beard and Salzberg (2005) examined the demographics and driving histories of drivers who received seat belt citations in Washington State. They characterized the offenders as being overrepresented by male pickup truck drivers over the age of 40. The driving records of the belt offenders were worse than the comparison group with respect to serious violations but, somewhat surprisingly, not with respect to collisions. Beard and Salzberg (2005) showed that drivers cited for seat belt violations are different from drivers cited for other violations in the State of Washington. Perhaps most striking in the findings of Beard and Salzberg (2005) is that the approximately 5% of vehicle occupants in Washington who do not buckle up account for almost half of the Washington State motor vehicle fatalities.

This dramatic overrepresentation of unbelted drivers in fatalities is also echoed in the Fatality Analysis Reporting System (FARS) data for all of the United States (Nichols, Chaudhary, & Tison, 2009). Over the years, as seat belt use has increased (83% nationwide in 2008), so too has the percentage of fatal crashes in which an individual was wearing a seat belt (45% in 2008). Although possibly counterintuitive, this is actually a positive indication since as seat belt use continues to increase it is expected that the percentage of fatalities in which the occupant was wearing a seat belt will continue to increase. However, 18% of drivers nationwide who do not wear seat belts account for 57% of the fatalities across the United States. The problem is even worse at night. Again using FARS data, Nichols et al. (2009) showed that the percentage of fatally injured occupants wearing seat belts was lowest during the nighttime hours and bottoms out at around 30% seat belt use among fatalities from midnight to 4 a.m. This is likely because seat belt use has been shown to be lower at night (e.g., in Connecticut as shown by Chaudhary et al., 2005). Also of importance is the fact that the FARS data show many more of the unbuckled fatalities at night-involved drivers with alcohol in their systems (Nichols, 2009).

In order to examine methods for intervening in this problem, the Washington Traffic Safety Commission (WTSC) received funding from the National Highway Traffic Safety Administration to conduct a high-visibility nighttime seat belt enforcement (NTSBE) program in

Washington State. The two-year program is following the basic *Click It or Ticket* (CIOT) model by using highly visible enforcement combined with increased paid and earned media about the enforcement but is applying its efforts towards the nighttime rather than the daytime hours. The specific research questions being addressed by the NTSBE program and its evaluation are:

- Do nighttime enforcement activities lead to higher nighttime belt use?
- Are the characteristics of nighttime non-belt users distinct from the characteristics of daytime non-belt users?
- Do nighttime belt enforcement activities lead to increased DUI arrests and a decrease in alcohol-related crashes and fatalities?
- What is the public perception of the nighttime belt and DUI enforcement activities?
- Do these enforcement activities result in changes in peoples' self-reported behavior regarding seat belt use and drinking driving?
- Were the NTSBE activities associated with a change in the characteristics of the group of non-belt users over time?

This report describes the activities that took place in the first year of NTSBE (from May 2007 to May 2008), the corresponding evaluation data collection activities, and preliminary results. Several data collection activities conducted by the project or by WTSC included observing seat belt use at a sample of roadway and gas station locations, intercept interviews of attitudes and self-reported behaviors, Department of Licensing (DOL) surveys on awareness and exposure, citation data, focus groups with police, and driving and criminal records of belted and unbelted drivers. A process evaluation was also conducted.

The results provide a preliminary look at the effects of the program and the capabilities and limitations of the various data collection techniques. More NTSBE campaigns are scheduled for the second year of the program, and the evaluation data from these additional activities will be combined in a final report with those data presented here. As such, any patterns within the data and any conclusions drawn from the information presented in this report are subject to change because of the remaining data collection and analysis efforts.

2 NIGHTTIME SEAT BELT ENFORCEMENT PROGRAM ACTIVITIES

The NTSBE program used a combination of high-visibility enforcement enhanced by paid and earned media about the enforcement in an attempt to increase seat belt use by creating general deterrence. For the first year of operations, WTSC combined $1,438,261 of its own funds with $600,000 from a NHTSA cooperative agreement and applied it to enforcement and publicity activities as shown in Table 1. The expenditures shown in the table covered activities statewide. The basic strategy was to use the NHTSA funds to support an additional mobilization in the fall 2007 that was above and beyond what WTSC could have accomplished with its own budget.

Table 1. First year expenditures for NTSBE mobilizations

	Law Enforcement Patrols	Publicity Total	Air Buy	Earned Media	Printing	Rented Road Signs	Training, Meetings, Video	Total Spent	WTSC Funds	NHTSA Cooperative Agreement Funds
First Mobilization (May 2007)										
	$288,353	$406,435	$287,833	$24,137	$18,521	$57,107	$18,837	$694,788	$694,788	$0
Second Mobilization (October 2007)										
	$282,540	$329,823	$285,114	$33,641	0	$11,068	0	$612,363	$12,363	$600,000
Sustained Patrols (2007-2008)										
	$62,228	$7,882	0	$5,241	$1,270	0	$1,371	$70,110	$70,110	
Third Mobilization (May, 2008)										
	$308,462	$352,538	$312,377	$25,074	0	0	$15,087	$661,000	$661,000	0
Total Spent	$941,583	$1,096,678	$885,324	$88,093	$19,791	$68,175	$35,295	$2,038,261	$1,438,261	$600,000

As part of the process evaluation, media and enforcement activity levels were closely monitored. The following two sections describe the media activities and enforcement activities for the first program year.

2.1 Nighttime Seat Belt Enforcement Media

The NTSBE program followed the same messaging strategy as a daytime CIOT program. As such, the NTSBE publicity program message was designed to:

1. Reach motorists who are likely to be unbuckled. Consistent with the daytime CIOT target audience, the NTSBE publicity was aimed at male, blue-collar, risk-takers, largely 18 to 34 years old.
2. Reach motorists numerous times. The NTSBE publicity strategy was designed to reach the target audience at least three times and, preferably, more than five times.
3. Be compelling and believable. The NTSBE publicity was designed to stand out in a sea of advertising. In addition, the publicity was designed to motivate the target audience to take action to buckle up because of the threat of enforcement. This was critical for the

program given that Washington's seat belt use rate was already so high that the remaining unbuckled people are likely resistant to wearing seat belts and had not been affected by prior campaigns.

4. Explain to the law compliant motorists why the project is taking place. Public support for the program is vital, especially when so many people already buckle up in Washington.

2.1.1 The Media Message

The NTSBE radio and television public service announcements feature the head of field operations for the Washington State Patrol. The WSP is highly visible and well known in Washington. The primary message of the ad is that "*extra seat-belt-focused law enforcement patrols are taking place at night because the death rate at night is four times higher than it is during the day*." The latter part was included to send an important message to the law compliant population about why the project is taking place. A storyboard description of one of the TV spots is shown in Appendix A.

2.1.2 Paid Media

The WTSC worked with media buy firms to plan and purchase media placements for the NTSBE project. The media firms negotiated to get one free PSA placement for every placement purchased. Most bonus placements aired at the same times as the purchased spots. The PSAs used for the air buy and the bonus media were the same CIOT spots used during the mobilization.

The NTSBE publicity strategies were conducted to have the greatest "reach" with the highest "frequency." "Reach" refers to what percentage of the target audience sees the message, and "frequency" describes how many times any one individual likely saw the media. To obtain the greatest reach and frequency for this project, the planners recommended using a mix of media. To increase the reach and frequency of the NTSBE message, WTSC produced radio and television PSAs, Web banners and facilitated having the air buy contractor and the public relations (earned media) contractor work together, both to avoid duplication of effort and to promote synergies where possible. See Table 2 for the details of the paid media campaign.

The nighttime seat belt enforcement mobilization began before the enforcement with a brief period of publicity and ended when the last PSA airs. Media Plus of Seattle encouraged WTSC to be flexible with the bonus media schedule, which resulted in significantly more bonus media and more exposure to the CIOT message. WTSC postulated that if the PSAs continue another week beyond the enforcement, people would assume the mobilization was still underway.

During the May *Click It or Ticket* Mobilizations in 2007 and 2008, NHTSA also aired national paid media campaigns to support high-visibility seat belt enforcement. In 2007, NHTSA's paid media began to support nighttime seat belt enforcement. In 2007, over the two-week media period, the national media spots reached 85% of the intended target group (men 18 to 34) 13 times. In 2008, the national media spot reached 74% of the intended target group (men 18 to 34) 11 times.

Table 2. Publicity budget, reach, frequency, and dollar values achieved

NTSBE Dates	Target Audience	Media Bought:	Reach / Frequency (GRP Total)	Purchased Spots	Cost	Bonus Spots	Bonus Value	Total Value
May '07	Adults 25 to 54	TV	90% / 11 (990)	835	$276,235	805	$194,720	$470,955
		Radio		0 bought	$0	0	$0	$0
		Newspaper		16 daily papers	$11,598	0	$0	$11,598
		Total		835	$287,833	805	$194,720	$482,553
Oct. '07	Males 18 to 34	TV	78% / 6 (468)	1,187	$156,361	955	$181,959	$338,320
		Radio	59% / 9 (531)	1,664	$91,879	1,661	$105,750	$197,629
		Newspaper		4 major dailies	$10,000	0	$0	$10,000
		Total		2,851	$258,240	2,616	$287,709	$545,949
May '08	Males 18 to 34	TV	80% / 5.8 (464)	1,955	$192,657	2,692	$185,974	$378,631
		Radio	60% / 8.7 (522)	1,663	$93,135	1,847	$122,618	$215,753
		Newspaper		4 major dailies	$13,432	0	$0	$13,432
		Total		3,618	$299,224	4,539	$308,592	$607,816

2.1.3 Earned Media

WTSC hired an earned media contractor, Levich Advertising of Seattle, to coordinate all earned media activities. The contractor kept records of media contacts made and monitored the various news media to determine the extent to which NTSBE activities were covered (See Table 3). The contractor kept records of:

- How many news media outlets (dailies, weeklies, television, and radio) were pitched;
- How many of these media outlets picked up the story;
- How many stories ran (some media ran the story more than once); and
- How it ran (as news, talk show, editorial content, a PSA, or on a Web page).

The method employed to obtain earned media involved localizing the media message with information about which law enforcement agencies were participating in a given area, and where and when the NTSBE patrols were operating. A fact sheet on the project was generated by WTSC and used to develop the press releases. Local media interviews with law enforcement officers were facilitated (See Figure 1) and, in some cases, press events were held. Several examples of earned media are shown in Appendix A.

Table 3. Earned media pitched and picked up for each NTSBE campaign

	Counties	Dailies		Weeklies		Television		Radio		Internet	Totals	
Mobilization Date	Pitched	Pitched	Pick Up	Pitched	Pick Up	Pitched	Pick Up	Pitched	Pick Up	Pick Up	Total Stories	PSAs
May '07	20	21	19	74	39	22	19	153	107	26	442	1,717
October '07	19	19	11	76	29	22	17	108	61	19	215	737
May '08	26	26	18	88	40	19	17	147	75	26	311	428

Figure 1. A law enforcement interview

The Washington Department of Transportation (WSDOT) has 150 or more variable message signs over freeways and highways that routinely remind motorists that they are approaching a collision. As a partner with WTSC's safety programs, WSDOT has been willing to place seat-belt-related messages on these signs, as shown in Figure 2.

Figure 2. Fixed location variable message sign

WTSC also contracts with companies that rent 8-foot-by-8-foot variable message road signs and works with law enforcement agencies to get these signs placed on busy roads in major cities to increase the reach and frequency of the seat belt message. Figure 3 shows an example of a portable variable message sign used during the mobilizations. In addition, law enforcement agencies have been willing to post orange pop-up signs in the vicinity of their patrols to increase the exposure to the message. Finally, the State has 625 fixed road signs that carry seat belt law messages.

Figure 3. Portable variable message sign

2.2 Nighttime Seat Belt Enforcement

The law enforcement budgets and agency participation data are shown in Table 4. The daytime 2006 CIOT data are presented to provide a comparison of the most recent prior daytime seat belt campaign activity levels to the nighttime campaigns. In order to cover as much of the State as possible, the NTSBE steering committee and project director decided to ask law enforcement to conduct patrols in shifts no longer than five hours to spread out the patrol budget among as many law enforcement agencies as possible. The theory was that reducing the patrols to five hours and positioning them during the highest traffic times but not before 7 p.m. would increase the likelihood that the patrols would be seen.

Table 4. Enforcement budgets and effort expended

	May 2006 CIOT	May 2007 NTSBE	Oct 2007 NTSBE	May 2008 NTSBE
Budget for enforcement	$642,682	$350,000	$300,000	$300,000
Amount spent on enforcement	$559,555 (87%)	$288,353 (82%)	$282,540 (94%)	$306,528.35 (102%)
Number of agencies	135	75	49	55
Hours requested	12,986	7,831	6,874	6,342
Hours worked	11,731	5,715	5,362	6,248

2.2.1 Enforcement Strategy

In the beginning of the project, law enforcement expressed reluctance to conduct nighttime seat belt patrols because of a perceived difficulty of seeing unbuckled motorists at night. With the assistance of the WSP and the Seattle and Kennewick Police Departments, WTSC tested enforcement methods to determine how best to conduct nighttime seat belt enforcement. The procedure that seemed to work best was a stationary patrol in which an officer stands next to a busy street at a well-lit intersection and observes traffic. When an officer observed an unbuckled motorist, they radioed ahead to another officer in a contact vehicle who then made the stop and issued the citation (See Figure 4). WTSC developed an educational video that explained the procedures. WTSC then scheduled training luncheon meetings with law enforcement in 9 cities (Vancouver, Olympia, Seattle, Bellingham, Wenatchee, Yakima, Tri Cities, Moses Lake, and Spokane) prior to the NTSBE mobilization. At the luncheons, WTSC explained why the project was being conducted and how the patrols could be managed.

Sixty-four law enforcement agencies plus multiple State Patrol troops participated in NTSBE across the State during the first NTSBE blitz in May 2007. During the November 2007 campaign, 51 agencies participated, and in the May 2008 campaign, 49 agencies participated. The participating agencies in each mobilization are identified in Appendix B. The patrols covered the major population centers and reached approximately 90% of the State's population.

An interesting aspect of the first two campaigns was that, as a whole, law enforcement did not spend the grant amounts they requested and some did not participate even after going through the process of getting the grant funds. As an example, in October 2007, agencies committed to spending $345,967 on patrols, yet they actually only spent $282,540. By the May 2008 mobilization, however, the patrols came within 2% of the budget with an overage of $6,525. The focus groups reported in Section 4.8 below suggest that the police may have become more comfortable with night seat belt enforcement as the program progressed, positive results were achieved, and procedural restrictions were relaxed.

Figure 4. Police officer issuing a seat belt ticket at night

3 METHODS

The evaluation of the first year of the NTSBE program involved multiple data collection activities including an awareness survey, observations of seat belt use at 40 sites across the State, observations and interviews at gas stations, driver abstract and criminal record searches, and the process data already discussed above relating to publicity and enforcement activities. Some of the evaluation activities, such as the observations of seat belt use over time, were aimed at those research questions related to determining the overall effectiveness of the NTSBE program at reaching its target audience and changing seat belt use behaviors. Other data collection activities were undertaken to answer research questions focused on examining the characteristics of unbelted drivers and how this might differ from that of the belted drivers. A better description of the unbelted driver, both day and night, should help to improve similar countermeasure programs in the future.

3.1 Public Awareness Survey

The Washington Department of Licensing (DOL) cooperated with the WTSC to conduct a survey of its customers in five offices across the State (East Spokane, Yakima, Seattle-Greenwood office, Wenatchee, and Vancouver) in order to determine the public perception of the NTSBE activities and examine self-reported seat belt behaviors. Figure 5 shows the locations of these offices. The survey was a paper-and-pencil instrument covering self-reported seat belt use day and night, exposure to NTSBE paid and earned media, and perceptions of nighttime enforcement levels. Customers completed the single-side survey as they waited to conduct a driver license transaction. This approach provides a relatively representative sample of all drivers across the State who may have been exposed to the NTSBE activities.

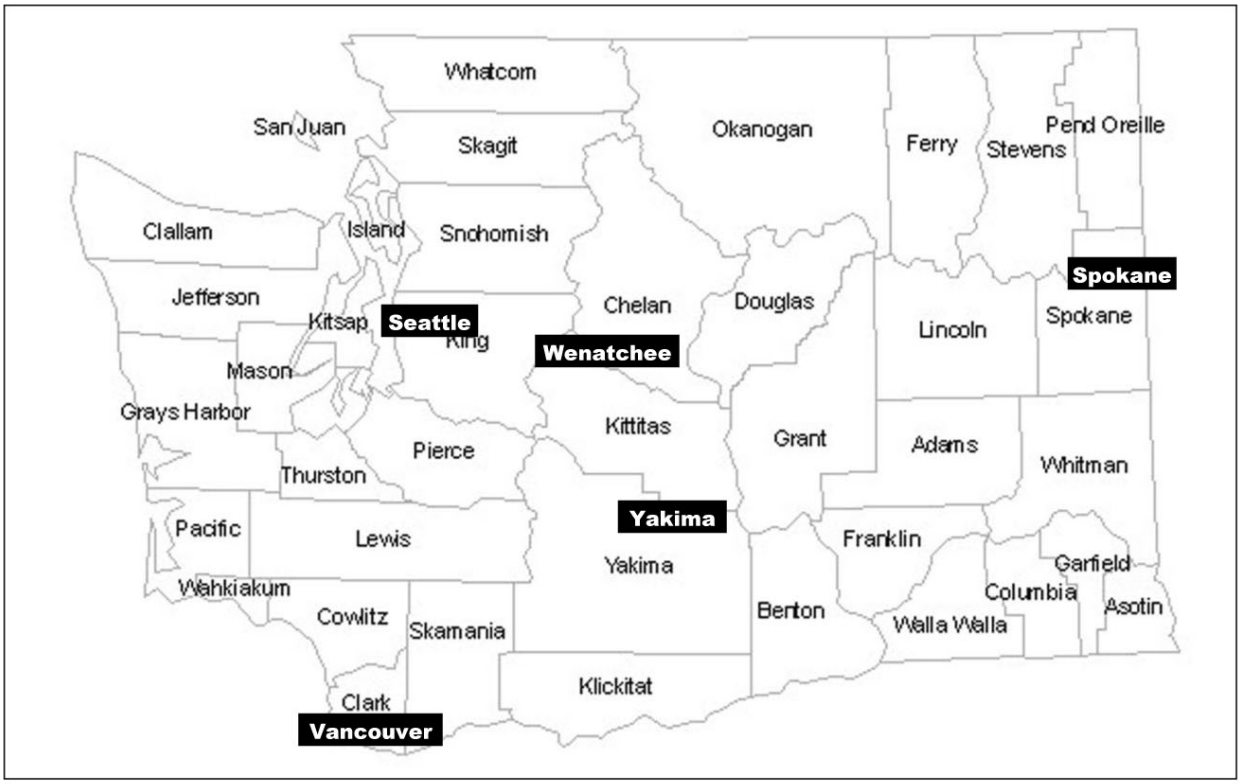
Eight waves of surveys were conducted at the five DOL offices over a period of approximately 16 months. Survey waves took place before and after the NTSBE media and enforcement campaigns in May and October 2007 and May 2008. Each survey wave lasted two to three weeks. The survey dates were as follows:

- April 17– May 5, 2007; pre-spring campaign
- June 5 – 29, 2007; post-spring campaign
- September 11 – 29, 2007; pre-fall campaign
- October 30– November 17, 2007; post-fall campaign
- January 22– February 2, 2008; persistence measure
- March 25– April 5, 2008; persistence measure
- April 15– May 3, 2008; pre-spring campaign
- July 15– August 2, 2008; post-spring campaign

DOL staff asked their customers to fill out the one-page survey (See Appendix C) as they waited to complete a driver license transaction. A total of 9,312 surveys were collected at the five offices over the eight waves. The number of surveys collected at each site varied substantially among the sites and across waves. Two of the sites had limited participation after May 2007 because of factors unrelated to the project (e.g., construction). Results for the DOL survey are generally presented for the sample as a whole. Separate analyses, were also

conducted to look for changes over time in responses by the target demographic, 18- to 34-year-old males.

Figure 5. Locations for collection of awareness survey



3.2 Seat Belt Observations

In order to assess the impact of NTSBE on seat belt use, observations of driver seat belt use were conducted across the State during both day and night hours. The same contractor that the State uses for its statewide observations collected the nighttime data.

3.2.1 Seat Belt Observation Sites

A total of 40 observation positions in five counties (8 positions in each county) were used for day and night observations of seat belt usage. These 40 observation positions are a subsample of the larger statewide survey that the State conducts every year to calculate its statewide seat belt usage rate, and are located in the counties of Walla Walla, Mason, Yakima, Spokane, and Pierce (See Figure 6). The 40 sites used in this study are a convenience sample that has traditionally yielded a use rate similar to the value produced by the statewide survey. The State has been using these 40 sites as an expeditious means to monitor seat belt use across the State at times other than immediately after CIOT. Similarly, this project used the 40 sites as the basis for monitoring seat belt use before and after the NTSBE activities rather than to produce a representative belt use rate for the whole State. Specifically, they were analyzed to determine if there are trends in nighttime seat belt use coincident with NTSBE activities and if these trends were different from any observed daytime trends.

Figure 6. Counties for seat belt observations

This report covers the first seven waves of day and night seat belt observations. For the Post Spring NTSBE waves of observations, the daytime data for the 40 sites were extracted from the statewide surveys normally conducted by the State. For each wave of these additional observations:

- Positions were visited in the same sequence, both day and night;
- Each position was visited at approximately the same start time;
- Night observations were scheduled on the first Thursday and Saturday of the data collection period;[1] and
- Day observations were scheduled on the second Thursday and Saturday of the data collection period.

The dates for the observations were:

- April 26 to May 3; pre-spring NTSBE 2007;
- June 14 to June 23; post-spring NTSBE 2007;
- July 3 to August 4; persistence 2007;
- September 13 to October 6; pre-fall NTSBE 2007

[1] The day and night schedules had to be changed for several waves because of scheduling conflicts among the observers. The basic measurement sequences and times were always maintained. It is not believed that the changes in schedule had a consequential effect on the results.

- November 8 to November 17; post-fall NTSBE 2007
- May 1 to May 11; pre-spring NTSBE 2008
- June 5 to June 14; post-spring NTSBE 2008

3.2.2 Daytime Observation Approach

Daytime observations were conducted by a single observer. Observers were instructed to stand in the same positions and to use the same observation methods they had been using in prior daytime seat belt surveys at the 40 sites. These observation methods included observations of seat belt use by drivers and outboard front seat passengers of cars, vans, SUVs, and pickup trucks. Observers were instructed to observe belt use for 40 minutes at each position. Improper belt use (e.g., belt behind the back) was to be logged as non-use. Observers tallied their observations on sets of counters mounted in a 4 x 4 configuration on a clipboard. Each row represented a vehicle type (e.g., SUV). The columns from left to right were for driver belt use (yes/no) and front-seat passenger belt use (yes/no). At the close of the data collection period all data from the counters were transferred to the same type of data sheets used for the statewide survey.

One addition was made to the standard daytime observation protocol in an attempt to create a weighting factor based on vehicle volume to be used in later analyses. Observers conducted a 10-minute count of vehicles passing the position immediately before they started the seat belt observations to provide a statistical weighting factor to calculate seat belt use. The pre-count was intended to provide an accurate account of the total traffic volume at a given position since the number of observations that a person can make is not necessarily representative of total traffic flow, especially when flow is high. Using the pre-count as a weighting factor, however, becomes problematic when counts are low or even zero. Any data for a position with a zero pre-count (which did occur in the baseline) would not be included in any belt use rate calculation weighted by traffic volume. The observers counted eligible vehicles for seat belt use and used one column of counters to count the total numbers of passenger cars, pickups, SUVs, and vans that passed in the direction that seat belt observations were being made. Observers then recorded the counts on a position count form and zeroed the counters before they started the seat belt observations.

3.2.3 Nighttime Observation Approach

Observers worked as two-person teams due to the extra equipment (e.g., night vision goggles) and added difficulty of nighttime observations. One person observed belt use, and the other data collector recorded the results as called out by the observer. The roles could have been alternated if both members of the team were equally familiar with both tasks. However, observers were told that roles should not be exchanged during the collection at a position. The teams were to record the roles at each position and use the same roles each wave of observations.

Each team was issued a night vision scope[2] and a two-million candlepower infrared (IR) spotlight[3] for use at those positions where there was insufficient ambient illumination to see belt use. The observers were trained to shine the IR light into the car and use the scope to view the

[2] ITT model TM-F6015XA-1
[3] Profiler II Golight

driver and passenger. Since the light and scope operate outside the visible spectrum, vehicle occupants were not disturbed in any way.

The nighttime observation teams followed the same basic procedures as the day observers and recorded data for 40 minutes. Because of the increased dangers to an observer at night, the teams wore hard hats and high-visibility vests and placed a high-visibility "Survey Ahead" sign on the roadway approximately 100 feet in advance of the observation position. As in the daytime, a 10-minute count of vehicles passing the position was made immediately before starting the observations.

3.2.4 Site Location and Observation Issues

For the first wave of observations, the exact same 40 sites were used both day and night. Due to a lack of nighttime traffic and/or observation difficulties at some of the 40 observation positions during the nighttime baseline observations, however, observers were allowed to move to new nearby positions in the subsequent six waves of observations so long as they were viewing essentially the same or similar flow of traffic. As can be seen in the belt use data presentations below, the change in positions led to a substantial increase in the number of nighttime observations for the subsequent waves. The original 40 observation positions were unchanged for all waves of the daytime observations.

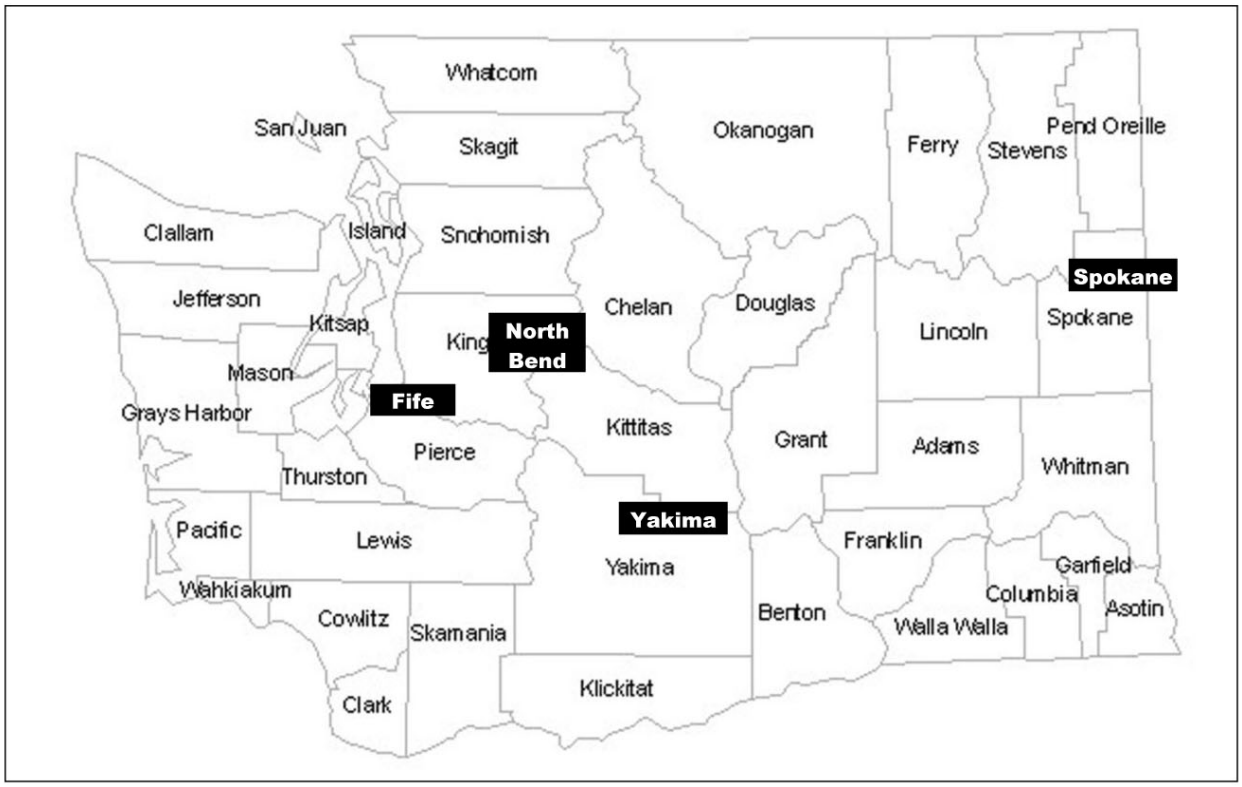
Another issue arose regarding the observation teams themselves. The contractor who normally directs the State's observational surveys was hired to conduct the surveys for this project. Unfortunately, the contractor fell ill during the project, prompting a change in management of the observation teams in May 2008. Two of the original observer teams stayed on to continue the project, but three of the original observation teams decided not to continue and had to be replaced. During May 2008, one of the new observation teams reported observed seat belt use rates that were substantially different from prior measurements at the locations and were substantially different from the rates observed by other teams that were conducting surveys at the same time in other counties. The magnitude of the differences prompted the removal of the data for that one county from the May 2008 total. Therefore, the data presented for May 2008 include only four of the five counties, resulting in an overall smaller number of observations. A refresher training session with all of the observers was conducted as a remedial measure, and, subsequently, the observed seat belt rates for June 2008 in the problem county were consistent with the other counties and included in the June 2008 total.

3.3 Intercept Seat Belt Observations and Interviews at Gas Stations

Determining the characteristics of daytime and nighttime belted and unbelted drivers required identifying a sample of belted and unbelted drivers and obtaining their criminal records. The original plan provided for teams of observers and interviewers to collect a single wave of data at high-volume, 24-hour gas stations across the State. The purpose of this data collection was to support an in-depth examination of the characteristics of drivers who do and do not wear their seat belts both day and night. Observations at the gas stations were continued for multiple waves to gather more data to increase the power of the analyses concerned with looking for differences in the driving and criminal records of belted and unbelted drivers both day and night.

Data were collected for 24-hour periods at two gas stations in each of the cities of North Bend, Yakima, Spokane, and Fife (See Figure 7). The observers recorded the belt use of arriving patrons as well as the vehicle type, vehicle make, license plate number, gender, and estimated age. These data were used to access Washington State driver record abstracts and criminal record files so that the driving and criminal records of belted and unbelted drivers both day and night could be compared.

Figure 7. Location of gas station observation sites



In order to be consistent with the FARS data categories, "day" observations were defined as between the hours of 6 a.m. and 5:59 p.m., and night was defined as between 6 p.m. and 5:59 a.m. Off-duty police officers were positioned at gas stations and worked day or night 12-hour shifts consistent with these times. For the baseline wave, two officers worked simultaneously for six days straight to ensure a large enough sample could be obtained. Each officer observed a different stream of traffic entering the gas station. The subsequent waves of observations were conducted by a single observer per observation shift over a two-day period. The dates for the observations during the first project year were:

- April 26 to May 1, 2007; pre-spring 2007 NTSBE campaign;
- June 15 and 16, 2007; post-spring 2007 NTSBE campaign;
- November 9 and 10, 2007; post-fall 2007 NTSBE campaign;
- May 2 and 3, 2008; pre-spring 2008 NTSBE campaign; and
- June 20 and 21, 2008; post-spring 2008 NTSBE campaign.

The gas stations were excellent locations to observe vehicle license plate numbers and driver belt use, and other driver characteristics (i.e., gender, age, height, weight, and race) could be recorded while drivers filled their vehicles' fuel tanks. Police officers are especially good at these observation tasks because they use related skills almost daily while on the job and have an opportunity to verify their estimates of these variables from the licenses of drivers they stop. The observers recorded the observation information on data collection sheets. This information was then used to identify the driver and retrieve his or her driving and criminal records in a process described later. The driver and criminal records could then be used to look for differences in the "types" of people who are belted and unbelted during the day or at night.

During the first wave of gas station observations (April 26 to May 1, 2007), WTSC conducted an intercept survey of drivers at the same gas stations where the observations of seat belt use were taking place. The objective of the intercept survey was to link belted and unbelted drivers with self-reported behaviors such as alcohol use, and correlate responses by time of day. This section summarizes the key results of that survey. The survey (shown in Appendix E) included items covering self-reported seat belt usage, purpose of trip, perceptions of law enforcement actions observed, and alcohol consumption. Survey data were collected 24 hours a day for the full six days of the observations conducted. Thus, all of the survey respondents should have been observed before they were interviewed. Interviewers wore badges with WTSC logos and greeted each potential interviewee by saying that they were conducting a survey about highway safety for the WTSC. Interviewees were assured that their responses were confidential.

The gas station observations were included to capture a convenience sample of belted and unbelted drivers with sufficient information to support retrieval of driving histories and criminal records. This sample was not designed to be either a representative measure of statewide belt use or indicative of the response of drivers statewide to the NTSBE interventions.

3.4 Citations

Another way to characterize a key group of non-belt users is to examine the driving and criminal histories of drivers cited during the seat belt mobilizations. Participating law enforcement agencies were asked to supply copies of the citations, and most, but not all, complied. Data from the citations that were obtained were entered into a database so that the cited drivers' criminal and driving records could be pulled for comparison to the observed belted and unbelted drivers entering the gas stations. Since virtually all of the cited drivers were unbelted, this sample should provide a basis for determining how drivers ticketed for a seat belt offense might differ from belted and unbelted drivers observed in the general population at the gas stations.

3.5 Driver Records and Criminal Records Analyses

A central research objective of this study is to determine if the belted and unbelted driving populations differ from one another regarding their driving and criminal histories, and whether any differences exist based on the time of day at which these populations are driving. As previously described, the observations at gas stations and the data from the large number of citations given during the NTSBE campaigns were the basis for examining driving and criminal records.

Because of the high belt use rate in Washington, the total number of observed belted drivers was substantially higher than the number of observed unbelted drivers (on the order of about 9:1). This ratio, combined with the fact that the volume of observations was higher at some sites than others, could have an undue influence on analyses of the final, combined data. In an attempt to provide a more consistent and balanced set of data for belted and unbelted drivers based on observation time and location, all unbelted drivers with usable data were included in the analysis dataset. Then, the next two belted drivers that were observed after an unbelted driver at a particular location at a given time were selected for inclusion in the driving and criminal records processing. These effectively matched drivers based on the time and location of observations, and produced a dataset with precisely twice as many belted as unbelted drivers.

Using the observed plate numbers and driver characteristics, WTSC queried the observed license plate number in Washington's Driver and Plate Search (DAPS) system for the identity of the registered owner. A WTSC staff member made judgments based on criteria provided by the project to determine if the owner matched the observed driver sufficiently. A match had to be the same sex and approximate age (± 5 years), height (± 2 inches), and race. If a match was made, the individual's driver license number (referred to as a PIC—Personal Identification Code) was extracted and entered into the analysis database. In the event that the registered owner of the vehicle did not match the person observed at the gas station, a "family" search was conducted to determine if the driver was a family member of the owner. The descriptions of family members who were living at the same address as the registered owner were examined to see if any matched the description of the driver of the vehicle. If any family member matched the description of the observed driver, that individual's PIC was entered into the database. If no match was made, the observed individual could not be used in the driver and/or criminal records analyses.

The hit rate across all waves ranged from 50% to 70%. This means that for each observation period, WTSC could obtain between 50% and 70% of the driving records for the drivers observed at the gas stations. It is not surprising to have a 30% to 50% "miss" rate given the number of corporate owned vehicles, rental cars, and other factors that are related to who is actually driving a given vehicle. Moreover, the miss rate was not substantially different for belted and unbelted drivers by day or night, thus suggesting that no meaningful bias was introduced into the data by the DAPS process.

Processing drivers who received citations was simpler since officers recorded driver PICs on the citations. Therefore, no matching through the DAPS system was necessary. The PICs, as written on the citations, were entered into the database. A good PIC was defined as one that had the correct number of digits and followed valid Washington State licensing PIC generation standards. Using the PICs identified from the DAPS search or from the citations, the full Abstract of Driving Record (ADR) for an individual was pulled if it was available.

A driver's ADR contains separate record entries for every reported violation, administrative action, and crash in a fixed printout-type format. These records are maintained for approximately five years until they are purged in a routine file update. Researchers created a program to process the ADR files and tally all instances of a particular offense for an individual. In most instances, examining any single violation type was not fruitful because of the relatively few occurrences of a single violation code for the project's sample of drivers. Since there are so many different violations and many of the violations are similar in nature, groups of like

violations were created for analysis purposes. Major groupings included speeding, alcohol, financial (e.g., no proof of insurance), negligent/reckless driving, and license violations.

Information from the matched ADRs was then used to search the criminal records files maintained by the Washington State Police. To have a criminal record for this project, an individual must have had at least one criminal arrest in the 11-year period for which data were made available (1997 to 2007). A person, however, could have multiple arrests across the 11 years and would therefore, appear multiple times. If an individual had multiple records, those records were combined. In addition, similar to the driving records, the criminal records have a large number of potential offenses that a person could have committed. Again, project staff created groupings of like offenses that were then tallied during processing. Groupings and tallies of offenses were created for the various levels of felonies (A, B, C, felony), as well as types of felonies within each level (e.g., drugs, sex, alcohol). Groups were also created for the various levels and types of misdemeanors. The program processed all 11 years of data and tallied the number of violations across the 11 years for each individual for each category and type of offense.

All information from the driving and criminal records files were merged into a single data record for each individual. This was then combined with the original gas station observation data such that the record for each person in the file from the gas station observations has a time of day that he/she was observed, his/her observed belt use, and all data relating to driving and criminal histories. Likewise, the driving and criminal records files were also combined with all data pulled from the citations. For the purposes of this Year 1 Report, however, only the baseline measurement period April 26 - May 1, 2007 results are presented for belted/unbelted drivers for day and night. Measurement period is not examined since the post-NTSBE measurements are ongoing.

3.6 WTSC Law Enforcement Focus Groups

After the first year of the project, WTSC conducted focus groups with officers and managers from participating law enforcement agencies. Agencies with varying levels of participation in the NTSBE activities, and even agencies that had withdrawn from the program were represented in the focus groups. Participants spoke about their involvement in the nighttime seat belt enforcement project, the problems they encountered with the project, the perceived ancillary benefits of the increased nighttime enforcement, and their suggestions for future program improvement.

4 RESULTS

4.1 Citations Issued

Citations are the primary measure of the enforcement process and the possible ancillary benefits from making seat belt stops at night. Table 5 shows the counts of citations that were issued during the NTSBE campaign periods, as well as the citations issued per hour of enforcement for each enforcement wave. Daytime 2006 CIOT data are presented in Table 5 to provide a daytime campaign comparison.

Table 5. Contacts and citations issued per hour of enforcement

	May, 2006 CIOT		May, 2007 NTSBE		Oct, 2007 NTSBE		May, 2008 NTSBE	
	Totals	Citations Per Hour Worked	Totals	Citations Per Hour Worked	Totals	Citations Per Hour Worked	Totals	Citations Per Hour Worked
Hours worked	11,731		5,715		5,362		6,248	
Total contacts	36,378	3.101	10,380	1.816	7,517	1.402	11,329	1.813
Total citations	21,658	1.846	6,756	1.182	5,322	0.993	7,228	1.157
Seat belt citations	9,892	0.843	4,516	0.790	3,822	0.713	5,194	0.831
SB warnings	n/a	n/a	359	0.063	606	0.113	811	0.130
Child car seat	276	0.024	166	0.029	181	0.034	257	0.041
CCS warnings	n/a	n/a	n/a	n/a	n/a	n/a	29	0.005
Aggressive driving	611	0.052	122	0.021	45	0.008	81	0.013
Reckless/negligent	24	0.002	39	0.007	12	0.002	17	0.003
DUI (alc & drugs)	108	0.009	143	0.025	83	0.015	105	0.017
Other alcohol	68	0.006	66	0.012	35	0.007	65	0.010
Drug arrests	150	0.013	138	0.024	78	0.015	67	0.011
Felony arrests	38	0.003	26	0.005	43	0.008	128	0.020
Felony warrants	83	0.007	40	0.007	21	0.004	41	0.007
Misd. warrants	283	0.024	124	0.022	134	0.025	158	0.025
Suspend/revoked	794	0.068	300	0.052	282	0.053	444	0.071
Uninsured	2,091	0.178	635	0.111	478	0.089	583	0.093
Stolen cars	23	0.002	8	0.001	4	0.001	5	0.001
Other criminal	384	0.033	123	0.022	110	0.021	172	0.028
IDL	n/a	n/a	9	0.002	14	0.003	7	0.001
Speeding	7,655	0.653	626	0.110	190	0.035	590	0.094

A total of 4,516 seat belt citations were issued during NTSBE activities in May 2007. A total of 3,822 seat belt citations were issued in November 2007, and 5,194 in May 2008. These numbers are substantially lower than the 21,658 citations that were issued during the May 2006 daytime CIOT campaign. It must be noted, however, that the total number of participating agencies was two to three times higher for the 2006 CIOT campaign, as were the total hours worked and budget. In addition, daytime seat belt ticketing proceeds somewhat quicker than the nighttime procedures.

A better comparison might be to use citations per hour when examining the general efficiency of the nighttime versus daytime campaigns. During the May 2006, daytime CIOT campaign law enforcement issued about 0.843 seat belt citations per hour. Overall, seat belt citation rates per hour for the May 2007 (0.7980 per hour), October 2008 (0.710 per hour), and May 2008 (0.831) NTSBE campaigns were only slightly lower than the May 2006 CIOT effort. The lower efficiency during the October 2008 campaign is not unexpected given the colder weather in Washington at that time.

Table 5 also shows that the NTSBE campaigns resulted in higher DUI citations and felony arrests per hour of enforcement than did the May 2006 daytime campaign. The May 2006 daytime campaign, however, netted substantially more speeding violations per hour worked than did the NTSBE campaigns.

Some of the variations in the rates of citations per hour are likely due to the enforcement strategies that were used for the nighttime campaigns. The NTSBE stationary strategy is much less likely to identify speeding offenses since the officer observing belt use is usually stationed at an intersection and does not have any speed measuring equipment. Other differences, such as the rates of DUI citations, can likely be attributed to the different populations that are driving during the day and night. This latter difference is explored in greater depth in the section of this report that provides results on differences between the characteristics of belted and unbelted drivers during the day and at night.

4.2 Awareness Survey

The survey of driver awareness in the DOL offices also asked for demographic information, including age and sex, to characterize the people who responded to the survey and check to assure that generally the same types of people completed the survey in each of the waves. There were no noteworthy differences in these demographic variables among the 8 data collection waves. Table 6 shows that the ages of survey respondents appeared to be a reasonable representation of the driving public when compared to the age distribution of licensed drivers in Washington State. Overall, 50.9% of the survey respondents were female and 49.1% male compared to 48.2% of the licensed drivers who are female and 51.8% male**.**

Table 6. Age distribution of Department of Licensing public awareness surveys vs. licensed drivers in Washington State

	Nighttime Seat Belt Enforcement Driver Licensing Office Surveys 2007-2008*			Washington State Licensed Drivers 2007**		
Age	Number	Percent	Cumulative Percentage	Number	Percent	Cumulative Percentage
Under 21	639	6.91%	6.91%	293,798	6.02%	6.02%
21-25	1,318	14.25%	21.16%	443,463	9.08%	15.10%
26-34	1,663	17.98%	39.14%	812,800	16.65%	31.75%
35-49	2,557	27.65%	66.79%	1,447,666	29.66%	61.41%
50-59	1,385	14.98%	81.77%	901,914	18.48%	79.89%
60+	1,686	18.23%	100.00%	981,702	20.11%	100.00%
Total	9,248	100.00%		4,881,343	100.00%	

*Those who reported age on the survey
** Drivers with valid Washington licenses and residences, DOL, 2007

From this point forward, results for the DOL survey are presented primarily for the sample as a whole. Separate analyses, were also conducted to look for changes over time in responses by the target demographic, 18- to 34-year-old males. Where interesting effects or differences were found for the target demographic, further description is provided. Otherwise, tables describing the responses of 18- to 34-year-old males for all of the DOL survey items are presented in Appendix D.

For males and females of all ages, the results demonstrate substantial increases from the baseline wave to the later waves in the percentage of respondents who reported reading, hearing, or seeing something about nighttime seat belt enforcement (Table 7). The percentage of people reporting that they saw or heard the media increased after each wave of media and enforcement. Exposure, which began at 10.3% in the baseline wave, reached a high of 70.2% of respondents saying they read, saw, or heard media about nighttime seat belt enforcement in October and November 2007. The 18- to 34-year-old males showed overall media exposure increases after the first campaign similar to that seen for all other respondents. During the November campaign, however, they showed a larger increase (78.4%) than other respondents (68.8%) show and stayed at moderate levels of reported exposure throughout the remainder of the measurement periods (Table D-1).[4]

Respondents could select multiple forms of media if they heard the message via more than one channel. TV, radio, road signs, newspapers, billboards, brochures, and police all showed significant increases in exposure over time. TV showed the highest levels of exposure followed by radio, road signs, and newspapers, respectively. The exposure results for the various types of media are presented in Table 8 to Table 15. It must be noted that Internet was only added as a choice after September 2007, when WTSC started an Internet campaign, and respondents rarely selected it (Table 15). The 18- to 34-year-old males showed higher sustained levels of reported exposure to radio compared to all other respondents (Table D-3) and slightly

[4] Throughout the report, tables numbered D- or E- may be found in Appendices D or E, respectively.

higher sustained exposure to television (Table D-2) and road signs (Table D-4) after the November 2007 campaign.

Table 7. Recently read, heard, or saw anything about nighttime seat belt enforcement

		May 07 Pre HVE (N=1,597)	Jun 07 Post HVE (N=1,544)	Sep 07 Pre HVE (N=1,379)	Nov 07 Post HVE (N=914)	Feb 08 Persistence Measure (N=597)	March 08 Persistence Measure (N=873)	April 08 Pre HVE (N=1,163)	July 08 Post HVE (N=958)
Yes	Count	165	967	527	642	294	355	463	480
	Column N %	**10.3%**	**62.6%**	**38.2%**	**70.2%**	**49.2%**	**40.7%**	**39.8%**	**50.1%**
No	Count	1,432	577	852	272	303	518	700	478
	Column N %	89.7%	37.4%	61.8%	29.8%	50.8%	59.3%	60.2%	49.9%

Pearson Chi-Square Tests[5]

Chi-square	1262.649
df	7
Sig.	.000(*)

Results are based on nonempty rows and columns in each innermost sub table.
* The chi-square statistic is significant at the 0.05 level.

Table 8. Saw or heard nighttime seat belt message on TV

			May 07 Pre HVE (N=1,670)	Jun 07 Post HVE (N=1,576)	Sep 07 Pre HVE (N=1,404)	Nov 07 Post HVE (N=943)	Feb 08 Persistence Measure (N=620)	March 08 Persistence Measure (N=908)	April 08 Pre HVE (N=1,209)	July 08 Post HVE (N=982)
TV	Read, Saw, Heard	Count	91	529	319	395	181	225	282	323
		Column N %	**5.4%**	**33.6%**	**22.7%**	**41.9%**	**29.2%**	**24.8%**	**23.3%**	**32.9%**
	Not Checked	Count	1,579	1,047	1,085	548	439	683	927	659
		Column N %	94.6%	66.4%	77.3%	58.1%	70.8%	75.2%	76.7%	67.1%

Pearson Chi-Square Tests

TV	Chi-square	586.700
	df	7
	Sig.	.000(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

[5] For this and subsequent data tables, the Pearson Chi-Square Test as implemented in the SPSS statistical package is reported together with any qualifiers or cautions produced by the program. The chi-square statistic measures the extent of association between the row and column variables of the table.

Table 9. Heard nighttime seat belt message on radio

			May 07 Pre HVE (N=1,670)	Jun 07 Post HVE (N=1,576)	Sep 07 Pre HVE (N=1,404)	Nov 07 Post HVE (N=943)	Feb 08 Persistence Measure (N=620)	March 08 Persistence Measure (N=908)	April 08 Pre HVE (N=1,209)	July 08 Post HVE (N=982)
Radio	Read, Saw, Heard	Count	65	329	220	296	124	139	179	218
		Column N %	**3.9%**	**20.9%**	**15.7%**	**31.4%**	**20.0%**	**15.3%**	**14.8%**	**22.2%**
	Not Checked	Count	1,605	1,247	1,184	647	496	769	1,030	764
		Column N %	96.1%	79.1%	84.3%	68.6%	80.0%	84.7%	85.2%	77.8%

Pearson Chi-Square Tests

Radio	Chi-square	391.443
	df	7
	Sig.	.000(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

Table 10. Saw nighttime seat belt message on road sign

			May 07 Pre HVE (N=1,670)	Jun 07 Post HVE (N=1,576)	Sep 07 Pre HVE (N=1,404)	Nov 07 Post HVE (N=943)	Feb 08 Persistence Measure (N=620)	March 08 Persistence Measure (N=908)	April 08 Pre HVE (N=1,209)	July 08 Post HVE (N=982)
Road Sign	Read, Saw, Heard	Count	34	369	113	162	58	64	92	100
		Column N %	**2.0%**	**23.4%**	**8.0%**	**17.2%**	**9.4%**	**7.0%**	**7.6%**	**10.2%**
	Not Checked	Count	1,636	1,207	1,291	781	562	844	1,117	882
		Column N %	98.0%	76.6%	92.0%	82.8%	90.6%	93.0%	92.4%	89.8%

Pearson Chi-Square Tests

Road Sign	Chi-square	477.595
	df	7
	Sig.	.000(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level..

Table 11. Saw nighttime seat belt message in newspaper

			May 07 Pre HVE (N=1,670)	Jun 07 Post HVE (N=1,576)	Sep 07 Pre HVE (N=1,404)	Nov 07 Post HVE (N=943)	Feb 08 Persistence Measure (N=620)	March 08 Persistence Measure (N=908)	April 08 Pre HVE (N=1,209)	July 08 Post HVE (N=982)
Newspaper	Read, Saw, Heard	Count	42	188	101	127	57	58	78	88
		Column N %	**2.5%**	**11.9%**	**7.2%**	**13.5%**	**9.2%**	**6.4%**	**6.5%**	**9.0%**
	Not Checked	Count	1,628	1,388	1,303	816	563	850	1,131	894
		Column N %	97.5%	88.1%	92.8%	86.5%	90.8%	93.6%	93.5%	91.0%

Pearson Chi-Square Tests

Newspaper	Chi-square	151.497
	df	7
	Sig.	.000(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

Table 12. Saw nighttime seat belt message on billboard

			May 07 Pre HVE (N=1,670)	Jun 07 Post HVE (N=1,576)	Sep 07 Pre HVE (N=1,404)	Nov 07 Post HVE (N=943)	Feb 08 Persistence Measure (N=620)	March 08 Persistence Measure (N=908)	April 08 Pre HVE (N=1,209)	July 08 Post HVE (N=982)
Billboard	Read, Saw, Heard	Count	25	116	72	83	35	35	52	53
		Column N %	**1.5%**	**7.4%**	**5.1%**	**8.8%**	**5.6%**	**3.9%**	**4.3%**	**5.4%**
	Not Checked	Count	1,645	1,460	1,332	860	585	873	1,157	929
		Column N %	98.5%	92.6%	94.9%	91.2%	94.4%	96.1%	95.7%	94.6%

Pearson Chi-Square Tests

Billboard	Chi-square	93.893
	Df	7
	Sig.	.000(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

Table 13. Received nighttime seat belt message from police

			May 07 Pre HVE (N=1,670)	Jun 07 Post HVE (N=1,576)	Sep 07 Pre HVE (N=1,404)	Nov 07 Post HVE (N=943)	Feb 08 Persistence Measure (N=620)	March 08 Persistence Measure (N=908)	April 08 Pre HVE (N=1,209)	July 08 Post HVE (N=982)
Police	Read, Saw, Heard	Count	11	30	23	20	10	13	10	20
		Column N %	**.7%**	**1.9%**	**1.6%**	**2.1%**	**1.6%**	**1.4%**	**.8%**	**2.0%**
	Not Checked	Count	1,659	1,546	1,381	923	610	895	1,199	962
		Column N %	99.3%	98.1%	98.4%	97.9%	98.4%	98.6%	99.2%	98.0%

Pearson Chi-Square Tests

Police	Chi-square	18.376
	Df	7
	Sig.	.010(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

Table 14. Saw nighttime seat belt message in brochure

			May 07 Pre HVE (N=1,670)	Jun 07 Post HVE (N=1,576)	Sep 07 Pre HVE (N=1,404)	Nov 07 Post HVE (N=943)	Feb 08 Persistence Measure (N=620)	March 08 Persistence Measure (N=908)	April 08 Pre HVE (N=1,209)	July 08 Post HVE (N=982)
Brochure	Read, Saw, Heard	Count	2	11	8	4	3	15	3	8
		Column N %	**.1%**	**.7%**	**.6%**	**.4%**	**.5%**	**1.7%**	**.2%**	**.8%**
	Not Checked	Count	1,668	1,565	1,396	939	617	893	1,206	974
		Column N %	99.9%	99.3%	99.4%	99.6%	99.5%	98.3%	99.8%	99.2%

Pearson Chi-Square Tests

Brochure	Chi-square	28.361
	df	7
	Sig.	.000(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

Table 15. Saw or heard nighttime seat belt message on Internet*

			May 07 Pre HVE (N=1,670)	Jun 07 Post HVE (N=1,576)	Sep 07 Pre HVE (N=1,404)	Nov 07 Post HVE (N=943)	Feb 08 Persistence Measure (N=620)	March 08 Persistence Measure (N=908)	April 08 Pre HVE (N=1,209)	July 08 Post HVE (N=982)
Internet	Read, Saw, Heard	Count	0	0	5	11	8	10	7	10
		Column N %	**.0%**	**.0%**	**.4%**	**1.2%**	**1.3%**	**1.1%**	**.6%**	**1.0%**
	Not Checked	Count	1,670	1,576	1,399	932	612	898	1,202	972
		Column N %	100.0%	100.0%	99.6%	98.8%	98.7%	98.9%	99.4%	99.0%

*added to questionnaire in September 2007

Pearson Chi-Square Tests

Internet	Chi-square	40.854
	df	7
	Sig.	.000(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

People who indicated that they had seen media were asked to recall what the media said (Table 16). Less than half of the people who said they saw media responded to this item. Of those who responded, there was a significant increase in the percentage that specifically indicated that the message was about nighttime enforcement. Of those people who recalled a message, the percentage specifically indicating that the message was about nighttime enforcement increased from 2.3% in May 2007 to 31.2% in June 2007, decreased to 10.8% in September 2007 and increased again to 31.3% in November 2007. In February 2008, the percentage saying the message was about nighttime enforcement dropped to 16.1% and stayed near that level for the remaining waves. People also mentioned general enforcement (no mention of nighttime) more often for all waves after the baseline wave. The percentage of people mentioning *Click It or Ticket* also increased for Waves 2 to 7, but returned to near baseline by August 2008.

Table 16. What did media message say? (based on those who responded to item)

		May 07 Pre HVE (N=88)	Jun 07 Post HVE (N=481)	Sep 07 Pre HVE (N=232)	Nov 07 Post HVE (N=310)	Feb 08 Persistence Measure (N=124)	March 08 Persistence Measure (N=106)	April 08 Pre HVE (N=160)	July 08 Post HVE (N=214)
Nighttime Enforcement	Count	2	150	25	97	20	23	26	38
	Column N %	**2.3%**	**31.2%**	**10.8%**	**31.3%**	**16.1%**	**21.7%**	**16.3%**	**17.8%**
General Enforcement	Count	13	122	56	83	45	36	49	78
	Column N %	14.8%	25.4%	24.1%	26.8%	36.3%	34.0%	30.6%	36.4%
Click It or Ticket	Count	24	164	101	108	39	32	61	59
	Column N %	**27.3%**	**34.1%**	**43.5%**	**34.8%**	**31.5%**	**30.2%**	**38.1%**	**27.6%**
Buckle Up	Count	15	14	17	8	17	7	5	17
	Column N %	17.0%	2.9%	7.3%	2.6%	5.6%	6.6%	9.4%	7.9%
Fine	Count	13	17	11	8	37	5		5
	Column N %	14.8%	3.5%	4.7%	2.6%	2.4%	4.7%	4.4%	2.3%
Safety	Count	3	5	4	4	62	3		6
	Column N %	3.4%	1.0%	1.7%	1.3%	4.8%	2.8%	1.3%	2.8%
Other	Count	18	9	18	2	40	0		11
	Column N %	20.5%	1.9%	7.8%	.6%	3.2%	.0%	.0%	5.1%

Pearson Chi-Square Tests

Chi-square	275.734
df	42
Sig.	.000(*,a)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.
a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

Respondents were asked, "When you pass a driver stopped by the police in the **daytime**, what do you think the stop was for?" The overwhelming response (nearly 90% of respondents for each wave) was speeding (Table 17). Respondents were then asked, "When you pass a driver stopped by the police at **night**, what do you think the stop was for?" Interestingly, speeding still remained the top choice at nearly 50% for all waves, but people responding that a stop was for drunk driving ranged between 35% and 40% for each wave (Table 18). The percentage of respondents indicating that a stop was for a seat belt violation did increase for both day and night and may have contributed to the significant effects found in both analyses, but the overall percentages of people indicating that a day or night stop was for seat belts were very low compared to speeding and drunk driving.

Table 17. What violation think person stopped for during daytime?

		May 07 Pre HVE (N=1,643)	Jun 07 Post HVE (N=1,544)	Sep 07 Pre HVE (N=1,378)	Nov 07 Post HVE (N=923)	Feb 08 Persistence Measure (N=603)	March 08 Persistence Measure (N=870)	April 08 Pre HVE (N=1,187)	July 08 Post HVE (N=933)
Speeding	Count	1,486	1,352	1,237	826	532	772	1,062	877
	Column N %	**90.4%**	**87.6%**	**89.8%**	**89.5%**	**88.2%**	**88.7%**	**89.5%**	**94.0%**
Seat Belt Violation	Count	42	71	65	36	14	32	39	31
	Column N %	2.6%	4.6%	4.7%	3.9%	2.3%	3.7%	3.3%	3.3%
Drunk Driving	Count	12	23	10	1	5	5	5	7
	Column N %	.7%	1.5%	.7%	.1%	.8%	.6%	.4%	.8%
Reckless Driving	Count	26	19	18	15	16	20	12	12
	Column N %	1.6%	1.2%	1.3%	1.6%	2.7%	2.3%	1.0%	1.3%
Registration Violation	Count	12	6	6	2	6	11	9	6
	Column N %	.7%	.4%	.4%	.2%	1.0%	1.3%	.8%	.6%
Other	Count	65	73	42	43	30	30	60	0
	Column N %	4.0%	4.7%	3.0%	4.7%	5.0%	3.4%	5.1%	.0%

Pearson Chi-Square Tests

Chi-square	113.770
df	35
Sig.	.000(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level..

In response to a question concerning the relative use of seat belts day and night, the great majority of people, nearly 95% each wave, indicated that they wear their seat belt with the same frequency day and night (Table 19). Approximately 1% each wave said they wore their seat belt "less" at night, and the remainder said they wore it "more." When respondents indicated they wore belts more or less at night, they were asked why they did so. However, the response to this item was too small for any meaningful analysis.

Table 18. What violation think person stopped for during nighttime?

		May 07 Pre HVE (N=1,645)	Jun 07 Post HVE (N=1,540)	Sep 07 Pre HVE (N=1,382)	Nov 07 Post HVE (N=924)	Feb 08 Persistence Measure (N=600)	March 08 Persistence Measure (N=887)	April 08 Pre HVE (N=1,177)	July 08 Post HVE (N=930)
Speeding	Count	801	713	680	460	297	425	599	452
	Column N %	**48.7%**	**46.3%**	**49.2%**	**49.8%**	**49.5%**	**47.9%**	**50.9%**	**48.6%**
Seat Belt Violation	Count	18	37	16	25	15	17	8	13
	Column N %	1.1%	2.4%	1.2%	2.7%	2.5%	1.9%	.7%	1.4%
Drunk Driving	Count	613	596	513	312	210	320	420	376
	Column N %	**37.3%**	**38.7%**	**37.1%**	**33.8%**	**35.0%**	**36.1%**	**35.7%**	**40.4%**
Reckless Driving	Count	124	106	114	65	43	79	82	84
	Column N %	7.5%	6.9%	8.2%	7.0%	7.2%	8.9%	7.0%	9.0%
Registration Violation	Count	10	9	7	3	3	8	2	5
	Column N %	.6%	.6%	.5%	.3%	.5%	.9%	.2%	.5%
Other	Count	79	79	52	59	32	38	66	0
	Column N %	4.8%	5.1%	3.8%	6.4%	5.3%	4.3%	5.6%	.0%

Pearson Chi-Square Tests

Chi-square	109.495
df	35
Sig.	.000(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

Another question asked respondents how often they wear a seat belt during the **day**. The percentage for each wave that said "always" was between 92.1% and 95.0% (Table 20). The peak was reached in August 2008 at 95%. When asked how often they wore a seat belt at **night,** respondents indicated they did between 92.0% and 95.8%. September 2007 had the highest "always" self-reported usage rate at 95.8% (Table 21). On average across all measurement waves, for day and night, the 18- to 34-year-old males reported always using seat belts approximately 5 percentage points less than all other respondents (Table D-14 and Table D-15).

Respondents were also asked, "Have you increased your seat belt use recently?" Approximately 17% to 19% each wave said "yes," although August 2008 showed a decrease to 13.9% (Table 22). Respondents were asked why they increased seat belt use recently. Although the number of any one response was small, the most common response was, "It's the law."

Table 19. Compared to day, how often wear belt at night?

		May 07 Pre HVE (N=1,606)	Jun 07 Post HVE (N=1,538)	Sep 07 Pre HVE (N=1,382)	Nov 07 Post HVE (N=926)	Feb 08 Persistence Measure (N=604)	March 08 Persistence Measure (N=874)	April 08 Pre HVE (N=1,193)	July 08 Post HVE (N=969)
More	Count	88	66	54	55	38	47	59	36
	Column N %	5.5%	4.3%	3.9%	5.9%	6.3%	5.4%	4.9%	3.7%
Less	Count	10	13	11	8	8	12	1	11
	Column N %	.6%	.8%	.8%	.9%	1.3%	1.4%	.1%	1.1%
The Same	Count	1,508	1,459	1,319	863	558	815	1,133	922
	Column N %	**93.9%**	**94.9%**	**95.3%**	**93.2%**	**92.4%**	**93.2%**	**95.0%**	**95.1%**

Pearson Chi-Square Tests

Chi-square	28.680
Df	14
Sig.	.012(*)

Results are based on nonempty rows and columns in each innermost subtable.
The chi-square statistic is significant at the 0.05 level.

Table 20. How often wear seat belt during day?

		May 07 Pre HVE (N=1,641)	Jun 07 Post HVE (N=1,553)	Sep 07 Pre HVE (N=1,389)	Nov 07 Post HVE (N=931)	Feb 08 Persistence Measure (N=606)	March 08 Persistence Measure (N=891)	April 08 Pre HVE (N=1,189)	July 08 Post HVE (N=977)
Always	Count	1,544	1,466	1,317	883	558	824	1,129	925
	Column N %	**94.1%**	**94.4%**	**94.8%**	**94.8%**	**92.1%**	**92.5%**	**95.0%**	**94.7%**
Nearly Always	Count	75	68	52	43	35	43	44	40
	Column N %	4.6%	4.4%	3.7%	4.6%	5.8%	4.8%	3.7%	4.1%
Sometimes	Count	13	12	9	3	11	18	7	8
	Column N %	.8%	.8%	.6%	.3%	1.8%	2.0%	.6%	.8%
Seldom	Count	6	4	3	1	1	4		3
	Column N %	.4%	.3%	.2%	.1%	.2%	.4%	.3%	.3%
Never	Count	3	3	8	1	1	2		1
	Column N %	.2%	.2%	.6%	.1%	.2%	.2%	.5%	.1%

Pearson Chi-Square Tests

Chi-square	44.809
Df	28
Sig.	.023(*,a)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.
* More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

Table 21. How often wear seat belt at night?

		May 07 Pre HVE (N=1,615)	Jun 07 Post HVE (N=1,521)	Sep 07 Pre HVE (N=1,357)	Nov 07 Post HVE (N=900)	Feb 08 Persistence Measure (N=591)	March 08 Persistence Measure (N=864)	April 08 Pre HVE (N=1,167)	July 08 Post HVE (N=951)
Always	Count	1,528	1,452	1,300	858	544	810	1,114	902
	Column N %	**94.6%**	**95.5%**	**95.8%**	**95.3%**	**92.0%**	**93.8%**	**95.5%**	**94.8%**
Nearly Always	Count	64	54	39	37	35	31	37	36
	Column N %	4.0%	3.6%	2.9%	4.1%	5.9%	3.6%	3.2%	3.8%
Sometimes	Count	14	6	7	2	10	17	7	9
	Column N %	.9%	.4%	.5%	.2%	1.7%	2.0%	.6%	.9%
Seldom	Count	6	6	3	1	1	3		3
	Column N %	.4%	.4%	.2%	.1%	.2%	.3%	.3%	.3%
Never	Count	3	3	8	2	1	3		1
	Column N %	.2%	.2%	.6%	.2%	.2%	.3%	.5%	.1%

Pearson Chi-Square Tests

Chi-square	53.795
Df	28
Sig.	.002(*,a)

Results are based on nonempty rows and columns in each innermost subtable.
The chi-square statistic is significant at the 0.05 level.
More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid

Table 22. Have you increased seat belt use recently?

		May 07 Pre HVE (N=1,597)	Jun 07 Post HVE (N=1,532)	Sep 07 Pre HVE (N=1,367)	Nov 07 Post HVE (N=906)	Feb 08 Persistence Measure (N=597)	March 08 Persistence Measure (N=854)	April 08 Pre HVE (N=1,170)	July 08 Post HVE (N=951)
Yes	Count	279	284	265	167	115	154	178	132
	Column N %	**17.5%**	**18.5%**	**19.4%**	**18.4%**	**19.3%**	**18.0%**	**15.2%**	**13.9%**
No	Count	1,318	1,248	1,102	739	482	700	992	819
	Column N %	82.5%	81.5%	80.6%	81.6%	80.7%	82.0%	84.8%	86.1%

Pearson Chi-Square Tests

Chi-square	19.332
Df	7
Sig.	.007(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

A question then asked, “How strictly do you think the police enforce the Washington seat belt law during the **day**?” On average, about 88% of respondents per wave said “very strictly” or “somewhat strictly” (Table 23). This was followed by the same question for **night** enforcement of the seat belt law; about 85% said “very strictly” or “somewhat strictly.” There was a small increase in the percentage responding "very strictly" after the first round of enforcement, but this increase dropped back to near baseline for the August 2008 wave (Table 24).

Table 23. How strictly is belt law enforced during day?

		May 07 Pre HVE (N=1,605)	Jun 07 Post HVE (N=1,516)	Sep 07 Pre HVE (N=1,370)	Nov 07 Post HVE (N=914)	Feb 08 Persistence Measure (N=591)	March 08 Persistence Measure (N=855)	April 08 Pre HVE (N=1,156)	July 08 Post HVE (N=957)
Very strictly	Count	775	811	769	482	289	441	558	469
	Column N %	**48.3%**	**53.5%**	**56.1%**	**52.7%**	**48.9%**	**51.6%**	**48.3%**	**49.0%**
Somewhat strictly	Count	619	547	453	339	232	311	448	379
	Column N %	**38.6%**	**36.1%**	**33.1%**	**37.1%**	**39.3%**	**36.4%**	**38.8%**	**39.6%**
Not very strictly	Count	171	130	119	73	53	83	116	79
	Column N %	10.7%	8.6%	8.7%	8.0%	9.0%	9.7%	10.0%	8.3%
Rarely	Count	33	17	23	16	12	11	28	23
	Column N %	2.1%	1.1%	1.7%	1.8%	2.0%	1.3%	2.4%	2.4%
Not at all	Count	7	11	6	4	5	9		7
	Column N %	.4%	.7%	.4%	.4%	.8%	1.1%	.5%	.7%

Pearson Chi-Square Tests

Chi-square	49.750
df	28
Sig.	.007(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

Table 24. How strictly is belt law enforced during night?

		May 07 Pre HVE (N=1,576)	Jun 07 Post HVE (N=1,481)	Sep 07 Pre HVE (N=1,333)	Nov 07 Post HVE (N=891)	Feb 08 Persistence Measure (N=573)	March 08 Persistence Measure (N=837)	April 08 Pre HVE (N=1,123)	July 08 Post HVE (N=933)
Very strictly	Count	743	784	709	458	281	430	524	450
	Column N %	**47.1%**	**52.9%**	**53.2%**	**51.4%**	**49.0%**	**51.4%**	**46.7%**	**48.2%**
Somewhat strictly	Count	586	505	435	327	204	296	420	352
	Column N %	37.2%	34.1%	32.6%	36.7%	35.6%	35.4%	37.4%	37.7%
Not very strictly	Count	193	156	134	82	66	88	133	92
	Column N %	12.2%	10.5%	10.1%	9.2%	11.5%	10.5%	11.8%	9.9%
Rarely	Count	43	24	51	16	17	14	37	30
	Column N %	2.7%	1.6%	3.8%	1.8%	3.0%	1.7%	3.3%	3.2%
Not at all	Count	11	12	4	8	5	9		9
	Column N %	.7%	.8%	.3%	.9%	.9%	1.1%	.8%	1.0%

Pearson Chi-Square Tests

Chi-square	54.867
df	28
Sig.	.002(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

The next question asked if respondents had ever been stopped by the police for not wearing a seat belt during the **day**. There were slight increases in the percentages that said "yes, I got a ticket" and "yes, I got a warning" after the May 2007 campaign (Table 25). The same question was asked for **night**, and no significant effects were found (Table 26).

A subsequent item asked, "Have you recently noticed increased enforcement of the seat belt law at **night**?" Significantly, more people indicated "yes, I noticed but wasn't stopped" rising from 8.4% in May 2007 to 26.1% in June 2007, 16.6% in September 2007, and 25.3% in November 2007. The 2008 measurement waves ranged between 13.6% and 17.8% of the respondents saying they had noticed increased enforcement but were not stopped (Table 27). The target group of 18- to 34-year-old males tended to demonstrate higher exposure to enforcement than did all other drivers. In June 2007, for example, 35.3% of the 18- to 34-year-old males reported seeing enforcement but not being stopped while 24.0% of the other respondents indicated seeing the enforcement but not being stopped (Table D-21).

Another item asked, "How often do you think you would get a ticket in Washington if you did not wear your seat belt during the **day**?" There was a statistically significant effect that was most likely due to an increase in the percentage of respondents who said "always," rising from 32.1% in April and May 2007 to a high of 36.1% in September 2007 (Table 28). No significant effects were found for the item that asked about **night** ticketing (Table 29).

Table 25. Ever stopped by police during the day for not wearing seat belt?

		May 07 Pre HVE (N=1,640)	Jun 07 Post HVE (N=1,547)	Sep 07 Pre HVE (N=1,387)	Nov 07 Post HVE (N=928)	Feb 08 Persistence Measure (N=606)	March 08 Persistence Measure (N=880)	April 08 Pre HVE (N=1,181)	July 08 Post HVE (N=972)
Yes, I got a ticket	Count	129	171	137	97	52	72	101	83
	Column N %	**7.9%**	**11.1%**	**9.9%**	**10.5%**	**8.6%**	**8.2%**	**8.6%**	**8.5%**
Yes, I got a warning	Count	36	49	45	21	18	32	27	20
	Column N %	2.2%	3.2%	3.2%	2.3%	3.0%	3.6%	2.3%	2.1%
No	Count	1,475	1,327	1,205	810	536	776	1,053	869
	Column N %	89.9%	85.8%	86.9%	87.3%	88.4%	88.2%	89.2%	89.4%

Pearson Chi-Square Tests

Chi-square	25.861
df	14
Sig.	.027(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

Table 26. Ever stopped by police at night for not wearing seat belt?

		May 07 Pre HVE (N=1,576)	Jun 07 Post HVE (N=1,478)	Sep 07 Pre HVE (N=1,333)	Nov 07 Post HVE (N=881)	Feb 08 Persistence Measure (N=583)	March 08 Persistence Measure (N=835)	April 08 Pre HVE (N=1,130)	July 08 Post HVE (N=920)
Yes, I got a ticket	Count	16	26	31	17	8	20	25	13
	Column N %	**1.0%**	**1.8%**	**2.3%**	**1.9%**	**1.4%**	**2.4%**	**2.2%**	**1.4%**
Yes, I got a warning	Count	12	17	13	5	8	16	14	7
	Column N %	.8%	1.2%	1.0%	.6%	1.4%	1.9%	1.2%	.8%
No	Count	1,548	1,435	1,289	859	567	799	1,091	900
	Column N %	98.2%	97.1%	96.7%	97.5%	97.3%	95.7%	96.5%	97.8%

Pearson Chi-Square Tests

Chi-square	23.223
df	14
Sig.	.057

Results are based on nonempty rows and columns in each innermost subtable.

Table 27. Have you recently noticed increased seat belt enforcement at night?

		May 07 Pre HVE (N=1,590)	Jun 07 Post HVE (N=1,516)	Sep 07 Pre HVE (N=1,367)	Nov 07 Post HVE (N=910)	Feb 08 Persistence Measure (N=590)	March 08 Persistence Measure (N=878)	April 08 Pre HVE (N=1,158)	July 08 Post HVE (N=958)
Yes, I got a ticket	Count	15	28	22	10	9	20	17	12
	Column N %	.9%	1.8%	1.6%	1.1%	1.5%	2.3%	1.5%	1.3%
Yes, I got a warning	Count	5	11	3	2	6	14	10	12
	Column N %	.3%	.7%	.2%	.2%	1.0%	1.6%	.9%	1.3%
Yes, I noticed but wasn't stopped	Count	133	395	227	230	105	147	157	150
	Column N %	**8.4%**	**26.1%**	**16.6%**	**25.3%**	**17.8%**	**16.7%**	**13.6%**	**15.7%**
No	Count	1,437	1,082	1,115	668	470	697	974	784
	Column N %	90.4%	71.4%	81.6%	73.4%	79.7%	79.4%	84.1%	81.8%

Pearson Chi-Square Tests

Chi-square	265.317
df	21
Sig.	.000(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

Table 28. How often think get ticket for not wearing seat belt during day?

		May 07 Pre HVE (N=1,611)	Jun 07 Post HVE (N=1,529)	Sep 07 Pre HVE (N=1,360)	Nov 07 Post HVE (N=906)	Feb 08 Persistence Measure (N=594)	March 08 Persistence Measure (N=857)	April 08 Pre HVE (N=1,163)	July 08 Post HVE (N=940)
Always	Count	517	523	491	314	210	288	356	307
	Column N %	**32.1%**	**34.2%**	**36.1%**	**34.7%**	**35.4%**	**33.6%**	**30.6%**	**32.7%**
Nearly Always	Count	296	296	256	189	96	164	248	191
	Column N %	18.4%	19.4%	18.8%	20.9%	16.2%	19.1%	21.3%	20.3%
Sometimes	Count	483	476	409	261	177	252	347	277
	Column N %	30.0%	31.1%	30.1%	28.8%	29.8%	29.4%	29.8%	29.5%
Seldom	Count	197	128	112	86	74	87	132	96
	Column N %	12.2%	8.4%	8.2%	9.5%	12.5%	10.2%	11.3%	10.2%
Never	Count	118	106	92	56	37	66	80	69
	Column N %	7.3%	6.9%	6.8%	6.2%	6.2%	7.7%	6.9%	7.3%

Pearson Chi-Square Tests

Chi-square	41.384
df	28
Sig.	.050(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

Table 29. How often think get ticket for not wearing seat belt at night?

		May 07 Pre HVE (N=1,556)	Jun 07 Post HVE (N=1,473)	Sep 07 Pre HVE (N=1,315)	Nov 07 Post HVE (N=866)	Feb 08 Persistence Measure (N=572)	March 08 Persistence Measure (N=812)	April 08 Pre HVE (N=1,109)	July 08 Post HVE (N=897)
Always	Count	501	496	474	298	198	287	341	299
	Column N %	**32.2%**	**33.7%**	**36.0%**	**34.4%**	**34.6%**	**35.3%**	**30.7%**	**33.3%**
Nearly Always	Count	263	245	210	155	90	131	200	157
	Column N %	16.9%	16.6%	16.0%	17.9%	15.7%	16.1%	18.0%	17.5%
Sometimes	Count	417	428	367	235	156	214	318	247
	Column N %	26.8%	29.1%	27.9%	27.1%	27.3%	26.4%	28.7%	27.5%
Seldom	Count	241	191	155	112	84	112	161	116
	Column N %	15.5%	13.0%	11.8%	12.9%	14.7%	13.8%	14.5%	12.9%
Never	Count	134	113	109	66	44	68	89	78
	Column N %	8.6%	7.7%	8.3%	7.6%	7.7%	8.4%	8.0%	8.7%

Pearson Chi-Square Tests

Chi-square	23.703
df	28
Sig.	.697

Results are based on nonempty rows and columns in each innermost subtable.

A final question asked, "If you were to drink too much to drive safely, what percentage of the time would you be stopped by the police for drunk driving during the **day**?" There were no significant changes over time. Averaged across all waves, 24.5%, said "100% of the time," 18.4% said "75% of the time," 23.3% said "50% of the time," 11.4% said "25% of the time," 5.5% said "10% of the time." 8.6% said "less than 10% of the time," and 8.4% said "0% of the time" (Table 30). The same question was asked for **night**. There were no significant effects, although there were some differences compared to the responses for the day question. For night, on average 29.5% said "100% of the time," 24.9% said "75% of the time," 20.1% said "50% of the time," 8.0% said "25% of the time," 3.5% said "10% of the time," 6.1% said "less than 10% of the time," and 8.0% said "0% of the time" (Table 31).[6]

[6] It was noted by data entry personnel that quite a few of the respondents who indicated "0% of the time" for both the day and night alcohol items also wrote in the margin that they do not drink alcohol. Therefore, it is not clear if a "0%" response indicated that they thought police would not stop drunk drivers, or that they themselves would never be stopped since they did not drink alcohol. The item was intended to be hypothetical, but may not have been interpreted this way by non-drinkers.

Table 30. What percentage of time would you be stopped for drunk driving during day?

		May 07 Pre HVE (N=1,552)	Jun 07 Post HVE (N=1,463)	Sep 07 Pre HVE (N=1,317)	Nov 07 Post HVE (N=869)	Feb 08 Persistence Measure (N=578)	March 08 Persistence Measure (N=836)	April 08 Pre HVE (N=1,118)	July 08 Post HVE (N=909)
100%	Count	395	334	327	229	143	196	279	212
	Column N %	25.5%	22.8%	24.8%	26.4%	24.7%	23.4%	25.0%	23.3%
75%	Count	269	268	256	150	120	171	185	175
	Column N %	17.3%	18.3%	19.4%	17.3%	20.8%	20.5%	16.5%	19.3%
50%	Count	363	348	317	189	136	193	262	203
	Column N %	23.4%	23.8%	24.1%	21.7%	23.5%	23.1%	23.4%	22.3%
25%	Count	167	182	158	97	52	93	131	105
	Column N %	10.8%	12.4%	12.0%	11.2%	9.0%	11.1%	11.7%	11.6%
10%	Count	95	84	51	42	34	34	67	64
	Column N %	6.1%	5.7%	3.9%	4.8%	5.9%	4.1%	6.0%	7.0%
Less than 10%	Count	128	115	108	75	51	83	92	89
	Column N %	8.2%	7.9%	8.2%	8.6%	8.8%	9.9%	8.2%	9.8%
0%	Count	135	132	100	87	42	66	102	61
	Column N %	8.7%	9.0%	7.6%	10.0%	7.3%	7.9%	9.1%	6.7%

Pearson Chi-Square Tests

Chi-square	50.648
df	42
Sig.	.169

Results are based on nonempty rows and columns in each innermost subtable.

Table 31. What percentage of time would you be stopped for drunk driving at night?

		May 07 Pre HVE (N=1,541)	Jun 07 Post HVE (N=1,445)	Sep 07 Pre HVE (N=1,295)	Nov 07 Post HVE (N=859)	Feb 08 Persistence Measure (N=575)	March 08 Persistence Measure (N=821)	April 08 Pre HVE (N=1,100)	July 08 Post HVE (N=902)
100%	Count	470	411	383	274	166	240	320	251
	Column N %	30.5%	28.4%	29.6%	31.9%	28.9%	29.2%	29.1%	27.8%
75%	Count	373	359	337	208	160	201	251	236
	Column N %	24.2%	24.8%	26.0%	24.2%	27.8%	24.5%	22.8%	26.2%
50%	Count	303	312	267	154	99	159	235	187
	Column N %	19.7%	21.6%	20.6%	17.9%	17.2%	19.4%	21.4%	20.7%
25%	Count	116	119	110	56	54	62	94	73
	Column N %	7.5%	8.2%	8.5%	6.5%	9.4%	7.6%	8.5%	8.1%
10%	Count	67	38	37	30	27	25	45	27
	Column N %	4.3%	2.6%	2.9%	3.5%	4.7%	3.0%	4.1%	3.0%
Less than 10%	Count	87	78	67	56	33	71	58	72
	Column N %	5.6%	5.4%	5.2%	6.5%	5.7%	8.6%	5.3%	8.0%
0%	Count	125	128	94	81	36	63	97	56
	Column N %	8.1%	8.9%	7.3%	9.4%	6.3%	7.7%	8.8%	6.2%

Pearson Chi-Square Tests

Chi-square	65.132
df	42
Sig.	.013(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

The data from the awareness survey in the DOL offices suggest that the media and enforcement campaigns achieved their basic objective of exposing Washington drivers, especially the target audience of 18- to 34-year-old males, to the intended message and enforcement activities. After each of the intervention periods, there were dramatic increases in the percentages of survey respondents who said they had read, seen, or heard any media about nighttime time seat belt enforcement. There were also large increases in the percentage of survey respondents who said they had noticed increased seat belt enforcement at night, although most people indicated that they were not personally stopped for a violation. The interventions, though highly visible, did not appear to have a meaningful effect on self-reported belt use. This is not surprising, however, given the extremely high self-reported, and observed (see below) seat belt use rates both day and night in Washington.

4.3 Seat Belt Observation Results

The preliminary seat belt use data are presented both with and without the pre-count (traffic volume) weighting factor. Figure 8 and Table 32 use the raw frequencies of observed belt use to calculate the belt use rates, day and night, for all of counties combined. This method of presentation provides a look at belt use by including all observations at all 40 sites across all 8 counties. A chi-square test is presented for the data in Table 32. The chi-square test shows that the changes in belt use over time for both day and night were statistically significant. The results show that there was an increase in nighttime belt use that peaked in September 2007 (2 percentage points above baseline). Observed nighttime belt use then falls back slightly by June 2008. A similar pattern is seen for daytime belt use with usage rates increasing to a peak in July 2007 (0.6 percentage points) and falling back to slightly below baseline by June 2008. The absolute magnitude of these statistically significant changes is relatively small. This is not unexpected given the consistently high starting belt use rates both day and night. More data will be collected in the second project year that will be added to the analysis to enhance the picture of the effect of the NTSBE on belt use in Washington.

Figure 9 and Table 33 present the mean belt use rates for day and night when the data are weighted by the 10-minute pre-counts. Although the seat belt usage rates are slightly different because of the calculation approach, the data follow the a similar pattern to the unweighted day and night use rates shown in Figure 8 and Table 32.

Figure 8. Unweighted day and night seat belt use at 40 sites

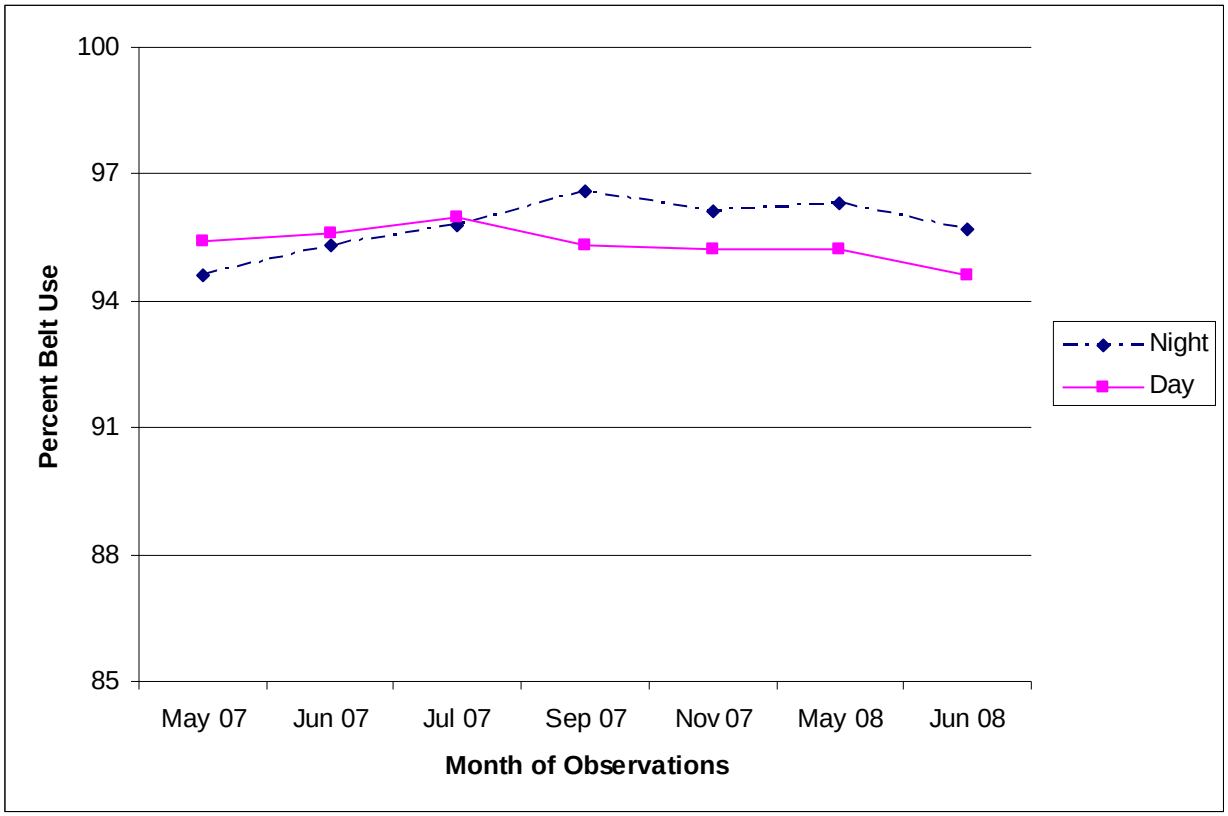


Table 32. Unweighted day and night seat belt use

			May 2007 Pre HVE	June 2007 Post HVE	July 2007	Sep. 2007 Pre HVE	Nov. 2007 Post HVE	May 2008 Pre HVE	June 2008 Post HVE
Night	Yes	Count	2,868	6,989	6,097	6,111	5,901	4,036	6,423
		Column N %	**94.6%**	**95.3%**	**95.8%**	**96.6%**	**96.1%**	**96.3%**	**95.7%**
	No	Count	163	346	268	218	237	155	289
		Column N %	5.4%	4.7%	4.2%	3.4%	3.9%	3.7%	4.3%
	Total	Count	3031	7,335	6,365	6,329	6,138	4,191	6,712
		Column N %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Day	Yes	Count	6,488	9,800	6,628	7,866	8,024	7,842	8,293
		Column N %	**95.4%**	**95.6%**	**96.0%**	**95.3%**	**95.2%**	**95.2%**	**94.6%**
	No	Count	311	449	279	384	403	393	474
		Column N %	4.6%	4.4%	4.0%	4.7%	4.8%	4.8%	5.4%
	Total	Count	6,799	10,249	6,907	8,250	8,427	8,235	8,767
		Column N %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Night	Chi-square	28.957
	df	6
	Sig.	.000(*)
Day	Chi-square	19.345
	df	6
	Sig.	.004(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

Figure 9. Day and night seat belt use weighted by pre-counts at 40 sites

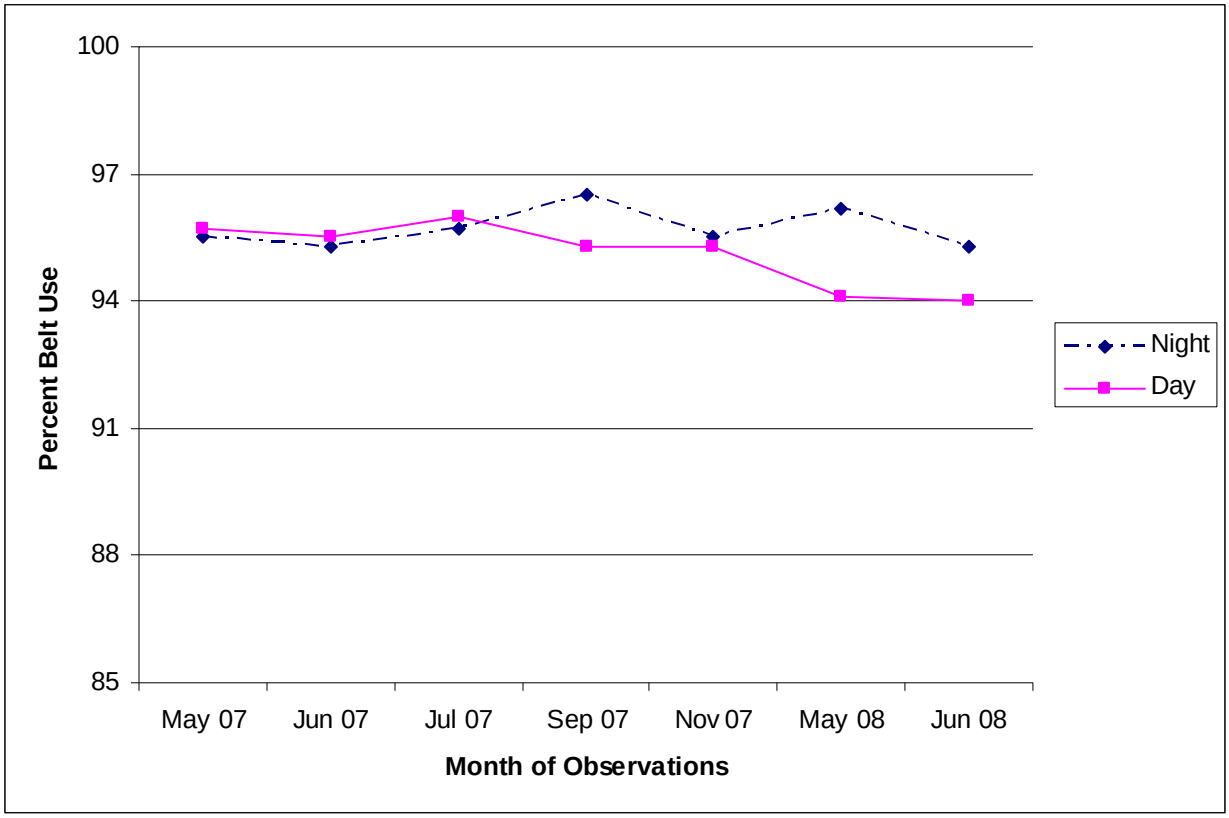


Table 33. Day and night seat belt use weighted by pre-counts

		May 2007 Pre HVE	June 2007 Post HVE	July 2007	Sep. 2007 Pre HVE	Nov. 2007 Post HVE	May 2008 Pre HVE	June 2008 Post HVE
Night	Belt Use	95.5%	95.3%	95.7%	96.5%	95.5%	96.2%	95.3%
Day	Belt Use	95.7%	95.5%	96.0%	95.3%	95.3%	94.1%	94.0%

The data presented in the figures and tables above suggest a trend for a slight increase in nighttime seat belt use over time and a slight decrease in observed daytime seat belt use during the same time period. When all data have been collected for the project, more complex statistical techniques will be considered in an attempt to quantify definitively the magnitude of changes in the day and night observed seat belt use at the 40 data collection locations.

4.4 Annual Statewide Surveys of Daytime Seat Belt Use

It was not clear at the outset of this project how daytime seat belt use would be affected by NTSBE since the Washington CIOT focus had been completely shifted to night. In particular, funding for special seat belt enforcement patrols was totally allocated to the evening and night hours. Thus, a reasonable question to ask was, "Will the focus on nighttime seat belt patrols result in a decrease in the daytime seat belt use rate because there is less enforcement during the daytime?" This question is best answered by data from the statewide seat belt surveys that are conducted every year. These surveys, which are summarized for 2004 to 2008 in Table 34, showed that the statewide daytime use rate continued to climb, moving from 96.4% in 2007 to 96.5% in 2008. Although the 40-site subsample results suggested that daytime belt use might be decreasing slightly, the official statewide number suggests that the focus on nighttime seat belt enforcement was not counterproductive regarding seat belt usage during daylight hours. The official statewide survey includes over 10 times as many sites as the subsample surveys conducted as part of this study. The official statewide belt use rates, therefore, are less prone to error and provide the best representation of daytime seat belt use across the State.

Table 34. Washington State seat belt use rates for 2004-2008

Year	*Belt Use Rate*
2004	*94.2%*
2005	*95.2%*
2006	*96.3%*
2007	*96.4%*
2008	*96.5%*

4.5 Describing Belted and Unbelted Drivers by Time of Day

Data from the observations at the gas stations were utilized to identify differences in driver and criminal records of belted and unbelted drivers by time of day. Although five waves of gas station observations were completed as part of the Year 1 activities, the driver and criminal records are only presented for drivers observed during the baseline period (April 26 to May 1, 2007) in this report**.** Focusing on the baseline provides a description of the relative behavior of the drivers that is free of any influence from the NTSBE program.

Observers could determine the sex for 13,424 (97.9%) drivers observed during the baseline period. Overall, 66.5% of the observed drivers during the baseline period were male. Among all of the observed drivers for whom sex could be determined in the baseline, 91.1% wore seat belts. Of the observed unbelted drivers in the baseline 72.8% were men. At night, however, 76.5% of the unbelted drivers were male compared to 69.7% during the day. Table 35 summarizes, for the baseline period only, counts of belted and unbelted drivers by time of day for each of the data processing steps described earlier in Section 3.5.

Table 35. Counts of observed drivers for each data processing step (baseline only)

	Night Belted	Night Unbelted	Day Belted	Day Unbelted	Total Observations
Observed Drivers	4,593	552	7,918	652	13,715
Sent to Driver and Plate Search (DAPS)	1,075	542	1,309	650	3,576
Drivers License Number (PIC) Identified	543	295	792	395	2,025
Driving Records (ADR) Retrieved	526	280	750	370	1,926
Drivers With Data Available for Criminal Search	447	242	686	340	1,715

Data and results based on the driver and criminal records for the drivers who entered the study because they received citations are presented separately from the gas station observation data since all of the citation data were collected during the NTSBE nighttime activities. No citations that were issued before the NTSBE program were available to this project, and nearly 95% of the citations that were collected were issued at night as part of the NTSBE-supported enforcement activities.[7] As a result, no pre/post analysis or day/night analysis of the citations is feasible. Some general comparisons, however, to the data derived from the observations are provided. These comparisons should be interpreted with caution since the citations span the whole year of NTSBE activities and the population receiving the citations could have changed over time. Table 36 includes counts of citations at each processing step.

Table 36. Counts of cited drivers for each data processing step (Year 1 citations only)

Total Year 1 Citations received	**11,519**
Sent to Driver and Plate Search (DAPS)	N/A
Drivers License Number (PIC) Identified	9,193
Driving Records (ADR) Retrieved	6,845
Drivers with data Available for Criminal Search	5,035

The project sent the Washington DOL requests for the driving records of 3,576 observed drivers from the baseline period and 9,193 cited drivers. Of the 3,576 driver descriptions collected during the baseline period and sent to WTSC, 2,025 resulted in a driver match and PIC identified in the DAPS system. Citations did not require a DAPS search since the PIC was

[7] All drivers in this group received citations from the officers on patrols supported or generated by the NTSBE program. In the vast majority of cases, the citation included a seat belt offense. Occasionally, a driver would be stopped for multiple offenses including failure to wear a seat belt and would ***not*** be cited for the seat belt violation.

already written on the citation. Nearly 95% (1,926 of 2,025 possible) of the PICs from the baseline gas station observations that were sent to DOL resulted in a driver record hit. Nearly 75% of the PICs (6,845 of 9,193 possible) from the citations resulted in a driver record hit. The lower hit rate from the citations was most likely due to difficulty in interpreting police officer handwriting on the photocopies received. On the other hand, with the observations, the PICs were cut-and-pasted from the DAPS system into the project data files and therefore required no handwriting interpretation.

For the baseline gas station observations, 1,715 driver records had the information needed to search the criminal records database. For the citations, 5,035 driver records had the information needed to search the criminal records database A total of 1,129 (207 from the gas station observations and 922 from the citations) unique people in the dataset had criminal records on file for the years searched.[8]

Since a person without a criminal record would not show up in the criminal records database WSP maintains, the ADRs provided the best means to examine the sex of drivers observed and cited who had enough information to search the criminal records database. Table 37 shows that about two-thirds of all the drivers at each processing step were male. There was a slight increase in the percentage of males who had driver and criminal records available compared to the percentage of males in the observed population. The citations showed similar sex distribution results with 68.0% of those PICS resulting in a driver record hit being male drivers.

Table 37. Sex of observed drivers (baseline only) throughout processing steps

	Male	*Female*
Observed Drivers	66.5%	*33.5%*
Drivers License Number (PIC) Identified	70.4%	*29.6%*
Driving Records (ADR) Retrieved	71.8%	*28.2%*
Drivers with data Available for Criminal Search	*70.4%*	*29.6%*

All information from the driving and criminal records files were merged into a single data record for each individual. This was then combined with the original gas station observation data such that the record for each person in the file from the gas station observations has a time of day that he/she was observed, his/her observed belt use, and all data relating to driving and criminal histories. Likewise, the driving and criminal records files were also combined with all data pulled from the citations.

The preliminary results for the baseline measurement period are intended to be descriptive in nature at this point in the project and to highlight any observed differences between belted and unbelted drivers by time of day. Results should not be considered definitive since future analyses may lead to an altered interpretation given any impact of the NTSBE program activities.

[8] Only the Washington State criminal records were searched to determine the criminal record of the people in this study. No attempt was made to search in any other State or Federal records for additional arrests not recorded in the Washington files.

The first of the tables in each subsection below displays the frequencies of occurrences for a particular driving citation type or criminal offense for belted/unbelted drivers for day and night for the baseline period only. Rather than discuss the statistical significance of the associations in each table, the results of the chi-square tests are provided including the exact probability that the displayed result might have been observed by chance. Information is also presented in the text specifically for the unbelted 18- to 34-year-old males at night since this was the target group for the media campaign. The baseline sample had 115 of these target group members in the ADR, 93 of which had sufficient data to do a criminal records search.

A second table in each subsection is also provided for the Year 1 citations. Again, comparisons between the citation results and the baseline observation results should be made with caution because the data were collected at different times using differing methodologies.

4.5.1 Alcohol Citations

The percentages of drivers in each group for the baseline period that had one or more alcohol citations on their ADRs are shown in Table 38. In the baseline period only 3.5% of the day-belted drivers had at least one alcohol citation on their driving record. The day-unbelted drivers were slightly higher at 5.7%, and the night-belted drivers were similar at 4.9%. However, 10.4% of the night-unbelted drivers had at least one alcohol citation on their driving record. For 18- to 34-year-old unbelted males observed at night, 13.9% had at least one alcohol citation.

Table 38. Observed drivers: One or more alcohol citations

		0	1+	Total
Day Unbelted	Count	349	21	370
	Row N %	94.3%	5.7%	100.0%
Day Belted	Count	724	26	750
	Row N %	96.5%	3.5%	100.0%
Night Unbelted	Count	251	29	280
	Row N %	89.6%	10.4%	100.0%
Night Belted	Count	500	26	526
	Row N %	95.1%	4.9%	100.0%
Total	Count	1,824	102	1,926
	Row N %	94.7%	5.3%	100.0%

Pearson Chi-Square Tests

Chi-square	19.541
df	3
Sig.	.000(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

Of the drivers who were stopped and cited during the NTSBE enforcement activities, 7.9% had an alcohol-related citation on their records (Table 39).

Table 39. Cited drivers: One or more alcohol citations

1+	Count	538
	Column N %	7.9%
0	Count	6,307
	Column N %	92.1%
Total	Count	6,845
	Column N %	100.0%

4.5.2 Any Moving Citations (Non-alcohol)

Non-alcohol-involved moving violations were combined into a single category. A person with one or more citations in this category may have been cited for violations such as speeding, failure to yield, failure to control, negligent/reckless driving, or a variety of other less prevalent violations. Of the day-belted drivers observed in the baseline period 39.2% had one or more moving violations, and 45.1% of the day-unbelted drivers had a moving violation. For drivers observed at night during the baseline period 49.0% of the night-belted drivers had one or more moving violations and 55.4% of the night-unbelted drivers had a moving violation on their records (Table 40). Of the unbelted 18– to 34-year-old males observed at night, 70.4% had one or more moving violations.

Table 40. Observed drivers: One or more moving violations

		0	1+	Total
Day Unbelted	Count	203	167	370
	Row N %	54.9%	45.1%	100.0%
Day Belted	Count	456	294	750
	Row N %	60.8%	39.2%	100.0%
Night Unbelted	Count	125	155	280
	Row N %	44.6%	55.4%	100.0%
Night Belted	Count	268	258	526
	Row N %	51.0%	49.0%	100.0%
Total	Count	1,052	874	1,926
	Row N %	54.6%	45.4%	100.0%

Pearson Chi-Square Tests

Chi-square	25.668
df	3
Sig.	.000(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

Of the drivers who were stopped and cited during the NTSBE enforcement activities, 60.9% had a moving violation on their records (Table 41).

Table 41. Cited drivers: One or more moving violations

1+	Count	4,171
	Column N %	60.9%
0	Count	2,674
	Column N %	39.1%
Total	Count	6,845
	Column N %	100.0%

4.5.3 Speeding Citations

As shown in Table 42, of the day-belted drivers in the baseline period, 32.3% had one or more speeding citations while 33.2% of the day-unbelted drivers had one or more citations. The night-belted drivers had a slightly higher rate of citations at 35.6%, and 42.1% of the night-unbelted drivers had a speeding citation on their driving record. For the unbelted 18- to 34-year-olds at night, 57.4% had at least one speeding citation.

Table 42. Observed drivers: One or more speeding citations

		0	1+	Total
Day Unbelted	Count	247	123	370
	Row N %	66.8%	33.2%	100.0%
Day Belted	Count	508	242	750
	Row N %	67.7%	32.3%	100.0%
Night Unbelted	Count	162	118	280
	Row N %	57.9%	42.1%	100.0%
Night Belted	Count	339	187	526
	Row N %	64.4%	35.6%	100.0%
Total	Count	1,256	670	1,926
	Row N %	65.2%	34.8%	100.0%

Pearson Chi-Square Tests

Chi-square	9.303
df	3
Sig.	.026(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

Of the drivers who were stopped and cited during the NTSBE enforcement activities, 48.4% had a speeding citation on their records (Table 43).

Table 43. Cited drivers: One or more speeding citations

1+	Count	3,312
	Column N %	48.4%
0	Count	3,533
	Column N %	51.6%
Total	Count	6,845
	Column N %	100.0%

4.5.4 Negligent/Reckless Driving Citations

Only 4.9% of the day-belted drivers in the baseline period had at least one negligent or reckless driving citation versus 7.3% for day-unbelted drivers (Table 44). Rates were even higher at night with 8.4% of night-belted drivers and 10.4% of night-unbelted drivers having citations on their records. Of the unbelted 18- to 34-year-old males at night, 15.7% had a negligent/reckless citation on their driving record.

Table 44. Observed drivers: One or more negligent/reckless citations

		0	1+	Total
Day Unbelted	Count	343	27	370
	Row N %	92.7%	7.3%	100.0%
Day Belted	Count	713	37	750
	Row N %	95.1%	4.9%	100.0%
Night Unbelted	Count	251	29	280
	Row N %	89.6%	10.4%	100.0%
Night Belted	Count	482	44	526
	Row N %	91.6%	8.4%	100.0%
Total	Count	1,789	137	1,926
	Row N %	92.9%	7.1%	100.0%

Pearson Chi-Square Tests

Chi-square	11.120
df	3
Sig.	.011(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

Of the drivers who were stopped and cited during the NTSBE enforcement activities, 9.0% had a negligent/reckless driving citation on their records (Table 45).

Table 45. Cited drivers: One or more negligent/reckless citations

1+	Count	614
	Column N %	9.0%
0	Count	6,231
	Column N %	91.0%
Total	Count	6,845
	Column N %	100.0%

4.5.5 License-related Citations

During the baseline period 6.0% of the day-belted drivers had at least one license-related citation (e.g., driving with suspended license) on their records compared to 7.8% of the day-unbelted drivers for the baseline period. For drivers observed at night, 11.0% of the night-belted drivers had a citation while 14.6% of the night-unbelted had a citation on their record (Table 46). Of the unbelted 18- to 34-year-old males at night, 20.0% had license-related citations.

Table 46. Observed drivers: One or more license-related citations

		0	1+	Total
Day Unbelted	Count	341	29	370
	Row N %	92.2%	7.8%	100.0%
Day Belted	Count	705	45	750
	Row N %	94.0%	6.0%	100.0%
Night Unbelted	Count	239	41	280
	Row N %	85.4%	14.6%	100.0%
Night Belted	Count	468	58	526
	Row N %	89.0%	11.0%	100.0%
Total	Count	1,753	173	1,926
	Row N %	91.0%	9.0%	100.0%

Pearson Chi-Square Tests

Chi-square	22.415
df	3
Sig.	.000(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

Of the drivers who were stopped and cited during the NTSBE enforcement activities, 23.6% had a license-related citation on their records (Table 47).

Table 47. Cited drivers: One or more license-related citations

1+	Count	1,617
	Column N %	23.6%
0	Count	5,228
	Column N %	76.4%
Total	Count	6,845
	Column N %	100.0%

4.5.6 Any Criminal Offense

Of the 4,542 ADRs obtained, 4,062 had enough valid information to search for a criminal record. To provide a gross look at criminal history, a binary variable was created where one group had no criminal record over the 11 years and the other group had at least one of any type of offense on their record for the same time period. During the baseline measurement period the day-belted drivers, at 9.6%, had nearly the same rate of criminal records as the day-unbelted drivers at 9.4%. Of the night-belted drivers 13.6% had criminal records, and 19.8% of the night-unbelted drivers had records (Table 48). For the unbelted 18- to 34-year-old males observed at night, 30.1% had criminal records.

Table 48. Observed drivers: One or more criminal offenses

		0	1+	Total
Day Unbelted	Count	308	32	340
	Row N %	90.6%	9.4%	100.0%
Day Belted	Count	620	66	686
	Row N %	90.4%	9.6%	100.0%
Night Unbelted	Count	194	48	242
	Row N %	80.2%	19.8%	100.0%
Night Belted	Count	386	61	447
	Row N %	86.4%	13.6%	100.0%
Total	Count	1,508	207	1,715
	Row N %	87.9%	12.1%	100.0%

Pearson Chi-Square Tests

Chi-square	20.935
df	3
Sig.	.000(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level

Of the drivers who were stopped and cited during the NTSBE enforcement activities, 18.3% had criminal records (Table 49).

Table 49. Cited drivers: One or more criminal offenses

1+	Count	922
	Column N %	18.3%
0	Count	4,113
	Column N %	81.7%
Total	Count	5,035
	Column N %	100.0%

4.5.7 Any Felony Offense

As shown in Table 50, only 3.1% of the day-belted drivers and 3.2% of the day-unbelted drivers observed during the baseline period had at least one felony offense. In contrast, 6.9% of the night-belted and 8.3% of the night-unbelted drivers had a felony offense on their records for the same time period. Of the unbelted 18- to 34-year-old males observed at night during the baseline period, 17.2% had a felony on their records.

Table 50. Observed drivers: One or more felony offenses

		0	1+	Total
Day Unbelted	Count	329	11	340
	Row N %	96.8%	3.2%	100.0%
Day Belted	Count	665	21	686
	Row N %	96.9%	3.1%	100.0%
Night Unbelted	Count	222	20	242
	Row N %	91.7%	8.3%	100.0%
Night Belted	Count	416	31	447
	Row N %	93.1%	6.9%	100.0%
Total	Count	1,632	83	1,715
	Row N %	95.2%	4.8%	100.0%

Pearson Chi-Square Tests

Chi-square	17.037
df	3
Sig.	.001(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

Of the drivers who were stopped and cited during the NTSBE enforcement activities, 7.9% had a felony on their criminal records (Table 51).

Table 51. Cited drivers: One or more felony offenses

1+	Count	396
	Column N %	7.9%
0	Count	4,639
	Column N %	92.1%
Total	Count	5,035
	Column N %	100.0%

4.5.8 Any Misdemeanor/Gross Misdemeanor Offense

During the baseline period, 6.9% of the day-belted drivers had at least one misdemeanor or gross misdemeanor on their criminal records, and 6.5% of the day-unbelted drivers had an offense of this these types on their records. Of the night-belted drivers 9.4% had a misdemeanor or gross misdemeanor, and 15.7% of the night-unbelted drivers had at least one such offense (Table 52). Of the unbelted 18- to 34-year-old males observed at night, 24.7% had a misdemeanor or gross misdemeanor on their records.

Table 52. Observed drivers: One or more misdemeanor/gross misdemeanor offenses

		0	1+	Total
Day Unbelted	Count	318	22	340
	Row N %	93.5%	6.5%	100.0%
Day Belted	Count	639	47	686
	Row N %	93.1%	6.9%	100.0%
Night Unbelted	Count	204	38	242
	Row N %	84.3%	15.7%	100.0%
Night Belted	Count	405	42	447
	Row N %	90.6%	9.4%	100.0%
Total	Count	1,566	149	1,715
	Row N %	91.3%	8.7%	100.0%

Pearson Chi-Square Tests

Chi-square	20.316
df	3
Sig.	.000(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

Of the drivers who were stopped and cited during the NTSBE enforcement activities, 13.5% had a misdemeanor or gross misdemeanor on their records (Table 53).

Table 53. Cited drivers: One or more misdemeanors/gross misdemeanors

1+	Count	681
	Column N %	13.5%
0	Count	4,354
	Column N %	86.5%
Total	Count	5,035
	Column N %	100.0%

4.5.9 Violent Offenses

The project staff characterized each possible criminal offense as violent or non-violent. During the baseline period, 4.1% of the day-belted drivers had an offense considered violent on their record. Of the day-unbelted drivers, 3.5% had an offense in this category. During the same time period 9.1% of the night-unbelted drivers and 6.9% of the night belted drivers committed a violent offense (Table 54). Of the unbelted 18- to 34-year-old males observed at night, 14.0% had a violent offense on their records.

Table 54. Observed drivers: One or more violent criminal offenses

		0	1+	Total
Day Unbelted	Count	328	12	340
	Row N %	96.5%	3.5%	100.0%
Day Belted	Count	658	28	686
	Row N %	95.9%	4.1%	100.0%
Night Unbelted	Count	220	22	242
	Row N %	90.9%	9.1%	100.0%
Night Belted	Count	416	31	447
	Row N %	93.1%	6.9%	100.0%
Total	Count	1,622	93	1,715
	Row N %	94.6%	5.4%	100.0%

Pearson Chi-Square Tests

Chi-square	13.125
df	3
Sig.	.004(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

Of the drivers who were stopped and cited during the NTSBE enforcement activities, 6.3% had a violent criminal offense on their records (Table 55).

Table 55. Cited drivers: One or more violent criminal offenses

1+	Count	319
	Column N %	6.3%
0	Count	4,716
	Column N %	93.7%
Total	Count	5,035
	Column N %	100.0%

4.5.10 Drug-Related Criminal Offenses

The project staff also categorized each possible criminal offense by whether it was drug-related (excluding alcohol). Table 56 presents the results. Unbelted drivers at night had more than twice as many drug-related offenses on their records (4.5%) as either the day-belted (2.0%) or day unbelted (2.1%) drivers. Night belted drivers also showed a relatively high frequency of drug-related offenses (4.0%). Of the unbelted 18- to 34-year-olds observed at night, 9.7% had a drug-related offense on their records.

Table 56. Observed drivers: One or more drug-related criminal offenses

		0	1+	Total
Day Unbelted	Count	333	7	340
	Row N %	97.9%	2.1%	100.0%
Day Belted	Count	672	14	686
	Row N %	98.0%	2.0%	100.0%
Night Unbelted	Count	231	11	242
	Row N %	95.5%	4.5%	100.0%
Night Belted	Count	429	18	447
	Row N %	96.0%	4.0%	100.0%
Total	Count	1,665	50	1,715
	Row N %	97.1%	2.9%	100.0%

Pearson Chi-Square Tests

Chi-square	6.958
df	3
Sig.	.073

Results are based on nonempty rows and columns in each innermost subtable.

Of the drivers who were stopped and cited during the NTSBE enforcement activities, 4.8% had a drug-related criminal offense on their records (Table 57).

Table 57. Cited drivers: One or more drug-related criminal offenses

1+	Count	241
	Column N %	4.8%
0	Count	4,794
	Column N %	95.2%
Total	Count	5,035
	Column N %	100.0%

4.5.11 Crashes

The ADRs contain one-line descriptions of crashes based on police crash reports submitted to the State. The description indicates whether the crash involved a moving, runaway, standing, or parked vehicle. The records also contain a field to indicate the number of vehicles involved in the crash (e.g., a single vehicle, two vehicles, three vehicles). No crash severity measure is included on the records.

The ADRs were examined for any differences in crash involvement among the belted and unbelted drivers by day and night. Only moving crashes were of interest because of the focus on seat belt use and since the numbers of the other types of crashes were small. As above with violations, only data for belt observations made during the baseline period are presented here since the post-NTSBE crash data and drivers could have been influenced by the program. This approach allows the cleanest look at differences among belted and unbelted drivers for the day and night hours before any media or enforcement blitzes took place. The text also includes a description of crashes for unbelted 18- to 34-year-old males observed at night. A separate table is presented for the drivers who received tickets since these drivers could only have been ticketed after the start of the program and, by definition, were directly affected by the NTSBE activities.

The number of people with more than one moving crash was small. Therefore, Table 58 shows a comparison of belted and unbelted drivers by day and night who had one or more moving crashes. Of the belted drivers observed during daylight hours for the baseline period, 16.0% had one or more moving crashes compared to 17.8% of the unbelted drivers observed during the same hours. The belted drivers observed at night were slightly higher with 19.6% having one or more moving crashes, and the unbelted drivers at night showed a high moving crash rate with 21.8% having one or more crashes on their records. Of the unbelted 18- to 34-year-old males observed at night, 27.8% had at least one crash on their records.

Table 58. Observed drivers: Moving crashes

		0	1+	Total
Day Unbelted	Count	304	66	370
	Row N %	82.2%	17.8%	100.0%
Day Belted	Count	630	120	750
	Row N %	84.0%	16.0%	100.0%
Night Unbelted	Count	219	61	280
	Row N %	78.2%	21.8%	100.0%
Night Belted	Count	423	103	526
	Row N %	80.4%	19.6%	100.0%
Total	Count	1,576	350	1,926
	Row N %	81.8%	18.2%	100.0%

Pearson Chi-Square Tests

Chi-square	5.569
df	3
Sig.	.135

Results are based on nonempty rows and columns in each innermost subtable.

Of the drivers who received a citation during the NTSBE activities, 23.4% had one or more moving crashes on their records (Table 59).

Table 59. Cited drivers: Moving crashes

1+	Count	1,605
	Column N %	23.4%
0	Count	5,240
	Column N %	76.6%
Total	Count	6,845
	Column N %	100.0%

As seen in Table 60, 3.5% of the belted drivers observed during the day for the baseline period had been involved in a single-vehicle crash compared to 4.3% of the unbelted drivers during the day. Of the belted drivers observed at night, 4.2% had been involved in a single-vehicle crash, and 4.6% of the unbelted night drivers had been involved in the same type of crash. Of the unbelted 18- to 34-year-old males observed at night, 7.8% had been involved in at least one single-vehicle crash.

Table 60. Observed drivers: Single-vehicle crashes

		0	1+	Total
Day Unbelted	Count	354	16	370
	Row N %	95.7%	4.3%	100.0%
Day Belted	Count	724	26	750
	Row N %	96.5%	3.5%	100.0%
Night Unbelted	Count	267	13	280
	Row N %	95.4%	4.6%	100.0%
Night Belted	Count	504	22	526
	Row N %	95.8%	4.2%	100.0%
Total	Count	1,849	77	1,926
	Row N %	96.0%	4.0%	100.0%

Pearson Chi-Square Tests

Chi-square	1.004
df	3
Sig.	.800

Results are based on nonempty rows and columns in each innermost subtable.

The drivers who received a citation during the NTSBE activities showed a slightly higher rate with 5.4% having been involved in a single-vehicle crash (Table 61).

Table 61. Cited drivers: Single-vehicle crashes

1+	Count	373
	Column N %	5.4%
0	Count	6,472
	Column N %	94.6%
Total	Count	6,845
	Column N %	100.0%

The belted drivers observed during the day for the baseline period had a slightly higher rate of involvement in two-vehicle crashes at 12.3% than the unbelted drivers during the day at 11.6%. Of the belted drivers at night, 14.1% had been involved in two-vehicle crashes compared to 15.7% of the unbelted drivers at night (Table 62). For the unbelted 18- to34-year-old males, 20.0% had been involved in two-vehicle crashes.

Table 62. Observed drivers: Two-vehicle crashes

		0	1+	Total
Day Unbelted	Count	327	43	370
	Row N %	88.4%	11.6%	100.0%
Day Belted	Count	658	92	750
	Row N %	87.7%	12.3%	100.0%
Night Unbelted	Count	236	44	280
	Row N %	84.3%	15.7%	100.0%
Night Belted	Count	452	74	526
	Row N %	85.9%	14.1%	100.0%
Total	Count	1,673	253	1,926
	Row N %	86.9%	13.1%	100.0%

Pearson Chi-Square Tests

Chi-square	3.272
df	3
Sig.	.351

Results are based on nonempty rows and columns in each innermost subtable.

The rate of involvement in two-vehicle crashes for drivers who received a citation during NTSBE activities was 17.6% (Table 63).

Table 63. Cited drivers: Two-vehicle crashes

1+	Count	1,204
	Column N %	17.6%
0	Count	5,641
	Column N %	82.4%
Total	Count	6,845
	Column N %	100.0%

Overall, very few of the drivers observed during the baseline period had been involved in a crash in which three or more vehicles collided. Belted drivers during the day had the lowest rate at 2.1%, followed by the unbelted day drivers at 2.7%, belted drivers at night at 2.9%, and the unbelted drivers observed at night had the highest rate of involvement at 3.9% (Table 64). Of the unbelted 18- to 34-year-old males observed at night, 4.3% had been involved in a crash in which three or more vehicles collided.

Table 64. Observed drivers: Three-or-more-vehicle crashes

		0	1+	Total
Day Unbelted	Count	360	10	370
	Row N %	97.3%	2.7%	100.0%
Day Belted	Count	734	16	750
	Row N %	97.9%	2.1%	100.0%
Night Unbelted	Count	269	11	280
	Row N %	96.1%	3.9%	100.0%
Night Belted	Count	511	15	526
	Row N %	97.1%	2.9%	100.0%
Total	Count	1,874	52	1,926
	Row N %	97.3%	2.7%	100.0%

Pearson Chi-Square Tests

Chi-square	2.572
df	3
Sig.	.462

Results are based on nonempty rows and columns in each innermost subtable.

The rate of involvement in three-or-more-vehicle crashes for drivers who received citations during NTSBE activities was 2.7% (Table 65).

Table 65. Cited drivers: Three-or-more-vehicle crashes

1+	Count	187
	Column N %	2.7%
0	Count	6,658
	Column N %	97.3%
Total	Count	6,845
	Column N %	100.0%

4.5.12 Summary of Driver Characteristics Results

These preliminary results suggest that there are substantial differences in the driver and criminal records of the belted and unbelted driver populations as a function of the time of day they are driving. In almost every instance examined for the baseline period, the observed night-unbelted drivers were at least twice as likely to have key driving citations (Table 66) or key criminal offenses (Table 67) on their records compared to the day belted drivers.

Table 66. Summary of key driving record offense categories by belt use and time of day for drivers observed during the baseline period (April 26 to May 1, 2007)

	One or More Alcohol Citations			One or More Moving Violations			One or More Speeding Citations			One or More Negligent or Reckless Citations			One or More License-related Citations		
Driver Group	**% of Group**	**Ratio***	**Difference Unbelted-Belted****	**% of Group**	**Ratio***	**Difference Unbelted-Belted**	**% of Group**	**Ratio***	**Difference Unbelted-Belted**	**% of Group**	**Ratio***	**Difference Unbelted-Belted**	**% of Group**	**Ratio***	**Difference Unbelted-Belted**
Night* Unbelted**	10.4	3.0	5.5	55.4	1.4	6.4	42.1	1.3	6.5	10.4	2.1	2.0	14.6	2.4	**3.6**
Night Belted	4.9	1.4		49.0	1.3		35.6	1.1		8.4	1.7		11.0	1.8	
Day** Unbelted**	5.7	1.6	2.2	45.1	1.1	5.9	33.2	1.0	0.9	7.3	1.5	2.4	7.8	1.3	**1.8**
Day Belted	**3.5**	**1.0**		**39.2**	**1.0**		**32.3**	**1.0**		**4.9**	**1.0**		**6.0**	**1.0**	

*Ratio is the quotient of the percentage in each category divided by the percentage of day belted drivers
**Difference is the percentage of Unbelted minus the percentage of belted calculated separately for night and day
***6 p.m. to 5:59 am
****6 a.m. to 5:59 p.m.

Table 67. Summary of key criminal offense categories by belt use and time of day for drivers observed during the baseline period (April 26 to May 1, 2007)

Driver Group	One or More Criminal Offenses			One or More Felonies			One or More Violent Crimes		
	% of Group	Ratio*	Difference Unbelted-Belted**	% of Group	Ratio*	Difference Unbelted-Belted	% of Group	Ratio*	Difference Unbelted-Belted
Night* Unbelted**	19.8	2.1	6.2	8.3	2.7	1.4	9.1	2.2	**2.2**
Night Belted	13.6	1.4		6.9	2.2		6.9	1.7	
Day** Unbelted**	9.4	1.0	-0.2	3.2	1.0	0.1	3.5	0.9	**-0.6**
Day Belted	**9.6**	**1.0**		**3.1**	**1.0**		**4.1**	**1.0**	

*Ratio is the quotient of the percentage in each category divided by the percentage of day belted drivers
**Difference is the percentage of unbelted minus the percentage of Belted calculated separately for night and day
***6 p.m. to 5:59 am
****6 a.m. to 5:59 p.m.

4.6 Belt Use Based on Gas Station Observations

As previously described, the belt use of drivers entering the four selected gas stations was recorded. A seat belt usage rate can be calculated from these data. As discussed earlier, this use rate is valid for longitudinal tracking at the sampled locations but is not presented as a valid estimate of actual seat belt usage across Washington State. An important point to remember with respect to these observations is that the observers were tasked with focusing on finding unbelted drivers, recording their characteristics, and, in the first wave, referring them for interview.[9] Observers gave priority to unbelted drivers and carefully recorded a description of the driver. They were told to just as carefully record the characteristics of belted drivers, but that if unbelted and belted drivers appeared simultaneously, priority should be given to capturing the data on the unbelted driver. To the extent that these simultaneous events occurred at busy gas stations, there would be an overrepresentation of unbelted drivers in the sample. This could bias an absolute estimate of belt use but not a judgment of whether local belt use rates changed over time as long as procedures remained constant from wave-to-wave of data collection.

Figure 10 presents the observed belt use at the four gas stations. In order to present a consistent picture of belt use over time and since there are likely differences in belt use as a function of day of the week, Figure 10 includes only belt use for Friday and Saturday for the baseline period in order to provide a consistent comparison with belt use in the later waves.[10]

As seen in Figure 10, no major changes in belt use were observed over the first three waves of observations. However, there was a drop in observed nighttime belt use for the May 2008 and June 2008 observations. Observed daytime belt use also dropped slightly during these time periods. These results are not consistent with the statewide surveys, or the subsample surveys that were taken throughout the study. The most likely explanation is that the difference arose from the changes in the observation teams in May 2008 that were necessitated by personnel availability. Discussions with the new teams revealed that some of the new observers were using slightly different procedures than earlier observers. A refresher training session was run after these problems were discovered, and it is hoped that the data for the second year will be more consistent with the baseline. This issue, however, likely had no effect on the primary purpose for the gas station data, which was to provide the input drivers for the ADR and criminal records analyses.

Figure 11 shows the percentage of unbelted drivers observed during the day and night who were males. As seen in the figure, there tended to be a greater percentage of males in the unbelted group during the night hours during the first four waves of observations, but this difference was gone by June 2008. Figure 12 shows the percentage of unbelted drivers observed during the day and night that were judged to be 18- to 34 years of age. The figure demonstrates a larger percentage of 18- to 34-year-olds in the night unbelted group than the day unbelted group.

[9] Because of Washington State's high seat belt use rate, the development of sampling protocols focused on attempting to complete observations on as many unbelted drivers as possible.

[10] The baseline observations covered almost an entire week (six days), while the later waves covered only two days (Friday and Saturday).

Figure 10. Day/night belt at gas stations for Friday and Saturday nights only

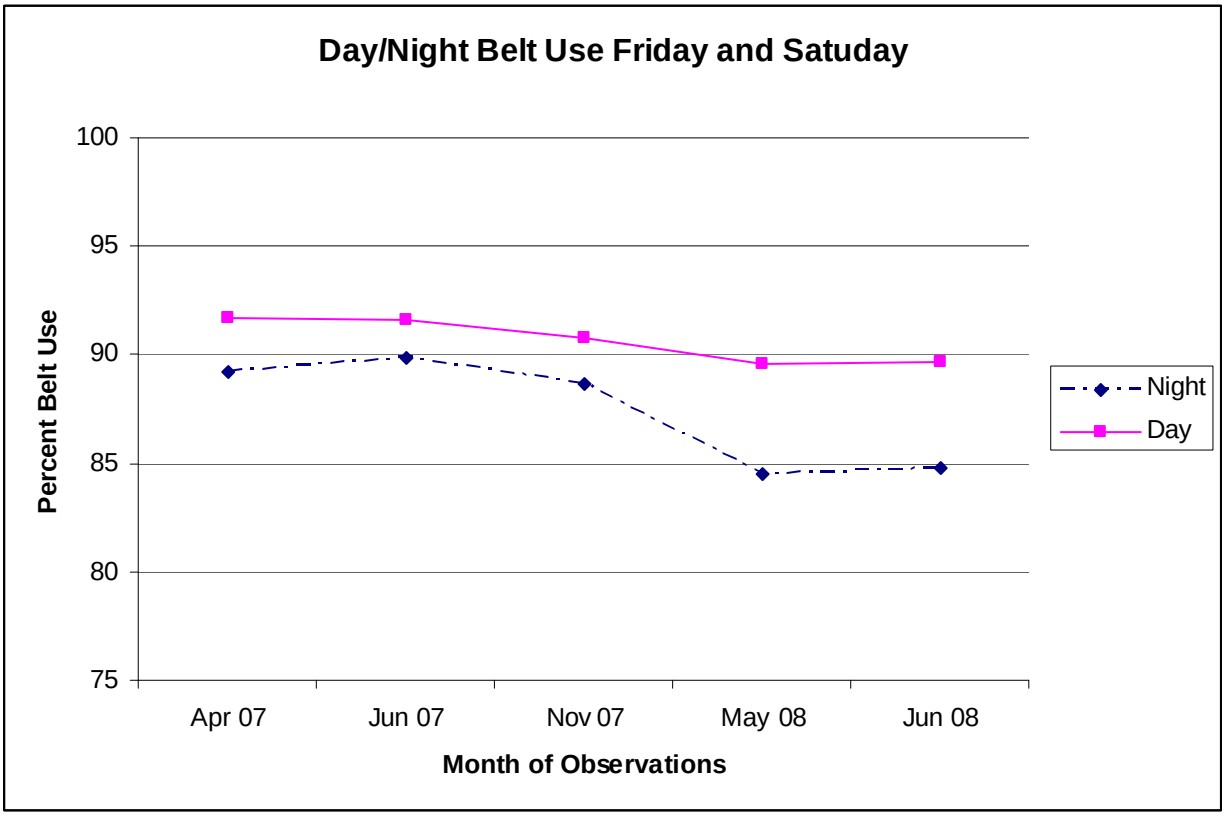


Figure 11. Percentage of males in unbelted driver population by day and night

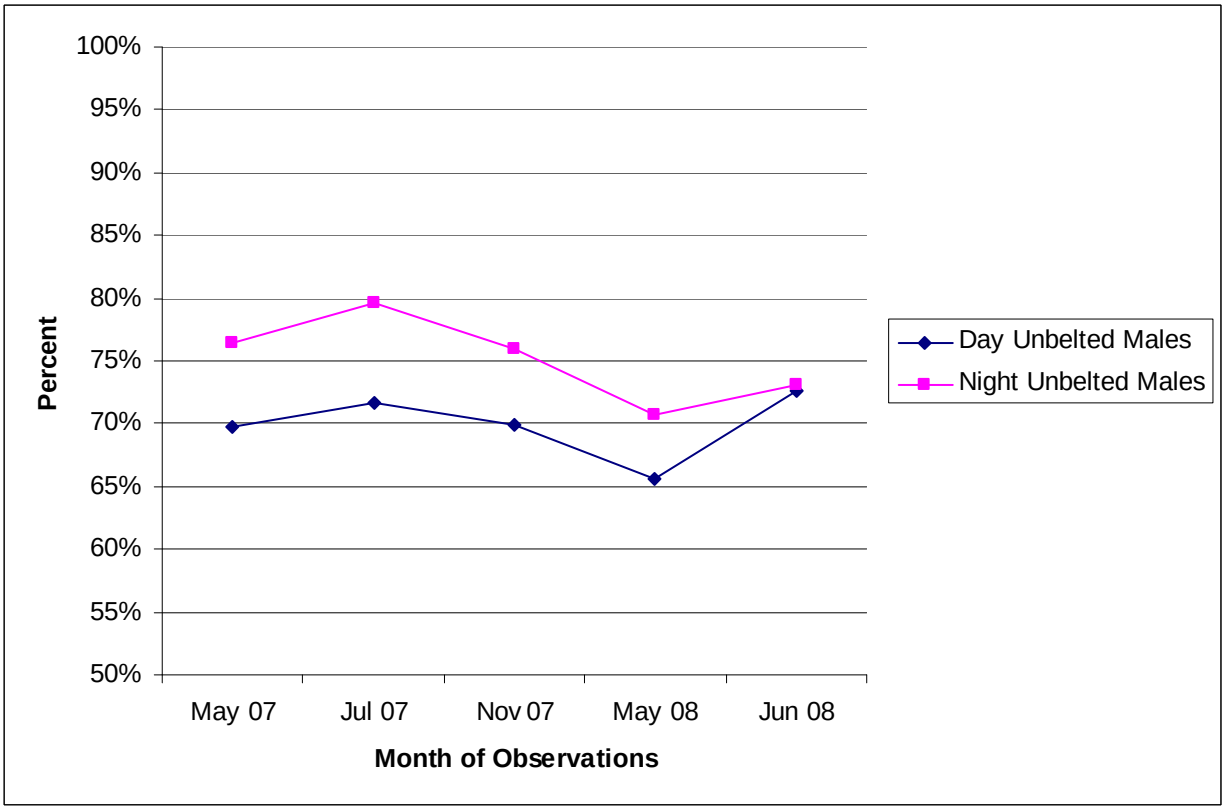
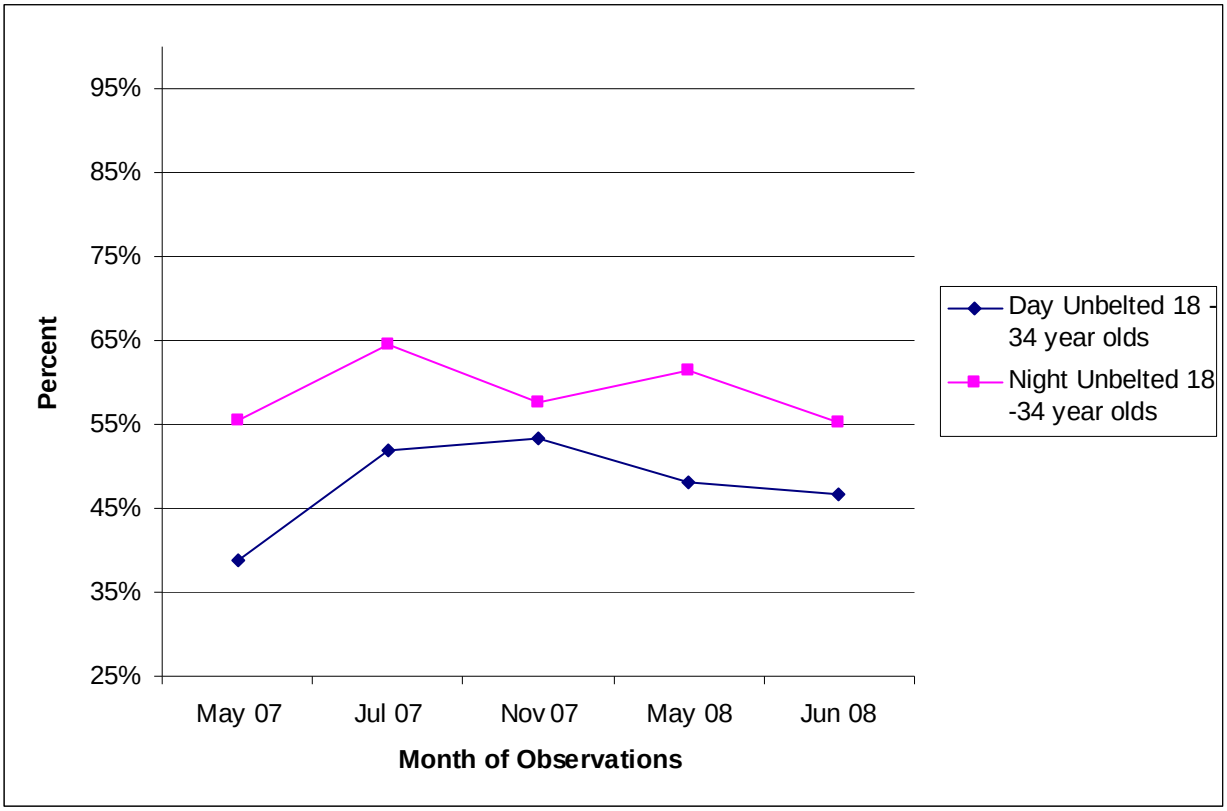


Figure 12. Percentage of 18- to 34-year-olds in unbelted driver population by day and night



4.7 Gas Station Intercept Survey

During the first wave of gas station observations (April 26 to May 1, 2007), WTSC conducted an intercept survey of drivers at the same gas stations where the observations of seat belt use were taking place. A total of 2,515 surveys were collected and matched with observation data. Observation data were first screened to determine if the people who were approached as part of the survey were different from the population of those people who were observed but were not approached to participate in the survey. Overall, 68.0% of the drivers approached for a survey (those who participated and those who refused to participate) were male, 81.3% were white, and their average age as estimated by the observers was 39.3 years. The demographic data were virtually the same for the group of people who were observed but not approached for the survey with 66.2% being male, 77.8% white, and an average age of 39.0 years. By intention, unbelted drivers were oversampled with 34.1% being unbelted in the survey sample compared to only 3.1% being unbelted for the group who were observed but not approached for an interview. This suggests that almost every unbelted driver who was observed was at least approached to participate in the survey. Table 68 shows the observed sex, Table 69 the observed age, and Table 70 the observed race of those people who completed the intercept survey.

Table 68. Observed sex of people who completed intercept surveys

		Male	Female	Total
Day 6 a.m. - 5:59 p.m.	Count	782	395	1,177
	Row N %	66.4%	33.6%	100.0%
Night 6 p.m. - 5:59 a.m.	Count	495	196	691
	Row N %	71.6%	28.4%	100.0%
Total	Count	1,277	591	1,868
	Row N %	68.4%	31.6%	100.0%

Table 69. Observed age of people who completed intercept surveys

		< 18 years old	18 - 34 years old	35 + years old	Total
Day 6 a.m. - 5:59 p.m.	Count	3	422	773	1,198
	Row N %	.3%	35.2%	64.5%	100.0%
Night 6 p.m. - 5:59 a.m.	Count	2	344	338	684
	Row N %	.3%	50.3%	49.4%	100.0%
Total	Count	5	766	1,111	1,882
	Row N %	.3%	40.7%	59.0%	100.0%

Table 70. Observed race of people who completed intercept surveys

		White	Hispanic	Black	Asian	Other	Unknown	Total
Day 6 a.m. - 5:59 p.m.	Count	1,066	66	42	23	1	1	1,199
	Row N %	88.9%	5.5%	3.5%	1.9%	.1%	.1%	100.0%
Night 6 p.m. - 5:59 a.m.	Count	486	147	32	12	6	6	689
	Row N %	70.5%	21.3%	4.6%	1.7%	.9%	.9%	100.0%
Total	Count	1,552	213	74	35	7	7	1,888
	Row N %	82.2%	11.3%	3.9%	1.9%	.4%	.4%	100.0%

It was important to keep a tally of refusals to monitor for possible biases such as whether or not any particular group of people was refusing to participate in the survey more than other groups. A total of 602 refusals were collected, and the reason for the refusal was coded (No time; Not interested; Non-English speaking; Other). The overall response rate of 76% is good for a survey of this type. Data were examined to determine if the people who refused to take the survey were different from those who agreed to participate. The survey participants and refusals were virtually the same on gender (68.4% male for survey takers; 66.9% male for refusals), race (82.2% of survey takers were white; 78.2% of refusals were white), and estimated age (39.4 years for survey takers; 39.1 years for refusals). Most importantly, however, it was found that 34.1% of the unbelted drivers approached for the survey refused to participate compared to a refusal rate of only 18.7% for belted drivers. The unbelted driver refusal rate was essentially the same for day and night hours. This indicates that, across day and night, unbelted drivers were significantly less likely to participate in the survey, and that the results of the survey could be affected by this bias.

For the completed surveys, data were analyzed to look for any differences among responses of the belted and unbelted drivers by time of day they were interviewed. Consistent with the other analyses contained in this report, day was defined as being between 6 a.m. and 5:59 p.m. Night was defined as between 6 p.m. and 5:59 a.m. The tables presented below are, by definition, descriptive since only one survey wave was collected. Part of the description is the chi-square Tests that are presented after each table test for differences among belted and unbelted drivers for day and night hours separately. The significance tests presented with each table indicate if there are any differences among belted and unbelted drivers for a particular time of day. Comparisons that examine the statistical significance of the interaction of time of day with belt use could be performed but were not conducted for this interim report. Appendix F includes the results of additional analyses of the survey data based on the observed gender of respondents, observed age of respondents, and membership in the study's target group based on observed age and gender (18- to 34-year-old males). Notable findings from these additional analyses are presented in the text.

Survey participants were asked the reason they were driving at the time they stopped at the gas station. As seen in Table 71, the most common reason for driving was "work." No significant differences were found among belted and unbelted drivers during the day or at night on reason for driving.

Participants were then asked, "When you pass a driver stopped by the police in the **daytime**, what do you think the stop was for?" Table 72 shows that the great majority of respondents (79.4% overall) thought speeding was the primary reason for most stops. Very few respondents thought of seat belts as the reason for daytime stops. No significant differences were found between belted and unbelted drivers for day or night hours.

A variation of the prior question asked, "When you pass a driver stopped by the police at **night**, what do you think the stop was for?" Speeding was still the most common answer at 45.9% of the total sample (Table 73), but the percentage of the sample selecting drunk driving increased dramatically to 33.0%. In addition, there was a statistically significant difference for belted and unbelted drivers during the day. More unbelted drivers (35.9%) thought the police were stopping people for drunk driving compared to 28.4% of the belted drivers. Conversely, more of the belted drivers (53.0%) thought the police were stopping people for speeding than did the unbelted drivers (44.3%). Belted and unbelted drivers at night did not show these differences.

Another question asked participants what they thought the police were looking for when they patrol the road at night. As seen in Table 74, 43.5% of all respondents indicated that police were looking for drunk drivers. Speeding was second highest at 18.1% and "other" was third highest at 13.8% of the total sample. No significant differences were found among belted and unbelted drivers for either the daytime surveys or the nighttime surveys.

Another question asked participants what percentage of the time they wear a seat belt when driving during the day. For the participants interviewed during daytime hours, 92.3% of the belted drivers said they wear their belts 100% of the time. Somewhat incongruously, 77.3% of the drivers who were observed unbelted during daytime hours said they wear seat belts 100% of the time during the day. The drivers interviewed at night followed the same pattern with 91.3% of the belted drivers saying they wear seat belts 100% of the time during the day and 73.7% of the unbelted drivers saying they wear their seat belts all of the time during the day. The differences between the belted and unbelted drivers were statistically significant for both day and night (Table 75).

All participants were then asked what percentage of the time they wear a seat belt when driving at night. The pattern was the same as self-reported daytime use, although the overall reported nighttime belt use rates were slightly higher. Of the belted drivers interviewed during the day, 94.0% said they wear seat belts 100% of the time at night while 80.1% of the unbelted drivers reported always wearing seat belts at night. For belted drivers interviewed at night, 93.6% said they wear belts 100% of the time at night while 77.8% of the unbelted said they wear seat belts 100% of the time at night. See Table 76 for the complete set of responses to the question.

Overall, a lower percentage of males (85.0%) reported 100% daytime belt use compared to females (91.9%). A similar pattern was found overall for self-reported 100% nighttime belt use with males at 87.6% and females at 94.0%. The patterns of reported day and night belt use were similar for participants interviewed during the day and night hours.

An interesting finding was that 18- to 34-year-old males interviewed during the day (80.8%) reported much lower 100% daytime belt use than all other respondents interviewed during the day (90.0%). The difference in reporting 100% daytime belt use, however, was not found for drivers interviewed at night. That is, 86.5% of the 18- to 34-year-olds interviewed at night reported 100% daytime belt use while 86.0% of all other respondents interviewed at night reported 100% daytime belt use. A similar pattern was found for reported nighttime belt use with 84.6% of 18- to 34-year-olds interviewed during the day reporting 100% nighttime belt use compared to 91.6% of all other respondents. The difference in nighttime seat belt use however, was not present when comparing drivers interviewed at night. Of the 18- to 34-year-olds

interviewed at night 89.4% said they wear belts 100% of the time at night compared to 89.1% of all other respondents.

Two items from the Alcohol Use Disorders Identification Test (AUDIT) developed by Babor, Higgins-Biddle, Saunders and Monteiro (2001) were included verbatim at the end of the survey. A third item that is a variation of a binge-drinking item found in the AUDIT was also included. The first question in the sequence asked, "In the past year, how often did you have a drink containing alcohol?" The next question asked, "In the past year, how many drinks containing alcohol did you have on a typical day when you are drinking?" The final question asked, "In the past year, how often have you had [5 for males][4 for females] or more drinks within a 2-hour period?"

Table 77 shows that overall, 31.8% of the sample said they never have an alcoholic drink, 27.3% monthly or less, 18.4% two to four times a month, 14.0% two to three times a week, and 7.2% four or more times a week. The belted and unbelted drivers by day and night showed the same pattern without any major differences in the magnitudes of the percentages. 0 shows that a larger percentage of males interviewed during the day (10.2%) said they drink four or more times a week compared to females interviewed during the day (5.2%). Surprisingly, there were no statistically significant differences between males and females interviewed at night for self-reported frequency of drinking. The 18- to 34-year-old males did not show any differences for frequency of drinking compared to all other respondents for both day and night (0).

Table 71. Driver's self-reported reason for driving when intercepted

			Work	Shopping/ Errand	School	Religious Activity	Visiting Friend	Medical/ Dental Appointment	Other Family/ Personal	Vacation	Out to Eat	Other	Refused	Total
Day 6 a.m. - 5:59 p.m.	Unbelted	Count	137	56	11	5	17	13	5	35	41	19	0	339
		Row N %	40.4%	16.5%	3.2%	1.5%	5.0%	3.8%	1.5%	10.3%	12.1%	5.6%	.0%	100.0%
	Belted	Count	389	141	21	2	39	24	16	77	84	46	0	839
		Row N %	46.4%	16.8%	2.5%	.2%	4.6%	2.9%	1.9%	9.2%	10.0%	5.5%	.0%	100.0%
	Total	Count	526	197	32	7	56	37	21	112	125	65	0	1,178
		Row N %	44.7%	16.7%	2.7%	.6%	4.8%	3.1%	1.8%	9.5%	10.6%	5.5%	.0%	100.0%
Night 6 p.m. - 5:59 a.m.	Unbelted	Count	82	23	4	2	25	1	6	39	13	11	1	207
		Row N %	39.6%	11.1%	1.9%	1.0%	12.1%	.5%	2.9%	18.8%	6.3%	5.3%	.5%	100.0%
	Belted	Count	200	63	15	1	44	2	14	85	33	16	0	473
		Row N %	42.3%	13.3%	3.2%	.2%	9.3%	.4%	3.0%	18.0%	7.0%	3.4%	.0%	100.0%
	Total	Count	282	86	19	3	69	3	20	124	46	27	1	680
		Row N %	41.5%	12.6%	2.8%	.4%	10.1%	.4%	2.9%	18.2%	6.8%	4.0%	.1%	100.0%
Total	Unbelted	Count	219	79	15	7	42	14	11	74	54	30	1	546
		Row N %	40.1%	14.5%	2.7%	1.3%	7.7%	2.6%	2.0%	13.6%	9.9%	5.5%	.2%	100.0%
	Belted	Count	589	204	36	3	83	26	30	162	117	62	0	1,312
		Row N %	44.9%	15.5%	2.7%	.2%	6.3%	2.0%	2.3%	12.3%	8.9%	4.7%	.0%	100.0%
	Total	Count	808	283	51	10	125	40	41	236	171	92	1	1,858
		Row N %	43.5%	15.2%	2.7%	.5%	6.7%	2.2%	2.2%	12.7%	9.2%	5.0%	.1%	100.0%

Pearson Chi-Square Tests

Day 6 a.m. - 5:59 p.m.	Chi-square	11.007
	df	9
	Sig.	.275
Night 6 p.m. - 5:59 a.m.	Chi-square	8.360
	df	10
	Sig.	.594(a,b)

Results are based on nonempty rows and columns in each innermost subtable.
a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.
b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table 72. Opinion of why drivers are stopped by police during daytime?

			Speeding	Seat Belt Violation	Drunk Driving	Reckless Driving	Other	Don't Know	Refused	Total
Day 6 a.m. - 5:59 p.m.	Unbelted	Count	281	6	3	0	24	29	0	343
		Row N %	81.9%	1.7%	.9%	.0%	7.0%	8.5%	.0%	100.0%
	Belted	Count	695	11	5	0	67	62	0	840
		Row N %	82.7%	1.3%	.6%	.0%	8.0%	7.4%	.0%	100.0%
	Total	Count	976	17	8	0	91	91	0	1,183
		Row N %	82.5%	1.4%	.7%	.0%	7.7%	7.7%	.0%	100.0%
Night 6 p.m. - 5:59 a.m.	Unbelted	Count	157	8	2	0	33	8	0	208
		Row N %	75.5%	3.8%	1.0%	.0%	15.9%	3.8%	.0%	100.0%
	Belted	Count	348	22	8	0	66	29	1	474
		Row N %	73.4%	4.6%	1.7%	.0%	13.9%	6.1%	.2%	100.0%
	Total	Count	505	30	10	0	99	37	1	682
		Row N %	74.0%	4.4%	1.5%	.0%	14.5%	5.4%	.1%	100.0%
Total	Unbelted	Count	438	14	5	0	57	37	0	551
		Row N %	79.5%	2.5%	.9%	.0%	10.3%	6.7%	.0%	100.0%
	Belted	Count	1,043	33	13	0	133	91	1	1,314
		Row N %	79.4%	2.5%	1.0%	.0%	10.1%	6.9%	.1%	100.0%
	Total	Count	1,481	47	18	0	190	128	1	1,865
		Row N %	79.4%	2.5%	1.0%	.0%	10.2%	6.9%	.1%	100.0%

Pearson Chi-Square Tests

Day 6 a.m. - 5:59 p.m.	Chi-square	1.297
	df	4
	Sig.	.862(a)
Night 6 p.m. - 5:59 a.m.	Chi-square	3.001
	df	5
	Sig.	.700(a,b)

Results are based on nonempty rows and columns in each innermost subtable.
a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.
b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table 73. Opinion of why drivers are stopped by police during nighttime?

			Speeding	Seat Belt Violation	Drunk Driving	Reckless Driving	Other	Don't Know	Refused	Total
Day 6 a.m. - 5:59 p.m.	Unbelted	Count	152	3	123	0	36	29	0	343
		Row N %	44.3%	.9%	35.9%	.0%	10.5%	8.5%	.0%	100.0%
	Belted	Count	444	1	238	0	81	74	0	838
		Row N %	53.0%	.1%	28.4%	.0%	9.7%	8.8%	.0%	100.0%
	Total	Count	596	4	361	0	117	103	0	1,181
		Row N %	50.5%	.3%	30.6%	.0%	9.9%	8.7%	.0%	100.0%
Night 6 p.m. - 5:59 a.m.	Unbelted	Count	81	5	72	0	32	15	0	205
		Row N %	39.5%	2.4%	35.1%	.0%	15.6%	7.3%	.0%	100.0%
	Belted	Count	176	6	180	0	78	31	2	473
		Row N %	37.2%	1.3%	38.1%	.0%	16.5%	6.6%	.4%	100.0%
	Total	Count	257	11	252	0	110	46	2	678
		Row N %	37.9%	1.6%	37.2%	.0%	16.2%	6.8%	.3%	100.0%
Total	Unbelted	Count	233	8	195	0	68	44	0	548
		Row N %	42.5%	1.5%	35.6%	.0%	12.4%	8.0%	.0%	100.0%
	Belted	Count	620	7	418	0	159	105	2	1,311
		Row N %	47.3%	.5%	31.9%	.0%	12.1%	8.0%	.2%	100.0%
	Total	Count	853	15	613	0	227	149	2	1,859
		Row N %	45.9%	.8%	33.0%	.0%	12.2%	8.0%	.1%	100.0%

Pearson Chi-Square Tests

Day 6 a.m. - 5:59 p.m.	Chi-square	12.362
	df	4
	Sig.	.015(*,a)
Night 6 p.m. - 5:59 a.m.	Chi-square	2.797
	df	5
	Sig.	.731(a,b)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.
a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.
b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table 74. What are police looking for when they patrol the road at night?

			Speeding	Seat belt violation	Drunk driving	Drugs	Reckless driving	Criminals	Other	Don't know	Refused	Total
Day 6 a.m. - 5:59 p.m.	Unbelted	Count	56	7	147	17	24	17	40	19	0	327
		Row N %	17.1%	2.1%	45.0%	5.2%	7.3%	5.2%	12.2%	5.8%	.0%	100.0%
	Belted	Count	164	12	354	26	64	34	96	54	2	806
		Row N %	20.3%	1.5%	43.9%	3.2%	7.9%	4.2%	11.9%	6.7%	.2%	100.0%
	Total	Count	220	19	501	43	88	51	136	73	2	1,133
		Row N %	19.4%	1.7%	44.2%	3.8%	7.8%	4.5%	12.0%	6.4%	.2%	100.0%
Night 6 p.m. - 5:59 a.m.	Unbelted	Count	35	5	81	7	11	14	38	10	0	201
		Row N %	17.4%	2.5%	40.3%	3.5%	5.5%	7.0%	18.9%	5.0%	.0%	100.0%
	Belted	Count	70	5	198	29	19	47	73	16	1	458
		Row N %	15.3%	1.1%	43.2%	6.3%	4.1%	10.3%	15.9%	3.5%	.2%	100.0%
	Total	Count	105	10	279	36	30	61	111	26	1	659
		Row N %	15.9%	1.5%	42.3%	5.5%	4.6%	9.3%	16.8%	3.9%	.2%	100.0%
Total	Unbelted	Count	91	12	228	24	35	31	78	29	0	528
		Row N %	17.2%	2.3%	43.2%	4.5%	6.6%	5.9%	14.8%	5.5%	.0%	100.0%
	Belted	Count	234	17	552	55	83	81	169	70	3	1,264
		Row N %	18.5%	1.3%	43.7%	4.4%	6.6%	6.4%	13.4%	5.5%	.2%	100.0%
	Total	Count	325	29	780	79	118	112	247	99	3	1,792
		Row N %	18.1%	1.6%	43.5%	4.4%	6.6%	6.3%	13.8%	5.5%	.2%	100.0%

Pearson Chi-Square Tests

Day 6 a.m. - 5:59 p.m.	Chi-square	5.997
	df	8
	Sig.	.648(a)
Night 6 p.m. - 5:59 a.m.	Chi-square	8.675
	df	8
	Sig.	.370(a)

Results are based on nonempty rows and columns in each innermost subtable.
a The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table 75. Self-reported daytime belt use

			100%	90% to 99.99%	75% to 89.99%	50% - 74.99%	1% to 49.99%	0%	Total
Day 6 a.m. - 5:59 p.m.	Unbelted	Count	262	38	9	11	12	7	339
		Row N %	77.3%	11.2%	2.7%	3.2%	3.5%	2.1%	100.0%
	Belted	Count	774	38	11	9	3	4	839
		Row N %	92.3%	4.5%	1.3%	1.1%	.4%	.5%	100.0%
	Total	Count	1,036	76	20	20	15	11	1,178
		Row N %	87.9%	6.5%	1.7%	1.7%	1.3%	.9%	100.0%
Night 6 p.m. - 5:59 a.m.	Unbelted	Count	151	17	14	10	9	4	205
		Row N %	73.7%	8.3%	6.8%	4.9%	4.4%	2.0%	100.0%
	Belted	Count	429	19	5	5	7	5	470
		Row N %	91.3%	4.0%	1.1%	1.1%	1.5%	1.1%	100.0%
	Total	Count	580	36	19	15	16	9	675
		Row N %	85.9%	5.3%	2.8%	2.2%	2.4%	1.3%	100.0%
Total	Unbelted	Count	413	55	23	21	21	11	544
		Row N %	75.9%	10.1%	4.2%	3.9%	3.9%	2.0%	100.0%
	Belted	Count	1,203	57	16	14	10	9	1,309
		Row N %	91.9%	4.4%	1.2%	1.1%	.8%	.7%	100.0%
	Total	Count	1,616	112	39	35	31	20	1,853
		Row N %	87.2%	6.0%	2.1%	1.9%	1.7%	1.1%	100.0%

Pearson Chi-Square Tests

Day 6 a.m. - 5:59 p.m.	Chi-square	57.851
	df	5
	Sig.	.000(*)
Night 6 p.m. - 5:59 a.m.	Chi-square	42.102
	df	5
	Sig.	.000(*,a)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.
a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

Table 76. Self-reported nighttime belt use

			100%	90% to 99.99%	75% to 89.99%	50% - 74.99%	1% to 49.99%	0%	Total
Day 6 a.m. - 5:59 p.m.	Unbelted	Count	269	30	9	8	13	7	336
		Row N %	80.1%	8.9%	2.7%	2.4%	3.9%	2.1%	100.0%
	Belted	Count	788	28	6	7	3	6	838
		Row N %	94.0%	3.3%	.7%	.8%	.4%	.7%	100.0%
	Total	Count	1057	58	15	15	16	13	1,174
		Row N %	90.0%	4.9%	1.3%	1.3%	1.4%	1.1%	100.0%
Night 6 p.m. - 5:59 a.m.	Unbelted	Count	158	15	8	8	9	5	203
		Row N %	77.8%	7.4%	3.9%	3.9%	4.4%	2.5%	100.0%
	Belted	Count	439	16	1	4	4	5	469
		Row N %	93.6%	3.4%	.2%	.9%	.9%	1.1%	100.0%
	Total	Count	597	31	9	12	13	10	672
		Row N %	88.8%	4.6%	1.3%	1.8%	1.9%	1.5%	100.0%
Total	Unbelted	Count	427	45	17	16	22	12	539
		Row N %	79.2%	8.3%	3.2%	3.0%	4.1%	2.2%	100.0%
	Belted	Count	1,227	44	7	11	7	11	1,307
		Row N %	93.9%	3.4%	.5%	.8%	.5%	.8%	100.0%
	Total	Count	1,654	89	24	27	29	23	1,846
		Row N %	89.6%	4.8%	1.3%	1.5%	1.6%	1.2%	100.0%

Pearson Chi-Square Tests

Day 6 a.m. - 5:59 p.m.	Chi-square	57.815
	df	5
	Sig.	.000(*,a)
Night 6 p.m. - 5:59 a.m.	Chi-square	42.338
	df	5
	Sig.	.000(*,a)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.
a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

Table 77. In the past year, how often had an alcoholic drink?

			Never	Monthly or less	2 to 4 Times a Month	2 to 3 Times a week	4 or more times a week	Refused	Total
Day 6 a.m. - 5:59 p.m.	Unbelted	Count	105	81	69	48	32	7	342
		Row N %	30.7%	23.7%	20.2%	14.0%	9.4%	2.0%	100.0%
	Belted	Count	249	218	160	127	67	10	831
		Row N %	30.0%	26.2%	19.3%	15.3%	8.1%	1.2%	100.0%
	Total	Count	354	299	229	175	99	17	1,173
		Row N %	30.2%	25.5%	19.5%	14.9%	8.4%	1.4%	100.0%
Night 6 p.m. - 5:59 a.m.	Unbelted	Count	71	57	35	27	13	2	205
		Row N %	34.6%	27.8%	17.1%	13.2%	6.3%	1.0%	100.0%
	Belted	Count	162	148	75	56	20	6	467
		Row N %	34.7%	31.7%	16.1%	12.0%	4.3%	1.3%	100.0%
	Total	Count	233	205	110	83	33	8	672
		Row N %	34.7%	30.5%	16.4%	12.4%	4.9%	1.2%	100.0%
Total	Unbelted	Count	176	138	104	75	45	9	547
		Row N %	32.2%	25.2%	19.0%	13.7%	8.2%	1.6%	100.0%
	Belted	Count	411	366	235	183	87	16	1,298
		Row N %	31.7%	28.2%	18.1%	14.1%	6.7%	1.2%	100.0%
	Total	Count	587	504	339	258	132	25	1,845
		Row N %	31.8%	27.3%	18.4%	14.0%	7.2%	1.4%	100.0%

Pearson Chi-Square Tests

Day 6 a.m. - 5:59 p.m.	Chi-square	2.690
	df	5
	Sig.	.748
Night 6 p.m. - 5:59 a.m.	Chi-square	2.299
	df	5
	Sig.	.806

Results are based on nonempty rows and columns in each innermost subtable.

Table 78 shows the responses of belted and unbelted drivers by day and night to the question about the quantity of alcoholic beverages they drink when they are drinking. This question was only appropriate if respondents indicated in the previous question that they drink alcoholic beverages. For those people who indicated they drink alcoholic beverages, there appear to be some differences among people driving during the day and at night regarding the amount of alcohol they drink. Most notably, 67.9% of the drivers interviewed during daytime hours said they only have one or two drinks compared to only 53.1% of the drivers interviewed at night. Correspondingly, 19.9% of the daytime drivers said they had three or four drinks when drinking compared to 30.6% of the drivers interviewed at night. A statistically significant difference was found for belted and unbelted drivers at night, but this must be interpreted with caution since some of the cell counts are small. 0 shows that males interviewed during the day tended to drink more drinks than, but there was no statistically significant difference by sex for drivers interviewed at night. In addition, 18- to 34-year-old males interviewed both during the day and at night reported significantly higher levels of alcohol consumption compared to all other respondents. For example, 13.2% of the 18- to 34-year-old males interviewed at night reported having five or six drinks compared to only 5.9% of all other respondents (0).

The results of the item relating to binge drinking and day/night belt use are shown in Table 79. Again, this question was only appropriate if a person indicated that he or she drank alcoholic beverages. Overall, 62.9% of those people who drink indicated that they never have (5 or more for males) (4 or more for females) drinks in two hours, 23.4% less than monthly, 8.8% monthly, 3.4% weekly, and 0.8% daily or almost daily. Belted and unbelted drivers showed virtually the same results for day and night interview hours. Males interviewed during the day tended to report more binge drinking than females, but the difference between the sexes was not found for drivers interviewed at night (0). Results also showed that 18- to 34-year-old males, regardless of the time of day they were interviewed, were more likely to binge drink (0). Overall, 7.1% of the 18- to 34-year-old males said they binge drink weekly compared to only 1.9% of all other respondents interviewed at night.

Overall, unbelted drivers, regardless of time of day, were less likely to participate in the survey. In addition, a large percentage of the drivers who were observed to be unbelted said that they always wear their seat belts, thus casting some doubt on their veracity. It is possible that some of these people wear only lap belts (which could not be observed) or wore seat belts improperly (which was coded as non-use). Only a few items appeared to show any differences by time of day or belt use. Most notably, it appears that the people interviewed at night drink greater quantities of alcoholic beverages when they do drink compared to the people interviewed during the day. This is consistent with the larger number of alcohol offenses on their driving records as reported earlier. Other global findings of interest include the fact that most people think police stop drivers for speeding during the day, but that more drivers are stopped for drunk driving at night. Along the same lines, people think that the police are looking for drunk driving and other more egregious activities (e.g., drugs, reckless driving) at night. Seat belts are rarely mentioned when talking about traffic stops or police activities.

Table 78. How many drinks have when drinking?

			1 or 2	3 or 4	5 or 6	7 to 9	10 or more	Refused	Total
Day 6 a.m. - 5:59 p.m.	Unbelted	Count	153	50	20	5	1	7	236
		Row N %	64.8%	21.2%	8.5%	2.1%	.4%	3.0%	100.0%
	Belted	Count	401	112	39	9	8	11	580
		Row N %	69.1%	19.3%	6.7%	1.6%	1.4%	1.9%	100.0%
	Total	Count	554	162	59	14	9	18	816
		Row N %	67.9%	19.9%	7.2%	1.7%	1.1%	2.2%	100.0%
Night 6 p.m. - 5:59 a.m.	Unbelted	Count	74	37	8	9	1	4	133
		Row N %	55.6%	27.8%	6.0%	6.8%	.8%	3.0%	100.0%
	Belted	Count	157	96	35	2	7	5	302
		Row N %	52.0%	31.8%	11.6%	.7%	2.3%	1.7%	100.0%
	Total	Count	231	133	43	11	8	9	435
		Row N %	53.1%	30.6%	9.9%	2.5%	1.8%	2.1%	100.0%
Total	Unbelted	Count	227	87	28	14	2	11	369
		Row N %	61.5%	23.6%	7.6%	3.8%	.5%	3.0%	100.0%
	Belted	Count	558	208	74	11	15	16	882
		Row N %	63.3%	23.6%	8.4%	1.2%	1.7%	1.8%	100.0%
	Total	Count	785	295	102	25	17	27	1,251
		Row N %	62.7%	23.6%	8.2%	2.0%	1.4%	2.2%	100.0%

Pearson Chi-Square Tests

Day 6 a.m. - 5:59 p.m.	Chi-square	4.040
	df	5
	Sig.	.544
Night 6 p.m. - 5:59 a.m.	Chi-square	19.265
	df	5
	Sig.	.002(*,a)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.
a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

Table 79. How often have (5 for males; 4 for females) drinks in 2 hours?

			Never	Less than monthly	Monthly	Weekly	Daily or almost daily	Refused	Total
Day 6 a.m. - 5:59 p.m.	Unbelted	Count	139	64	20	5	2	1	231
		Row N %	60.2%	27.7%	8.7%	2.2%	.9%	.4%	100.0%
	Belted	Count	368	129	49	21	1	4	572
		Row N %	64.3%	22.6%	8.6%	3.7%	.2%	.7%	100.0%
	Total	Count	507	193	69	26	3	5	803
		Row N %	63.1%	24.0%	8.6%	3.2%	.4%	.6%	100.0%
Night 6 p.m. - 5:59 a.m.	Unbelted	Count	79	33	11	4	3	1	131
		Row N %	60.3%	25.2%	8.4%	3.1%	2.3%	.8%	100.0%
	Belted	Count	190	63	29	12	4	1	299
		Row N %	63.5%	21.1%	9.7%	4.0%	1.3%	.3%	100.0%
	Total	Count	269	96	40	16	7	2	430
		Row N %	62.6%	22.3%	9.3%	3.7%	1.6%	.5%	100.0%
Total	Unbelted	Count	218	97	31	9	5	2	362
		Row N %	60.2%	26.8%	8.6%	2.5%	1.4%	.6%	100.0%
	Belted	Count	558	192	78	33	5	5	871
		Row N %	64.1%	22.0%	9.0%	3.8%	.6%	.6%	100.0%
	Total	Count	776	289	109	42	10	7	1,233
		Row N %	62.9%	23.4%	8.8%	3.4%	.8%	.6%	100.0%

Pearson Chi-Square Tests

Day 6 a.m. - 5:59 p.m.	Chi-square	5.715
	df	5
	Sig.	.335(a,b)
Night 6 p.m. - 5:59 a.m.	Chi-square	2.105
	df	5
	Sig.	.834(a,b)

Results are based on nonempty rows and columns in each innermost subtable.
a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.
b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

4.8 Year 1 WTSC Focus Groups with Law Enforcement

The NTSBE program involved increased enforcement of the seat belt law at night along with paid and earned media about the increased enforcement. Increased enforcement took place across the State with over 50 law enforcement agencies participating in each of the spring and fall campaigns in 2007 and the spring 2008 campaign.

As part of the Year 1 NTSBE activities, three focus groups were conducted by WTSC on September 22, 2008, with representatives from several of the law enforcement agencies that participated in the enforcement program. One of the focus group sessions also included law enforcement personnel from agencies that had not participated in the program. This section summarizes the findings from these focus groups.

4.8.1 Focus Group Composition and Process

The first WTSC focus group took place in the morning and included representatives from two agencies that had not participated in the nighttime seat belt patrols as well as representatives from the Washington State Patrol who had participated in the program. The second focus group took place midday and included representatives from agencies who had participated in the first round of enforcement activities, but who had then dropped out of the program. WSP members also sat in on the second focus group. The last focus group included officers from local agencies who participated in the program and continued to participate, as well as WSP troopers. The focus groups ranged from 5 to 12 participants. Participants in each group represented a cross-section of police ranks, ranging from police chiefs to patrol officers.

The focus groups started with each officer describing his or her agency's emphasis on seat belt enforcement and participation, or lack thereof, in the NTSBE project. From there, open discussions were held regarding the effectiveness of NTSBE publicity, the grants process, operational issues, public perceptions, and a variety of other topics. A brief summary of the participant comments for each of the main topic areas discussed is provided below. Any conclusions or interpretations presented are the opinions of the researchers.

4.8.2 Key Points from Focus Groups

Although there were some differences in opinions among focus group members, the comments elicited were generally quite homogeneous with little variation by area of the State or by type of police agency. The major points made by the focus group participants and any differences of note among participants are summarized in the subsections that follow.

Overall benefit. Every focus group participant agreed that the NTSBE project was beneficial to both the public and to law enforcement agencies. The increase in the number of officers on the roadway at night led not only to more citations for non-use of seat belts, but also to a wide variety of other citations and arrests that normally would not have occurred. Officers universally agreed that the NTSBE project had increased the level of attention they and others in their agencies give to enforcement of seat belt use at night. If nothing else, the officers noted that stopping drivers for non-use of seat belts provided a valid probable cause to find other violations.

Applicability to other States. All focus group participants agreed that other States would benefit from using a similar or slightly modified approach to nighttime seat belt enforcement. In fact, it was suggested many times that the stationary approach that was initially mandated as part of the NTSBE project might be more beneficial in States where belt use is lower since it would be much easier to find unbelted drivers simply because of their greater prevalence.

Effects on law enforcement. It was universally held that law enforcement felt stopping people for improper or non-use of seat belts sometimes led to the discovery of other, often more serious, violations. However, officers did emphasize education over tickets when they observed improper seat belt usage. Participants felt the project was a great team-building experience, especially when they were able to choose their teams for the patrols.

Ticketing for non-belt use is now part of the normal activities during both the day and night for most agencies that have participated in the nighttime patrols. The participants agreed that the enforcement is effective and should be continued to maintain Washington's high seat belt usage rate.

Effects on the public. Officers indicated they stopped a cross-section of the public, though some officers indicated more violators were male than female. In addition, some officers believed increased nighttime enforcement pushed crime out of certain areas. There were some comments from the public that officers should be "spending their time on more important things," and officers described how they used the seat belt stops to educate people who had this opinion.

The publicity campaign. The focus group participants thought the publicity campaign was pervasive and effective. They reported comments from stopped drivers to the effect that they saw or heard the messages but forgot to act on them, or in a few cases, simply stated it was their right not to wear a seat belt. It was stated that without the publicity, the campaign would be nearly impossible and ineffective. Everyone agreed that publicity in Spanish would be an excellent way to reach to reach the migrant population. Another suggestion was made to use local celebrities/personalities to do the various public service announcements. Finally, it was suggested that the media should be encouraged to discuss improper belt use more often.

The respondents reported some negative press from local newspapers in selected areas, although the overall media response was largely positive. Some agencies preferred to use their own public information officers to communicate with the local media, while others preferred to work in conjunction with WTSC's press releases.

Courts/Legal issues. The reaction of the judicial system to the nighttime seat belt tickets varied somewhat across counties. For example, in one location the courts insisted that spotters had to co-sign tickets or the tickets would be dismissed. Some agencies expedited the process by using probable cause templates that the officers filled in as necessary. In other cases, the courts dismissed seat belt tickets (day or night) when the driver protested.

Operational issues. The use of a stationary spotter was only effective in high traffic areas. In many locations, there were simply so few unbelted drivers that officers were not reaching their target of three contacts per hour and became bored. Although the grants initially required the officers to be stationary, many agencies started roving patrols in order to apprehend

more seat belt law violators and get better utilization of their personnel. Most of the officers preferred using the roving patrol approach later in the night when traffic volumes dropped and remaining stationary became unproductive. In addition, many officers noted that cold weather makes the stationary approach less appealing.

The stationary approach appeared to work best with a plain-clothes spotter calling out violations to officers in chase cars. Drivers would buckle up if they saw a uniformed officer at the stationary position. Some agencies had limited success with their stationary spotters because of the lack of sufficient overhead lighting. Some agencies resorted to using the patrol vehicles' headlights to create backlighting that would allow the officers to see into the vehicles. They also preferred to have start and end times earlier than 7 p.m. and 1midnight to take advantage of more daylight and higher traffic volumes.

Some police agencies did not have enough personnel to catch every offender. There was little coordination among the various agencies. The State Patrol had communication issues that inhibited their working with local agencies.

Some agencies focused only on seat belt violations, while others participated in other calls if their special seat belt patrols were not busy. There was wide use of motorcycle units and unmarked cars when roving patrols were conducted. A number of officers reported that using sport utility vehicles improved their ability to see into vehicles and determine seat belt use.

Some of the agencies wanted more flexibility with respect to the calendar dates of the increased seat belt enforcement. This was because they already had so many other overtime projects going that the officers were not as willing to work the seat belt patrols.

4.8.3 Focus Group Summary

WTSC's focus on nighttime seat belt usage was well received by law enforcement even though it was new to many agencies. Law enforcement personnel unanimously agreed that the publicity campaign was critical and enhanced their enforcement efforts. The operational issues were relatively minor with most of them focusing on problems with the mandatory use of the stationary spotter. Most officers felt that using a stationary spotter was only effective when there was high traffic volume. Many agencies began using roving patrols to meet their contact targets for the campaigns. In response to these comments, WTSC relaxed the requirement for stationary patrols and permitted its grantees to have discretion in the way they operate their enforcement.

Overall, the WTSC focus group attendees indicated that they would highly recommend the nighttime seat belt program to other law enforcement agencies across the United States. They thought that with some minor adjustments and a little more flexibility, the program would continue to be effective in Washington even though seat belt use is already high. Even without additional overtime, most of the agencies indicated that they would continue to raise their level of seat belt enforcement at night, especially because it was an effective way to make additional contacts with drivers and to get "bad" people off the road.

5 DISCUSSION AND LIMITATIONS OF YEAR 1 RESULTS

Although it is premature to draw any firm conclusions as to the effectiveness of the NTSBE first year activities, there are strong indications that the program is working and that the evaluation is collecting valuable information to answer the research questions of interest. Additional analyses will be conducted as part of the evaluation of the second year of the program.

The DOL survey shows that people are reporting that they are seeing and hearing the NTSBE message about nighttime enforcement and that they are seeing increased enforcement at night. There is an indication in the survey that the targeting of the message to 18- to 34-year-old males was successful. The survey also shows, however, that most people still do not think of seat belt enforcement when they see someone stopped by the police at night. In addition, self-reported seat belt use peaked in Washington. These results are not surprising in a State with such high overall seat belt use.

Somewhat surprisingly, the 40-site nighttime seat belt observation survey showed that nighttime seat belt use was at virtually the same level as daytime use. The 40-site observations also showed some slight increases in nighttime seat belt use and a very slight decrease in observed daytime belt use. The statewide observational survey showed daytime use to be steady during the NTSBE campaigns.

The gas station observations proved to be an effective way to gather information on unbelted drivers. The data collected to date show substantial differences among belted and unbelted drivers for day and night. In all instances, the night unbelted population of drivers was the most aberrant and therefore of most interest for highway safety efforts. There is also an indication that the NTSBE primary target group of 18- to 34-year-old males was an appropriate selection, since this group appears to wear belts less and exhibit more traffic and criminal violations. The characterization of these drivers that will emerge at the end of the study should be of significant value in two ways. First, it should demonstrate the benefits of nighttime enforcement to law enforcement agencies around the country. Second, it will likely provide new information for targeting interventions aimed at getting high-risk individuals to wear their seat belts.

The NTSBE program will continue through May 2009, and evaluation data collection activities will continue into June 2009. After all evaluation data have been processed and analyzed, a full report of the activities and evaluation results will be prepared.

The present research included a number of data collection methods, each with its own limitations that could potentially bias the outcomes of the study. Some of the limitations associated with each data collection effort are discussed briefly below.

First, a self-report awareness survey was conducted by the State at five driver-licensing offices across the State. Although this approach yields a large sample size, it is possible that with only five offices the sample of respondents was not truly representative of the entire driving population of Washington. In addition, four of the five licensing offices were in larger cities where media were likely more prevalent, possibly inflating any statewide increases in exposure.

Day and night seat belt observations were taken at 40 sites across the State. These sites were chosen from the State's larger sample of sites used during the annual statewide measure. The 40 sites, however, were not specifically chosen based on vehicle miles traveled or some other metric. Rather they were chosen based on convenience, observer team availability, and previous use by WTSC. In addition, the nighttime observations were initially taken at the same locations as the daytime observations, but due to virtually no traffic flow at some sites at night, the nighttime locations were moved in some counties to allow for a more robust sample. Although the new locations were very close to the old locations, they were specifically chosen to increase the number of observations, which could affect observed belt use rates.

Intercept observations and interviews were conducted in four cities across the State. The 24-hour gas stations that were used offered an excellent opportunity to observe belt use and driver characteristics around-the-clock, but it is possible that the populations using the various gas stations could be very different from those that might be observed at other locations, such as shopping malls. In addition, observed belt use at gas stations was never intended to be representative of statewide belt use, especially since observers were instructed to give priority to gathering as much information on unbelted drivers as possible.

Citations that were given out during the NTSBE campaigns were provided by many, but not all, of the participating law enforcement agencies. These citations were a subset of those actually handed out by the law enforcement across the State. No citations were available for the time period before the project started which makes it impossible to know if the population of drivers receiving tickets during the NTSBE campaigns is different from those who normally received tickets at night before the campaign. In addition, officer handwriting on many of the citations was difficult to read, which could potentially have caused data entry errors. It must be noted, however, that the driving and criminal records of those people receiving citations during the NTSBE activities were very similar to those people observed to be unbelted at night at the gas stations. This suggests that despite the limitations of the citation data, the sample was probably a reasonable representation of the unbelted population of night drivers.

Driver and criminal records were searched based on data gathered at the gas stations and from citations. Matching observed drivers to drivers listed in the DAPS system required the use of judgment by WTSC personnel who used criteria set forth by the researchers. Given the intervals used for these criteria, it is quite possible that some observations were not correctly matched to driver records. However, the similarity between the driver and criminal records of the observed unbelted drivers at night and those drivers who received citations from NTSBE activities suggests that the DAPS matching and records search processes were likely accurate. Some issues with the records themselves, however, were that the driver records were limited to 5 years because the State purges records older than 5 years, and only 11 years of criminal data were available.

The WTSC law enforcement focus groups were held with officers from agencies who had participated in NTSBE, withdrawn from NTSBE, and never participated in NTSBE. As is often the case with focus groups, however, these officers may not have been representative of law enforcement throughout the State.

Crash data were not available at the time of this report due to a lag in processing time at the State level, but will be included in the final report that covers the second year of the program.

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Appendix A

Examples of Paid and Earned Media

Nighttime Seat Belt Patrols
30 Second PSA

Quick Traffic montage with graphic:

Extra Nighttime Seat Belt
Patrols are Going on Now

I'm Les Young, Assistant Chief with the Washington State Patrol. Along with other law enforcement agencies throughout Washington State, we'll be conducting special nighttime seat belt patrols.

We're doing this because our nighttime traffic death rate is over four times what it is during the day, and seat belt use at night is lower.

The goal of the project is to reduce traffic deaths and injuries.

Voiceover:
Nighttime seat belt patrols are now under way.
So remember, Click it or Ticket.

A message from the Washington Traffic Safety Commission.

Vancouver *Columbian* 11/14/07

Nighttime seat belt crackdown nets 354

Fatality rate increases by four times after dark

By JOHN BRANTON
Columbian staff writer

You'd better buckle up tight, including at night.

During a police crackdown to convince more folks to wear their seat belts after dark, 354 motorists saw flashing lights in their rearview mirrors.

Beginning on Oct. 22 and continuing for about two weeks, troopers with the Washington State Patrol and officers with the Vancouver Police Department went after the 3.6 percent of people who don't buckle up.

Although Washington's seat-belt use rate of 96.4 percent is one of the best in the U.S., local officers want to make it even better.

The nighttime stings, typically using overtime payroll money from the Washington Traffic Safety Commission, are meant to lower the rate of fatalities in traffic accidents after dark.

The number of traffic deaths during the day and night are about the same, said Trooper Mike Kesler. But there's so much less traffic volume at night that the nighttime fatality rate is four times the daytime rate.

On a recent night, Vancouver Sgt. Wayne Reynolds stood in plain view at major traffic areas, including Southeast Mill Plain Boulevard and 136th Avenue in Cascade Park. He wore a police uniform and gun belt, and carried a radio.

As most cars went past, Reynolds saw no seat-belt violations. He later estimated that fewer than 5 percent of vehicles had any visible violations.

But when Reynolds did see a vio-

SEAT BELTS, *back page*

Seat belts:

From Page C1

lation of state law, he'd radio the car's description and license plate to other officers waiting nearby in patrol cars or on police motorcycles.

How well did local motorists do? Here are the results of the 354 traffic stops:

- Vancouver police traffic unit officers issued 91 seat-belt tickets, including 61 to drivers and the rest to passengers. Seven VPD tickets were given for misuse of seat belts, such as pulling the shoulder strap under one's arm. Officers also gave out 11 tickets for violating child safety-restraint laws.
- Troopers handed out 46 seat-belt tickets in Clark County and two for child-safety restraint violations. In addition, troopers made one DUI arrest and five drug arrests, and arrested three people for previously issued warrants. Eleven of the motorists had suspended driver's licenses.

Troopers also stopped 11 vehicles in Skamania and Klickitat counties and issued two seat-belt tickets.

WSP employees "are fully committed to improving traffic safety on our roadways, and these results ... demonstrate that commitment," Lt. Ron Rupke said in a bulletin.

Vancouver's officers also consider the crackdown a success, and plan to continue it periodically, using the department's regular funding, said Kim Kapp, Vancouver police spokeswoman.

In addition, another state-funded nighttime crackdown is scheduled for May.

JOHN BRANTON *covers crime and law enforcement for The Columbian. He can be reached at 360-759-8012 or john.branton@columbian.com.*

Dear Reader

Got a traffic-related question or comment?

E-mail bumper@seattletimes.com or call Charles E. Brown at 206-464-2206. Please include your name and city if you agree to publication.

BUMPER NOTE

For the first time since its inception, this state's "Click it or Ticket" campaign will take to nighttime hours. Starting next Monday, more than 75 law-enforcement agencies throughout the state will be patrolling for unbuckled motorists.

The Washington Traffic Safety Commission says the nighttime death rate is four times what it is during the day because seat-belt use is lower, perhaps partly because many folks think police can't see unbuckled motorists at night.

Officers observing traffic will be aided by patrol officers who will pursue vehicles and make stops. Agencies plan to run the emphasis through June 3. Participating agencies in King County include Seattle, Bellevue, Black Diamond, SeaTac, Issaquah, Kent, Burien, Kirkland, Shoreline, Maple Valley and Federal Way police departments, and the State Patrol.

Seat-belt usage across the state has increased from 35 percent when it became law in 1986 to the current estimated 94 percent, the highest seat-belt use recorded in the nation, the commission says. The nation's seat-belt-use average is 81 percent.

The state's primary seat-belt law gives officers authority to pull over unbuckled motorists. The state's been conducting "Click it or Ticket" campaigns for the past five years.

Appendix B

Participating Law Enforcement Agencies

Law Enforcement Agencies Participating in the May 2007 Mobilization

Aberdeen PD
Adams County SO
Battleground PD
Bellevue PD
Bellingham PD
Black Diamond
Burien PD
Brewster Police Dept
Camas PD
Castle Rock PD
Chehalis PD
Chelan SO
Clark SO
Cowlitz SO
Douglas SO
E. Wenatchee PD
Edmonds PD
Ephrata PD
Federal Way PD
Franklin SO
Grant Coty SO
Grays Harbor SO
Hoquiam PD
Island County SO
Kennewick PD
Kelso PD
Kent PD
Kirkland PD
Kitsap SO
Lacey PD
Lakewood PD
Lewis Coty SO
Lynden PD
Lynnwood PD
Longview PD
Maple Valley PD
Shelton PD*
Mason County SO*
Moses Lake
Okanogan SO
Pasco PD
Pierce County SO
Puyallup PD
Raymond PD
Richland PD
Sea Tac PD
Seattle PD
Selah PD
Shoreline PD
Sno Com 911
South Bend PD
Spokane PD
Tacoma PD
University Place PD
Vader PD
Walla Walla PD
Wenatchee PD
Western WA U PD
Whatcom Coty SO
Whitman Coty SO
Woodland PD
Yakima SO
Yakima Police Dept
Washington State Patrol

PD = Police Department
SO = Sheriff's Office
***Part of Mason County TF**

Law Enforcement Agencies Participating in the November 2007 Mobilization

Auburn PD
Battle Ground PD
Bellevue PD
Bellingham PD
Black Diamond PD
Burien PD
Chelan SO
Cheney PD
Clarkston PD
Douglas SO
E. Wenatchee PD
Ephrata PD
Edmonds PD
Federal Way PD
Ferry SO
Forks PD
City of Goldendale PD
Grant SO
Grays Harbor SO
Hoquiam PD
Island SO
Issaquah PD
Kennewick PD
Kent PD
Kitsap SO
Lacey PD
Longview PD
Lynden PD
Lynnwood PD
Maple Valley PD
Morton PD
Pend Oreille SO
Puyallup PD
Sea Tac PD
Selah PD
Shelton PD
Shoreline PD
South Bend PD
Spokane SO
Spokane PD
Spokane Valley PD
Sunnyside PD
Tacoma PD
Vancouver PD
Wenatchee PD
Whatcom SO
Whitman SO
Woodenville PD
Walla Walla PD
Yakima SO
Washington State Patrol

PD = Police Department
SO = Sheriff's Office

Law Enforcement Agencies Participating in the May 2008 Mobilization

Aberdeen PD
Bellevue PD
Bellingham PD
Black Diamond PD
Burien PD
Chelan SO
Cheney PD
Clark SO
Clarkston PD
E. Wenatchee PD
Eastern Washington University
Edmonds PD
Franklin SO
Grant SO
Grays Harbor SO
Hoquiam PD
Island SO
Issaquah PD
Jefferson SO
Kennewick PD
Kent PD
Kitsap SO
Lacey PD
Lakewood PD
Long Beach PD
Longview PD
Lynnwood PD
Oak Harbor PD
Pacific SO
Puyallup PD
Sea Tac PD
Sequim PD
Shelton PD
Shoreline PD
South Bend PD
Spokane SO
Spokane PD
Spokane Valley PD
Sunnyside PD
Tacoma PD
Vancouver PD
Whatcom SO
Wenatchee PD
Whitman SO
Woodenville PD
WSU PD
Yakima SO
Yelm PD
Washington State Patrol

PD = Police Department
SO = Sheriff's Office

APPENDIX C

DOL Awareness Survey Questionnaire

1

The East Spokane Department of Licensing office is assisting the Washington Traffic Safety Commission in a study about highway safety in Washington. Your answers to the following questions are voluntary and anonymous. Please complete the survey and then put it in the drop box or hand it back to the agent.

Your sex: ☐ Male ☐ Female **2. Your Zip Code:** _____

Your age: ☐ Under 18 ☐ 18-20 ☐ 21-25 ☐ 26-34 ☐ 35-49 ☐ 50-59 ☐ 60 Plus

When you pass a driver stopped by the police in the daytime, what do you think the stop was for? (Check 1 only)
☐ Speeding ☐ Seat Belt Violation ☐ Drunk Driving ☐ Reckless Driving ☐ Registration Violation ☐ Other_____

When you pass a driver stopped by the police at night, what do you think the stop was for? (Check 1 only)
☐ Speeding ☐ Seat Belt Violation ☐ Drunk Driving ☐ Reckless Driving ☐ Registration Violation ☐ Other_____

What type of vehicle do you drive most often? (Check 1 only)
☐ Passenger car ☐ Pick-up truck ☐ Semi truck ☐ SUV ☐ Mini-van ☐ Full-van ☐ Other

About how many miles did you drive last year… (Please give your best estimate)
During the day? _____ **miles** **At night?** _____ **miles**

Compared to daytime, how often do you wear your seat belt at night? ☐ More ☐ Less ☐ The same

If more or less, Why?_____

Have you increased your seat belt use recently? ☐ Yes ☐ No **If yes, Why?**_____

How often do you use seat belts when you drive or ride in a car, van, SUV or pick-up…
During the day? ☐ Always ☐ Nearly always ☐ Sometimes ☐ Seldom ☐ Never
At night? ☐ Always ☐ Nearly always ☐ Sometimes ☐ Seldom ☐ Never

How strictly do you think the police enforce the Washington seat belt law…
During the day? ☐ Very strictly ☐ Somewhat strictly ☐ Not very strictly ☐ Rarely ☐ Not at all
At night? ☐ Very strictly ☐ Somewhat strictly ☐ Not very strictly ☐ Rarely ☐ Not at all

Have you ever been stopped by the police for not wearing a seat belt… (Check all that apply)
During the day? ☐ Yes, I got a ticket ☐ Yes, I got a warning ☐ No
At night? ☐ Yes, I got a ticket ☐ Yes, I got a warning ☐ No

Have you recently noticed increased enforcement of the seat belt law at night?
☐ Yes, I got a ticket ☐ Yes, I got a warning ☐ Yes, I noticed but wasn't stopped ☐ No

Have you recently read, seen or heard anything about nighttime seat belt enforcement? ☐ Yes ☐ No
If yes, where did you see or hear about it? (Check all that apply)
☐ Newspaper ☐ Radio ☐ TV ☐ Road sign ☐ Brochure ☐ Police ☐ Billboard ☐ Poster ☐ Internet ☐ Other
If yes, what did it say? _____

How often do you think you would get a ticket in Washington if you did not wear your seat belt while driving…
During the day? ☐ Always ☐ Nearly always ☐ Sometimes ☐ Seldom ☐ Never
At night? ☐ Always ☐ Nearly always ☐ Sometimes ☐ Seldom ☐ Never

If you were to drink too much to drive safely, what percentage of the time would you be stopped by the police for drunk driving…
During the day? ☐ 100% ☐ 75% ☐ 50% ☐ 25% ☐ 10% ☐ Less than 10% ☐ 0%
At night? ☐ 100% ☐ 75% ☐ 50% ☐ 25% ☐ 10% ☐ Less than 10% ☐ 0%

Appendix D

DOL Survey Results for 18- to 34-Year-Old Males

Table D-1. 18- to 34-year-old males: Recently read, heard, or saw anything about nighttime seat belt enforcement

			May 07	Jun 07	Sep 07	Nov 07	Feb 08	Apr 08	May 08	Aug 08	Total
Male 18- to 34	Yes	Count	35	176	87	116	48	70	94	87	713
		Column N %	12.0%	60.3%	38.5%	78.4%	54.5%	47.0%	46.3%	55.1%	45.8%
	No	Count	257	116	139	32	40	79	109	71	843
		Column N %	88.0%	39.7%	61.5%	21.6%	45.5%	53.0%	53.7%	44.9%	54.2%
	Total	Count	292	292	226	148	88	149	203	158	1,556
		Column N %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Other Gender and Ages	Yes	Count	130	781	432	523	238	257	363	387	3,111
		Column N %	10.1%	63.2%	38.0%	68.8%	48.4%	37.5%	38.3%	49.1%	42.4%
	No	Count	1,162	455	704	237	254	429	586	401	4,228
		Column N %	89.9%	36.8%	62.0%	31.2%	51.6%	62.5%	61.7%	50.9%	57.6%
	Total	Count	1,292	1,236	1,136	760	492	686	949	788	7,339
		Column N %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Yes	Count	165	957	519	639	286	327	457	474	3,824
		Column N %	10.4%	62.6%	38.1%	70.4%	49.3%	39.2%	39.7%	50.1%	43.0%
	No	Count	1,419	571	843	269	294	508	695	472	5,071
		Column N %	89.6%	37.4%	61.9%	29.6%	50.7%	60.8%	60.3%	49.9%	57.0%
	Total	Count	1,584	1,528	1,362	908	580	835	1,152	946	8,895
		Column N %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Male 18 to 34	Chi-square	235.532
	df	7
	Sig.	.000(*)
All Other Gender and Ages	Chi-square	1033.283
	df	7
	Sig.	.000(*)

Results are based on nonempty rows and columns in each innermost subtable.

* The chi-square statistic is significant at the 0.05 level.

Table D-2. 18-34-year-old males: Saw or heard nighttime seat belt message on TV

			May 07	Jun 07	Sep 07	Nov 07	Feb 08	Apr 08	May 08	Aug 08	Total
Male 18 to 34	Read, Saw, Heard	Count	23	80	38	65	34	46	62	52	400
		Col %	7.5%	26.8%	16.7%	43.3%	36.2%	29.7%	29.7%	31.9%	25.0%
	Not Checked	Count	284	218	189	85	60	109	147	111	1,203
		Col %	92.5%	73.2%	83.3%	56.7%	63.8%	70.3%	70.3%	68.1%	75.0%
	Total	Count	307	298	227	150	94	155	209	163	1,603
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Other Gender and Ages	Read, Saw, Heard	Count	68	444	280	328	142	168	214	267	1,911
		Col %	5.0%	35.3%	24.2%	41.8%	28.0%	23.6%	21.7%	33.1%	25.3%
	Not Checked	Count	1,279	814	877	456	366	545	774	539	5,650
		Col %	95.0%	64.7%	75.8%	58.2%	72.0%	76.4%	78.3%	66.9%	74.7%
	Total	Count	1,347	1,258	1,157	784	508	713	988	806	7,561
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Read, Saw, Heard	Count	91	524	318	393	176	214	276	319	2,311
		Col %	5.5%	33.7%	23.0%	42.1%	29.2%	24.7%	23.1%	32.9%	25.2%
	Not Checked	Count	1,563	1,032	1,066	541	426	654	921	650	6,853
		Col %	94.5%	66.3%	77.0%	57.9%	70.8%	75.3%	76.9%	67.1%	74.8%
	Total	Count	1,654	1,556	1,384	934	602	868	1,197	969	9,164
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Male 18 to 34	Chi-square	100.635
	df	7
	Sig.	.000(*)
All Other Gender and Ages	Chi-square	509.402
	df	7
	Sig.	.000(*)

Results are based on nonempty rows and columns in each innermost subtable.

* The chi-square statistic is significant at the 0.05 level.

Table D-3. 18-34-year-old males: Heard nighttime seat belt message on radio

			May 07	Jun 07	Sep 07	Nov 07	Feb 08	Apr 08	May 08	Aug 08	Total
Male 18 to 34	Read, Saw, Heard	Count	18	73	35	61	22	32	43	52	336
		Col %	5.9%	24.5%	15.4%	40.7%	23.4%	20.6%	20.6%	31.9%	21.0%
	Not Checked	Count	289	225	192	89	72	123	166	111	1,267
		Col %	94.1%	75.5%	84.6%	59.3%	76.6%	79.4%	79.4%	68.1%	79.0%
	Total	Count	307	298	227	150	94	155	209	163	1,603
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Other Gender and Ages	Read, Saw, Heard	Count	47	253	182	235	101	106	134	164	1,222
		Col %	3.5%	20.1%	15.7%	30.0%	19.9%	14.9%	13.6%	20.3%	16.2%
	Not Checked	Count	1,300	1,005	975	549	407	607	854	642	6,339
		Col %	96.5%	79.9%	84.3%	70.0%	80.1%	85.1%	86.4%	79.7%	83.8%
	Total	Count	1,347	1,258	1,157	784	508	713	988	806	7,561
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Read, Saw, Heard	Count	65	326	217	296	123	138	177	216	1,558
		Col %	3.9%	21.0%	15.7%	31.7%	20.4%	15.9%	14.8%	22.3%	17.0%
	Not Checked	Count	1,589	1,230	1,167	638	479	730	1,020	753	7,606
		Col %	96.1%	79.0%	84.3%	68.3%	79.6%	84.1%	85.2%	77.7%	83.0%
	Total	Count	1,654	1,556	1,384	934	602	868	1,197	969	9,164
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Male 18 to 34	Chi-square	95.999
	df	7
	Sig.	.000(*)
All Other Gender and Ages	Chi-square	306.099
	df	7
	Sig.	.000(*)

Results are based on nonempty rows and columns in each innermost subtable.

* The chi-square statistic is significant at the 0.05 level.

Table D-4. 18- to 34-year-old males: Saw nighttime seat belt message on road sign

			May 07	Jun 07	Sep 07	Nov 07	Feb 08	Apr 08	May 08	Aug 08	Total
Male 18 to 34	Read, Saw, Heard	Count	9	76	26	26	11	13	25	23	209
		Col %	2.9%	25.5%	11.5%	17.3%	11.7%	8.4%	12.0%	14.1%	13.0%
	Not Checked	Count	298	222	201	124	83	142	184	140	1,394
		Col %	97.1%	74.5%	88.5%	82.7%	88.3%	91.6%	88.0%	85.9%	87.0%
	Total	Count	307	298	227	150	94	155	209	163	1,603
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Other Gender and Ages	Read, Saw, Heard	Count	25	290	86	135	47	48	65	77	773
		Col %	1.9%	23.1%	7.4%	17.2%	9.3%	6.7%	6.6%	9.6%	10.2%
	Not Checked	Count	1,322	968	1,071	649	461	665	923	729	6,788
		Col %	98.1%	76.9%	92.6%	82.8%	90.7%	93.3%	93.4%	90.4%	89.8%
	Total	Count	1,347	1,258	1,157	784	508	713	988	806	7,561
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Read, Saw, Heard	Count	34	366	112	161	58	61	90	100	982
		Col %	2.1%	23.5%	8.1%	17.2%	9.6%	7.0%	7.5%	10.3%	10.7%
	Not Checked	Count	1,620	1,190	1,272	773	544	807	1,107	869	8,182
		Col %	97.9%	76.5%	91.9%	82.8%	90.4%	93.0%	92.5%	89.7%	89.3%
	Total	Count	1,654	1,556	1,384	934	602	868	1,197	969	9,164
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Male 18 to 34	Chi-square	74.923
	df	7
	Sig.	.000(*)
All Other Gender and Ages	Chi-square	404.641
	df	7
	Sig.	.000(*)

Results are based on nonempty rows and columns in each innermost subtable.

Table D-5. 18- to 34-year-old males: Saw nighttime seat belt message in newspaper

			May 07	Jun 07	Sep 07	Nov 07	Feb 08	Apr 08	May 08	Aug 08	Total
Male 18 to 34	Read, Saw, Heard	Count	7	23	12	15	7	12	7	11	94
		Col %	2.3%	7.7%	5.3%	10.0%	7.4%	7.7%	3.3%	6.7%	5.9%
	Not Checked	Count	300	275	215	135	87	143	202	152	1,509
		Col %	97.7%	92.3%	94.7%	90.0%	92.6%	92.3%	96.7%	93.3%	94.1%
	Total	Count	307	298	227	150	94	155	209	163	1,603
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Other Gender and Ages	Read, Saw, Heard	Count	35	161	87	111	48	45	69	75	631
		Col %	2.6%	12.8%	7.5%	14.2%	9.4%	6.3%	7.0%	9.3%	8.3%
	Not Checked	Count	1,312	1,097	1,070	673	460	668	919	731	6,930
		Col %	97.4%	87.2%	92.5%	85.8%	90.6%	93.7%	93.0%	90.7%	91.7%
	Total	Count	1,347	1,258	1,157	784	508	713	988	806	7,561
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Read, Saw, Heard	Count	42	184	99	126	55	57	76	86	725
		Col %	2.5%	11.8%	7.2%	13.5%	9.1%	6.6%	6.3%	8.9%	7.9%
	Not Checked	Count	1,612	1,372	1,285	808	547	811	1,121	883	8,439
		Col %	97.5%	88.2%	92.8%	86.5%	90.9%	93.4%	93.7%	91.1%	92.1%
	Total	Count	1,654	1,556	1,384	934	602	868	1,197	969	9,164
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Male 18 to 34	Chi-square	17.827
	df	7
	Sig.	.013(*)
All Other Gender and Ages	Chi-square	134.466
	df	7
	Sig.	.000(*)

Results are based on nonempty rows and columns in each innermost subtable.

* The chi-square statistic is significant at the 0.05 level.

Table D-6. 18- to 34-year-old males: Saw nighttime seat belt message on billboard

			May 07	Jun 07	Sep 07	Nov 07	Feb 08	Apr 08	May 08	Aug 08	Total
Male 18 to 34	Read, Saw, Heard	Count	7	20	12	13	6	8	10	12	88
		Col %	2.3%	6.7%	5.3%	8.7%	6.4%	5.2%	4.8%	7.4%	5.5%
	Not Checked	Count	300	278	215	137	88	147	199	151	1,515
		Col %	97.7%	93.3%	94.7%	91.3%	93.6%	94.8%	95.2%	92.6%	94.5%
	Total	Count	307	298	227	150	94	155	209	163	1,603
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Other Gender and Ages	Read, Saw, Heard	Count	18	93	58	70	28	27	42	40	376
		Col %	1.3%	7.4%	5.0%	8.9%	5.5%	3.8%	4.3%	5.0%	5.0%
	Not Checked	Count	1,329	1,165	1,099	714	480	686	946	766	7,185
		Col %	98.7%	92.6%	95.0%	91.1%	94.5%	96.2%	95.7%	95.0%	95.0%
	Total	Count	1,347	1258	1157	784	508	713	988	806	7,561
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Read, Saw, Heard	Count	25	113	70	83	34	35	52	52	464
		Col %	1.5%	7.3%	5.1%	8.9%	5.6%	4.0%	4.3%	5.4%	5.1%
	Not Checked	Count	1,629	1,443	1,314	851	568	833	1,145	917	8,700
		Col %	98.5%	92.7%	94.9%	91.1%	94.4%	96.0%	95.7%	94.6%	94.9%
	Total	Count	1,654	1,556	1,384	934	602	868	1,197	969	9,164
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Male 18 to 34	Chi-square	11.367
	df	7
	Sig.	.123
All Other Gender and Ages	Chi-square	82.772
	df	7
	Sig.	.000(*)

Results are based on nonempty rows and columns in each innermost subtable.

* The chi-square statistic is significant at the 0.05 level.

Table D-7. 18- to 34-year-old males: Received nighttime seat belt message from police

			May 07	Jun 07	Sep 07	Nov 07	Feb 08	Apr 08	May 08	Aug 08	Total
Male 18 to 34	Read, Saw, Heard	Count	2	4	7	10	3	3	2	7	38
		Col %	.7%	1.3%	3.1%	6.7%	3.2%	1.9%	1.0%	4.3%	2.4%
	Not Checked	Count	305	294	220	140	91	152	207	156	1,565
		Col %	99.3%	98.7%	96.9%	93.3%	96.8%	98.1%	99.0%	95.7%	97.6%
	Total	Count	307	298	227	150	94	155	209	163	1,603
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Other Gender and Ages	Read, Saw, Heard	Count	9	25	16	10	6	7	8	13	94
		Col %	.7%	2.0%	1.4%	1.3%	1.2%	1.0%	.8%	1.6%	1.2%
	Not Checked	Count	1,338	1,233	1,141	774	502	706	980	793	7,467
		Col %	99.3%	98.0%	98.6%	98.7%	98.8%	99.0%	99.2%	98.4%	98.8%
	Total	Count	1,347	1,258	1,157	784	508	713	988	806	7,561
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Read, Saw, Heard	Count	11	29	23	20	9	10	10	20	132
		Col %	.7%	1.9%	1.7%	2.1%	1.5%	1.2%	.8%	2.1%	1.4%
	Not Checked	Count	1,643	1,527	1,361	914	593	858	1,187	949	9,032
		Col %	99.3%	98.1%	98.3%	97.9%	98.5%	98.8%	99.2%	97.9%	98.6%
	Total	Count	1,654	1,556	1,384	934	602	868	1,197	969	9,164
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Male 18 to 34	Chi-square	22.555
	df	7
	Sig.	.002(*,a)
All Other Gender and Ages	Chi-square	12.314
	df	7
	Sig.	.091

Results are based on nonempty rows and columns in each innermost subtable.

* The chi-square statistic is significant at the 0.05 level.

a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

Table D-8. 18- to 34-year-old males: Saw nighttime seat belt message in brochure

			May 07	Jun 07	Sep 07	Nov 07	Feb 08	Apr 08	May 08	Aug 08	Total
Male 18 to 34	Read, Saw, Heard	Count	1	3	0	2	1	0	0	2	9
		Col %	.3%	1.0%	.0%	1.3%	1.1%	.0%	.0%	1.2%	.6%
	Not Checked	Count	306	295	227	148	93	155	209	161	1,594
		Col %	99.7%	99.0%	100.0%	98.7%	98.9%	100.0%	100.0%	98.8%	99.4%
	Total	Count	307	298	227	150	94	155	209	163	1,603
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Other Gender and Ages	Read, Saw, Heard	Count	1	8	8	2	2	7	3	6	37
		Col %	.1%	.6%	.7%	.3%	.4%	1.0%	.3%	.7%	.5%
	Not Checked	Count	1,346	1,250	1,149	782	506	706	985	800	7,524
		Col %	99.9%	99.4%	99.3%	99.7%	99.6%	99.0%	99.7%	99.3%	99.5%
	Total	Count	1,347	1,258	1,157	784	508	713	988	806	7,561
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Read, Saw, Heard	Count	2	11	8	4	3	7	3	8	46
		Col %	.1%	.7%	.6%	.4%	.5%	.8%	.3%	.8%	.5%
	Not Checked	Count	1,652	1,545	1,376	930	599	861	1,194	961	9,118
		Col %	99.9%	99.3%	99.4%	99.6%	99.5%	99.2%	99.7%	99.2%	99.5%
	Total	Count	1,654	1,556	1,384	934	602	868	1,197	969	9,164
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Male 18 to 34	Chi-square	8.020
	df	7
	Sig.	.331(a,b)
All Other Gender and Ages	Chi-square	12.598
	df	7
	Sig.	.083(a)

Results are based on nonempty rows and columns in each innermost subtable.

a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table D-9. 18- to 34-year-old males: Saw or heard nighttime seat belt message on Internet*

			May 07	Jun 07	Sep 07	Nov 07	Feb 08	Apr 08	May 08	Aug 08	Total
Male 18 to 34	Read, Saw, Heard	Count	0	0	1	5	0	2	5	3	16
		Col %	.0%	.0%	.4%	3.3%	.0%	1.3%	2.4%	1.8%	1.0%
	Not Checked	Count	307	298	226	145	94	153	204	160	1,587
		Col %	100.0%	100.0%	99.6%	96.7%	100.0%	98.7%	97.6%	98.2%	99.0%
	Total	Count	307	298	227	150	94	155	209	163	1,603
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Other Gender and Ages	Read, Saw, Heard	Count	0	0	4	6	8	7	2	6	33
		Col %	.0%	.0%	.3%	.8%	1.6%	1.0%	.2%	.7%	.4%
	Not Checked	Count	1,347	1,258	1,153	778	500	706	986	800	7,528
		Col %	100.0%	100.0%	99.7%	99.2%	98.4%	99.0%	99.8%	99.3%	99.6%
	Total	Count	1,347	1,258	1,157	784	508	713	988	806	7,561
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Read, Saw, Heard	Count	0	0	5	11	8	9	7	9	49
		Col %	.0%	.0%	.4%	1.2%	1.3%	1.0%	.6%	.9%	.5%
	Not Checked	Count	1,654	1,556	1,379	923	594	859	1,190	960	9,115
		Col %	100.0%	100.0%	99.6%	98.8%	98.7%	99.0%	99.4%	99.1%	99.5%
	Total	Count	1,654	1,556	1,384	934	602	868	1,197	969	9,164
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Male 18 to 34	Chi-square	21.455
	df	7
	Sig.	.003(*,a,b)
All Other Gender and Ages	Chi-square	36.622
	df	7
	Sig.	.000(*,a)

Results are based on nonempty rows and columns in each innermost subtable.

* The chi-square statistic is significant at the 0.05 level.

a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table D-10. 18- to 34-year-old males: What did media message say? (based on those who responded to item)

			May 07	Jun 07	Sep 07	Nov 07	Feb 08	Apr 08	May 08	Aug 08	Total
Male 18 to 34	Nighttime Enforcement	Count	1	29	6	20	2	2	4	8	72
		Col %	5.3%	33.0%	23.1%	37.7%	8.0%	11.1%	11.8%	23.5%	24.2%
	General Enforcement	Count	3	25	5	13	6	3	11	13	79
		Col %	15.8%	28.4%	19.2%	24.5%	24.0%	16.7%	32.4%	38.2%	26.6%
	Click It or Ticket	Count	2	26	12	17	10	12	17	10	106
		Col %	10.5%	29.5%	46.2%	32.1%	40.0%	66.7%	50.0%	29.4%	35.7%
	Buckle Up	Count	1	1	0	1	0	1	1	1	6
		Col %	5.3%	1.1%	.0%	1.9%	.0%	5.6%	2.9%	2.9%	2.0%
	Fine	Count	2	3	1	1	2	0	1	0	10
		Col %	10.5%	3.4%	3.8%	1.9%	8.0%	.0%	2.9%	.0%	3.4%
	Safety	Count	1	1	0	1	3	0	0	1	7
		Col %	5.3%	1.1%	.0%	1.9%	12.0%	.0%	.0%	2.9%	2.4%
	Other	Count	9	3	2	0	2	0	0	1	17
		Col %	47.4%	3.4%	7.7%	.0%	8.0%	.0%	.0%	2.9%	5.7%
	Total	Count	19	88	26	53	25	18	34	34	297
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Other Gender and Ages	Nighttime Enforcement	Count	1	119	19	76	18	21	22	30	306
		Col %	1.5%	30.6%	9.4%	29.7%	18.4%	24.4%	17.5%	16.7%	21.8%
	General Enforcement	Count	10	95	50	70	39	33	38	65	400
		Col %	14.7%	24.4%	24.6%	27.3%	39.8%	38.4%	30.2%	36.1%	28.4%
	Click It or Ticket	Count	21	138	87	91	29	19	44	49	478
		Col %	30.9%	35.5%	42.9%	35.5%	29.6%	22.1%	34.9%	27.2%	34.0%
	Buckle Up	Count	14	13	17	7	6	5	14	16	92
		Col %	20.6%	3.3%	8.4%	2.7%	6.1%	5.8%	11.1%	8.9%	6.5%
	Fine	Count	11	14	10	7	1	5	6	5	59
		Col %	16.2%	3.6%	4.9%	2.7%	1.0%	5.8%	4.8%	2.8%	4.2%
	Safety	Count	2	4	4	3	3	3	2	5	26
		Col %	2.9%	1.0%	2.0%	1.2%	3.1%	3.5%	1.6%	2.8%	1.8%
	Other	Count	9	6	16	2	2	0	0	10	45
		Col %	13.2%	1.5%	7.9%	.8%	2.0%	.0%	.0%	5.6%	3.2%
	Total	Count	68	389	203	256	98	86	126	180	1406
		Col	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

		%									
Total	Nighttime Enforcement	Count	2	148	25	96	20	23	26	38	378
		Col %	2.3%	31.0%	10.9%	31.1%	16.3%	22.1%	16.3%	17.8%	22.2%
	General Enforcement	Count	13	120	55	83	45	36	49	78	479
		Col %	14.9%	25.2%	24.0%	26.9%	36.6%	34.6%	30.6%	36.4%	28.1%
	Click It or Ticket	Count	23	164	99	108	39	31	61	59	584
		Col %	26.4%	34.4%	43.2%	35.0%	31.7%	29.8%	38.1%	27.6%	34.3%
	Buckle Up	Count	15	14	17	8	6	6	15	17	98
		Col %	17.2%	2.9%	7.4%	2.6%	4.9%	5.8%	9.4%	7.9%	5.8%
	Fine	Count	13	17	11	8	3	5	7	5	69
		Col %	14.9%	3.6%	4.8%	2.6%	2.4%	4.8%	4.4%	2.3%	4.1%
	Safety	Count	3	5	4	4	6	3	2	6	33
		Col %	3.4%	1.0%	1.7%	1.3%	4.9%	2.9%	1.3%	2.8%	1.9%
	Other	Count	18	9	18	2	4	0	0	11	62
		Col %	20.7%	1.9%	7.9%	.6%	3.3%	.0%	.0%	5.1%	3.6%
	Total	Count	87	477	229	309	123	104	160	214	1,703
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Male 18 to 34	Chi-square	121.482
	df	42
	Sig.	.000(*,a,b)
All Other Gender and Ages	Chi-square	210.598
	df	42
	Sig.	.000(*,a)

Results are based on nonempty rows and columns in each innermost subtable.

* The chi-square statistic is significant at the 0.05 level.

a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table D-11. 18- to 34-year-old males: What violation think person stopped for during daytime?

			May 07	Jun 07	Sep 07	Nov 07	Feb 08	Apr 08	May 08	Aug 08	Total
Male 18 to 34	Speeding	Count	269	252	195	130	77	144	180	143	1,390
		Col %	88.5%	85.1%	85.9%	87.2%	86.5%	94.1%	87.0%	93.5%	88.1%
	Seat Belt Violation	Count	8	17	16	11	1	5	8	4	70
		Col %	2.6%	5.7%	7.0%	7.4%	1.1%	3.3%	3.9%	2.6%	4.4%
	Drunk Driving	Count	5	8	4	0	1	0	2	2	22
		Col %	1.6%	2.7%	1.8%	.0%	1.1%	.0%	1.0%	1.3%	1.4%
	Reckless Driving	Count	5	4	4	2	3	1	5	2	26
		Col %	1.6%	1.4%	1.8%	1.3%	3.4%	.7%	2.4%	1.3%	1.6%
	Registration Violation	Count	4	3	3	0	2	1	2	2	17
		Col %	1.3%	1.0%	1.3%	.0%	2.2%	.7%	1.0%	1.3%	1.1%
	Other	Count	13	12	5	6	5	2	10	0	53
		Col %	4.3%	4.1%	2.2%	4.0%	5.6%	1.3%	4.8%	.0%	3.4%
	Total	Count	304	296	227	149	89	153	207	153	1,578
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Other Gender and Ages	Speeding	Count	1,205	1,087	1,028	691	441	616	872	724	6,664
		Col %	90.9%	88.3%	90.6%	90.0%	88.7%	89.5%	90.0%	94.1%	90.3%
	Seat Belt Violation	Count	33	53	49	25	13	27	31	26	257
		Col %	2.5%	4.3%	4.3%	3.3%	2.6%	3.9%	3.2%	3.4%	3.5%
	Drunk Driving	Count	7	14	6	1	3	1	2	5	39
		Col %	.5%	1.1%	.5%	.1%	.6%	.1%	.2%	.7%	.5%
	Reckless Driving	Count	21	15	14	13	12	12	7	10	104
		Col %	1.6%	1.2%	1.2%	1.7%	2.4%	1.7%	.7%	1.3%	1.4%
	Registration Violation	Count	7	3	2	2	3	7	7	4	35
		Col %	.5%	.2%	.2%	.3%	.6%	1.0%	.7%	.5%	.5%
	Other	Count	52	59	36	36	25	25	50	0	283
		Col %	3.9%	4.8%	3.2%	4.7%	5.0%	3.6%	5.2%	.0%	3.8%
	Total	Count	1,325	1,231	1,135	768	497	688	969	769	7,382
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Speeding	Count	1,474	1,339	1,223	821	518	760	1,052	867	8,054
		Col %	90.5%	87.7%	89.8%	89.5%	88.4%	90.4%	89.5%	94.0%	89.9%
	Seat Belt Violation	Count	41	70	65	36	14	32	39	30	327
		Col %	2.5%	4.6%	4.8%	3.9%	2.4%	3.8%	3.3%	3.3%	3.6%
	Drunk Driving	Count	12	22	10	1	4	1	4	7	61
		Col %	.7%	1.4%	.7%	.1%	.7%	.1%	.3%	.8%	.7%

	Reckless Driving	Count	26	19	18	15	15	13	12	12	130
		Col %	1.6%	1.2%	1.3%	1.6%	2.6%	1.5%	1.0%	1.3%	1.5%
	Registration Violation	Count	11	6	5	2	5	8	9	6	52
		Col %	.7%	.4%	.4%	.2%	.9%	1.0%	.8%	.7%	.6%
	Other	Count	65	71	41	42	30	27	60	0	336
		Col %	4.0%	4.6%	3.0%	4.6%	5.1%	3.2%	5.1%	.0%	3.8%
	Total	Count	1,629	1,527	1,362	917	586	841	1,176	922	8,960
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Male 18 to 34	Chi-square	42.952
	df	35
	Sig.	.167(a,b)
All Other Gender and Ages	Chi-square	87.720
	df	35
	Sig.	.000(*)

Results are based on nonempty rows and columns in each innermost subtable.

* The chi-square statistic is significant at the 0.05 level.

a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table D-12. 18- to 34-year-old males: What violation think person stopped for during nighttime?

			May 07	Jun 07	Sep 07	Nov 07	Feb 08	Apr 08	May 08	Aug 08	Total
Male 18 to 34	Speeding	Count	147	134	115	79	47	73	114	80	789
		Col %	48.7%	45.4%	50.7%	53.0%	52.8%	47.4%	56.2%	51.9%	50.2%
	Seat Belt Violation	Count	4	9	3	4	3	4	1	4	32
		Col %	1.3%	3.1%	1.3%	2.7%	3.4%	2.6%	.5%	2.6%	2.0%
	Drunk Driving	Count	111	115	91	53	27	62	66	59	584
		Col %	36.8%	39.0%	40.1%	35.6%	30.3%	40.3%	32.5%	38.3%	37.1%
	Reckless Driving	Count	21	17	12	5	5	11	11	10	92
		Col %	7.0%	5.8%	5.3%	3.4%	5.6%	7.1%	5.4%	6.5%	5.8%
	Registration Violation	Count	1	2	2	0	0	0	0	1	6
		Col %	.3%	.7%	.9%	.0%	.0%	.0%	.0%	.6%	.4%
	Other	Count	18	18	4	8	7	4	11	0	70
		Col %	6.0%	6.1%	1.8%	5.4%	7.9%	2.6%	5.4%	.0%	4.5%
	Total	Count	302	295	227	149	89	154	203	154	1,573
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Other Gender and Ages	Speeding	Count	646	574	559	377	242	343	479	370	3,590
		Col %	48.6%	46.7%	49.1%	49.0%	48.8%	49.2%	49.7%	48.4%	48.6%
	Seat Belt Violation	Count	14	28	13	21	10	12	7	9	114
		Col %	1.1%	2.3%	1.1%	2.7%	2.0%	1.7%	.7%	1.2%	1.5%
	Drunk Driving	Count	496	472	414	259	180	252	351	308	2,732
		Col %	37.3%	38.4%	36.3%	33.7%	36.3%	36.2%	36.4%	40.3%	37.0%
	Reckless Driving	Count	103	88	101	60	37	57	70	74	590
		Col %	7.8%	7.2%	8.9%	7.8%	7.5%	8.2%	7.3%	9.7%	8.0%
	Registration Violation	Count	9	7	5	3	2	3	2	4	35
		Col %	.7%	.6%	.4%	.4%	.4%	.4%	.2%	.5%	.5%
	Other	Count	61	59	47	49	25	30	54	0	325
		Col %	4.6%	4.8%	4.1%	6.4%	5.0%	4.3%	5.6%	.0%	4.4%
	Total	Count	1,329	1,228	1139	769	496	697	963	765	7,386
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Speeding	Count	793	708	674	456	289	416	593	450	4,379
		Col %	48.6%	46.5%	49.3%	49.7%	49.4%	48.9%	50.9%	49.0%	48.9%
	Seat Belt Violation	Count	18	37	16	25	13	16	8	13	146
		Col %	1.1%	2.4%	1.2%	2.7%	2.2%	1.9%	.7%	1.4%	1.6%
	Drunk Driving	Count	607	587	505	312	207	314	417	367	3,316
		Col %	37.2%	38.5%	37.0%	34.0%	35.4%	36.9%	35.8%	39.9%	37.0%

	Reckless Driving	Count	124	105	113	65	42	68	81	84	682
		Col %	7.6%	6.9%	8.3%	7.1%	7.2%	8.0%	6.9%	9.1%	7.6%
	Registration Violation	Count	10	9	7	3	2	3	2	5	41
		Col %	.6%	.6%	.5%	.3%	.3%	.4%	.2%	.5%	.5%
	Other	Count	79	77	51	57	32	34	65	0	395
		Col %	4.8%	5.1%	3.7%	6.2%	5.5%	4.0%	5.6%	.0%	4.4%
	Total	Count	1,631	1,523	1,366	918	585	851	1,166	919	8,959
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Male 18 to 34	Chi-square	39.861
	df	35
	Sig.	.263(a,b)
All Other Gender and Ages	Chi-square	80.993
	df	35
	Sig.	.000(*)

Results are based on nonempty rows and columns in each innermost subtable.

* The chi-square statistic is significant at the 0.05 level.

a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table D-13. 18- to 34-year-old males: Compared to day, how often wear belt at night?

			May 07	Jun 07	Sep 07	Nov 07	Feb 08	Apr 08	May 08	Aug 08	Total
Male 18 to 34	More	Count	21	13	10	13	4	9	8	7	85
		Col %	7.1%	4.4%	4.4%	8.7%	4.4%	6.0%	3.9%	4.3%	5.4%
	Less	Count	4	5	5	3	3	2	0	5	27
		Col %	1.3%	1.7%	2.2%	2.0%	3.3%	1.3%	.0%	3.1%	1.7%
	The Same	Count	272	275	211	134	83	140	196	150	1,461
		Col %	91.6%	93.9%	93.4%	89.3%	92.2%	92.7%	96.1%	92.6%	92.9%
	Total	Count	297	293	226	150	90	151	204	162	1,573
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Other Gender and Ages	More	Count	65	52	43	42	31	34	51	28	346
		Col %	5.0%	4.2%	3.8%	5.5%	6.2%	4.9%	5.2%	3.5%	4.7%
	Less	Count	6	8	6	5	4	7	1	6	43
		Col %	.5%	.7%	.5%	.6%	.8%	1.0%	.1%	.8%	.6%
	The Same	Count	1,227	1,168	1,092	723	464	659	925	760	7,018
		Col %	94.5%	95.1%	95.7%	93.9%	93.0%	94.1%	94.7%	95.7%	94.7%
	Total	Count	1,298	1,228	1,141	770	499	700	977	794	7,407
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	More	Count	86	65	53	55	35	43	59	35	431
		Col %	5.4%	4.3%	3.9%	6.0%	5.9%	5.1%	5.0%	3.7%	4.8%
	Less	Count	10	13	11	8	7	9	1	11	70
		Col %	.6%	.9%	.8%	.9%	1.2%	1.1%	.1%	1.2%	.8%
	The Same	Count	1,499	1,443	1,303	857	547	799	1,121	910	8,479
		Col %	94.0%	94.9%	95.3%	93.2%	92.9%	93.9%	94.9%	95.2%	94.4%
	Total	Count	1,595	1,521	1,367	920	589	851	1,181	956	8,980
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Male 18 to 34	Chi-square	14.744
	df	14
	Sig.	.396(a)
All Other Gender and Ages	Chi-square	17.077
	df	14
	Sig.	.252

Results are based on nonempty rows and columns in each innermost subtable.

a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

Table D-14. 18- to 34-year-old males: How often wear seat belt during day?

			May 07	Jun 07	Sep 07	Nov 07	Feb 08	Apr 08	May 08	Aug 08	Total
Male 18 to 34	Always	Count	276	271	202	138	73	135	185	135	1,415
		Col %	91.4%	92.8%	89.4%	92.6%	83.0%	89.4%	90.2%	82.8%	89.8%
	Nearly Always	Count	20	15	14	10	11	11	13	19	113
		Col %	6.6%	5.1%	6.2%	6.7%	12.5%	7.3%	6.3%	11.7%	7.2%
	Sometimes	Count	2	4	5	1	3	4	3	5	27
		Col %	.7%	1.4%	2.2%	.7%	3.4%	2.6%	1.5%	3.1%	1.7%
	Seldom	Count	2	2	1	0	0	0	1	3	9
		Col %	.7%	.7%	.4%	.0%	.0%	.0%	.5%	1.8%	.6%
	Never	Count	2	0	4	0	1	1	3	1	12
		Col %	.7%	.0%	1.8%	.0%	1.1%	.7%	1.5%	.6%	.8%
	Total	Count	302	292	226	149	88	151	205	163	1576
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Other Gender and Ages	Always	Count	1,256	1,180	1,100	739	474	670	932	778	7,129
		Col %	94.7%	94.9%	96.0%	95.2%	94.6%	95.3%	95.9%	97.1%	95.4%
	Nearly Always	Count	54	52	37	33	21	26	31	21	275
		Col %	4.1%	4.2%	3.2%	4.3%	4.2%	3.7%	3.2%	2.6%	3.7%
	Sometimes	Count	11	8	4	2	5	7	4	2	43
		Col %	.8%	.6%	.3%	.3%	1.0%	1.0%	.4%	.2%	.6%
	Seldom	Count	4	2	2	1	1	0	2	0	12
		Col %	.3%	.2%	.2%	.1%	.2%	.0%	.2%	.0%	.2%
	Never	Count	1	2	3	1	0	0	3	0	10
		Col %	.1%	.2%	.3%	.1%	.0%	.0%	.3%	.0%	.1%
	Total	Count	1,326	1,244	1,146	776	501	703	972	801	7,469
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Always	Count	1,532	1,451	1,302	877	547	805	1,117	913	8,544
		Col %	94.1%	94.5%	94.9%	94.8%	92.9%	94.3%	94.9%	94.7%	94.5%
	Nearly Always	Count	74	67	51	43	32	37	44	40	388
		Col %	4.5%	4.4%	3.7%	4.6%	5.4%	4.3%	3.7%	4.1%	4.3%
	Sometimes	Count	13	12	9	3	8	11	7	7	70
		Col %	.8%	.8%	.7%	.3%	1.4%	1.3%	.6%	.7%	.8%
	Seldom	Count	6	4	3	1	1	0	3	3	21
		Col %	.4%	.3%	.2%	.1%	.2%	.0%	.3%	.3%	.2%
	Never	Count	3	2	7	1	1	1	6	1	22
		Col %	.2%	.1%	.5%	.1%	.2%	.1%	.5%	.1%	.2%
	Total	Count	1,628	1,536	1,372	925	589	854	1,177	964	9,045
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Male 18 to 34	Chi-square	34.757
	df	28
	Sig.	.177(a,b)
All Other Gender and Ages	Chi-square	27.213
	df	28
	Sig.	.507(a,b)

Results are based on nonempty rows and columns in each innermost subtable.
a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.
b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table D-15. 18- to 34-year-old males: How often wear seat belt at night?

			May 07	Jun 07	Sep 07	Nov 07	Feb 08	Apr 08	May 08	Aug 08	Total
Male 18 to 34	Always	Count	272	268	202	134	73	138	183	132	1,402
		Col %	91.6%	94.0%	90.6%	93.1%	83.0%	91.4%	90.1%	83.5%	90.5%
	Nearly Always	Count	18	13	12	9	12	8	14	17	103
		Col %	6.1%	4.6%	5.4%	6.3%	13.6%	5.3%	6.9%	10.8%	6.6%
	Sometimes	Count	3	1	4	1	2	4	2	5	22
		Col %	1.0%	.4%	1.8%	.7%	2.3%	2.6%	1.0%	3.2%	1.4%
	Seldom	Count	2	3	1	0	0	0	1	3	10
		Col %	.7%	1.1%	.4%	.0%	.0%	.0%	.5%	1.9%	.6%
	Never	Count	2	0	4	0	1	1	3	1	12
		Col %	.7%	.0%	1.8%	.0%	1.1%	.7%	1.5%	.6%	.8%
	Total	Count	297	285	223	144	88	151	203	158	1,549
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Other Gender and Ages	Always	Count	1,244	1,170	1,085	718	459	656	920	758	7,010
		Col %	95.3%	95.9%	97.0%	95.7%	94.4%	96.3%	96.5%	97.2%	96.1%
	Nearly Always	Count	46	40	26	28	21	19	23	19	222
		Col %	3.5%	3.3%	2.3%	3.7%	4.3%	2.8%	2.4%	2.4%	3.0%
	Sometimes	Count	11	5	3	1	5	6	5	3	39
		Col %	.8%	.4%	.3%	.1%	1.0%	.9%	.5%	.4%	.5%
	Seldom	Count	4	3	2	1	1	0	2	0	13
		Col %	.3%	.2%	.2%	.1%	.2%	.0%	.2%	.0%	.2%
	Never	Count	1	2	3	2	0	0	3	0	11
		Col %	.1%	.2%	.3%	.3%	.0%	.0%	.3%	.0%	.2%
	Total	Count	1,306	1,220	1,119	750	486	681	953	780	7,295
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Always	Count	1,516	1,438	1,287	852	532	794	1,103	890	8,412
		Col %	94.6%	95.5%	95.9%	95.3%	92.7%	95.4%	95.4%	94.9%	95.1%
	Nearly Always	Count	64	53	38	37	33	27	37	36	325
		Col %	4.0%	3.5%	2.8%	4.1%	5.7%	3.2%	3.2%	3.8%	3.7%
	Sometimes	Count	14	6	7	2	7	10	7	8	61

		Col %	.9%	.4%	.5%	.2%	1.2%	1.2%	.6%	.9%	.7%
	Seldom	Count	6	6	3	1	1	0	3	3	23
		Col %	.4%	.4%	.2%	.1%	.2%	.0%	.3%	.3%	.3%
	Never	Count	3	2	7	2	1	1	6	1	23
		Col %	.2%	.1%	.5%	.2%	.2%	.1%	.5%	.1%	.3%
	Total	Count	1,603	1,505	1,342	894	574	832	1,156	938	8,844
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Male 18 to 34	Chi-square	39.686
	df	28
	Sig.	.070(a,b)
All Other Gender and Ages	Chi-square	31.266
	df	28
	Sig.	.305(a,b)

Results are based on nonempty rows and columns in each innermost subtable.
a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.
b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table D-16. 18- to 34-year-old males: Have you increased seat belt use recently?

			May 07	Jun 07	Sep 07	Nov 07	Feb 08	Apr 08	May 08	Aug 08	Total
Male 18 to 34	Yes	Count	71	71	68	35	20	33	40	33	371
		Col %	24.1%	24.6%	30.4%	23.5%	23.3%	21.9%	19.8%	20.5%	23.8%
	No	Count	223	218	156	114	66	118	162	128	1,185
		Col %	75.9%	75.4%	69.6%	76.5%	76.7%	78.1%	80.2%	79.5%	76.2%
	Total	Count	294	289	224	149	86	151	202	161	1,556
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Other Gender and Ages	Yes	Count	206	210	193	131	88	118	136	93	1,175
		Col %	16.0%	17.1%	17.1%	17.4%	17.8%	17.2%	14.2%	12.0%	16.1%
	No	Count	1,085	1,017	933	620	407	568	820	685	6,135
		Col %	84.0%	82.9%	82.9%	82.6%	82.2%	82.8%	85.8%	88.0%	83.9%
	Total	Count	1,291	1,227	1,126	751	495	686	956	778	7,310
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Yes	Count	277	281	261	166	108	151	176	126	1,546
		Col %	17.5%	18.5%	19.3%	18.4%	18.6%	18.0%	15.2%	13.4%	17.4%
	No	Count	1,308	1,235	1,089	734	473	686	982	813	7,320
		Col %	82.5%	81.5%	80.7%	81.6%	81.4%	82.0%	84.8%	86.6%	82.6%
	Total	Count	1,585	1,516	1,350	900	581	837	1,158	939	8,866
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Male 18 to 34	Chi-square	8.498
	df	7
	Sig.	.291
All Other Gender and Ages	Chi-square	16.914
	df	7
	Sig.	.018(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

Table D-17. 18- to 34-year-old males: How strictly is belt law enforced during day?

			May 07	Jun 07	Sep 07	Nov 07	Feb 08	Apr 08	May 08	Aug 08	Total
Male 18 to 34	Very strictly	Count	144	165	131	82	47	78	100	78	825
		Col %	47.7%	56.7%	57.7%	55.4%	53.4%	54.5%	49.3%	48.4%	52.8%
	Somewhat strictly	Count	115	99	72	54	28	47	81	65	561
		Col %	38.1%	34.0%	31.7%	36.5%	31.8%	32.9%	39.9%	40.4%	35.9%
	Not very strictly	Count	37	19	17	9	8	13	12	13	128
		Col %	12.3%	6.5%	7.5%	6.1%	9.1%	9.1%	5.9%	8.1%	8.2%
	Rarely	Count	5	3	6	3	3	2	9	1	32
		Col %	1.7%	1.0%	2.6%	2.0%	3.4%	1.4%	4.4%	.6%	2.0%
	Not at all	Count	1	5	1	0	2	3	1	4	17
		Col %	.3%	1.7%	.4%	.0%	2.3%	2.1%	.5%	2.5%	1.1%
	Total	Count	302	291	227	148	88	143	203	161	1,563
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Other Gender and Ages	Very strictly	Count	621	639	629	397	236	349	452	384	3,707
		Col %	48.1%	52.9%	55.9%	52.2%	48.5%	51.6%	48.0%	48.9%	51.0%
	Somewhat strictly	Count	503	441	375	284	196	254	362	311	2,726
		Col %	39.0%	36.5%	33.3%	37.4%	40.2%	37.6%	38.5%	39.6%	37.5%
	Not very strictly	Count	133	109	100	62	44	62	104	65	679
		Col %	10.3%	9.0%	8.9%	8.2%	9.0%	9.2%	11.1%	8.3%	9.3%
	Rarely	Count	27	14	17	13	8	7	18	22	126
		Col %	2.1%	1.2%	1.5%	1.7%	1.6%	1.0%	1.9%	2.8%	1.7%
	Not at all	Count	6	5	5	4	3	4	5	3	35
		Col %	.5%	.4%	.4%	.5%	.6%	.6%	.5%	.4%	.5%
	Total	Count	1,290	1,208	1,126	760	487	676	941	785	7,273
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Very strictly	Count	765	804	760	479	283	427	552	462	4,532
		Col %	48.1%	53.6%	56.2%	52.8%	49.2%	52.1%	48.3%	48.8%	51.3%
	Somewhat strictly	Count	618	540	447	338	224	301	443	376	3,287
		Col %	38.8%	36.0%	33.0%	37.2%	39.0%	36.8%	38.7%	39.7%	37.2%
	Not very strictly	Count	170	128	117	71	52	75	116	78	807
		Col %	10.7%	8.5%	8.6%	7.8%	9.0%	9.2%	10.1%	8.2%	9.1%
	Rarely	Count	32	17	23	16	11	9	27	23	158
		Col %	2.0%	1.1%	1.7%	1.8%	1.9%	1.1%	2.4%	2.4%	1.8%
	Not at all	Count	7	10	6	4	5	7	6	7	52
		Col %	.4%	.7%	.4%	.4%	.9%	.9%	.5%	.7%	.6%
	Total	Count	1,592	1,499	1,353	908	575	819	1,144	946	8,836
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Male 18 to 34	Chi-square	40.208
	df	28
	Sig.	.063(a,b)
All Other Gender and Ages	Chi-square	38.275
	df	28
	Sig.	.093

Results are based on nonempty rows and columns in each innermost subtable.
a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.
b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table D-18. 18- to 34-year-old males: How strictly is belt law enforced during night?

			May 07	Jun 07	Sep 07	Nov 07	Feb 08	Apr 08	May 08	Aug 08	Total
Male 18 to 34	Very strictly	Count	134	165	116	81	46	79	92	77	790
		Col %	45.3%	58.5%	53.0%	56.3%	52.9%	54.9%	46.9%	49.4%	51.8%
	Somewhat strictly	Count	114	78	65	45	25	44	74	56	501
		Col %	38.5%	27.7%	29.7%	31.3%	28.7%	30.6%	37.8%	35.9%	32.9%
	Not very strictly	Count	36	28	26	14	10	16	16	18	164
		Col %	12.2%	9.9%	11.9%	9.7%	11.5%	11.1%	8.2%	11.5%	10.8%
	Rarely	Count	8	5	11	3	4	2	13	2	48
		Col %	2.7%	1.8%	5.0%	2.1%	4.6%	1.4%	6.6%	1.3%	3.1%
	Not at all	Count	4	6	1	1	2	3	1	3	21
		Col %	1.4%	2.1%	.5%	.7%	2.3%	2.1%	.5%	1.9%	1.4%
	Total	Count	296	282	219	144	87	144	196	156	1,524
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Other Gender and Ages	Very strictly	Count	600	613	584	376	228	338	427	367	3,533
		Col %	47.3%	51.9%	53.1%	50.8%	48.3%	51.1%	46.6%	47.9%	49.7%
	Somewhat strictly	Count	471	419	365	279	174	245	341	292	2,586
		Col %	37.1%	35.4%	33.2%	37.7%	36.9%	37.0%	37.2%	38.1%	36.4%
	Not very strictly	Count	156	126	107	65	54	65	117	73	763
		Col %	12.3%	10.7%	9.7%	8.8%	11.4%	9.8%	12.8%	9.5%	10.7%
	Rarely	Count	34	19	40	13	13	10	23	28	180
		Col %	2.7%	1.6%	3.6%	1.8%	2.8%	1.5%	2.5%	3.7%	2.5%
	Not at all	Count	7	5	3	7	3	4	8	6	43
		Col %	.6%	.4%	.3%	.9%	.6%	.6%	.9%	.8%	.6%
	Total	Count	1,268	1,182	1,099	740	472	662	916	766	7,105
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Very strictly	Count	734	778	700	457	274	417	519	444	4,323
		Col %	46.9%	53.1%	53.1%	51.7%	49.0%	51.7%	46.7%	48.2%	50.1%
	Somewhat strictly	Count	585	497	430	324	199	289	415	348	3,087
		Col %	37.4%	33.9%	32.6%	36.7%	35.6%	35.9%	37.3%	37.7%	35.8%

	Not very strictly	Count	192	154	133	79	64	81	133	91	927
		Col %	12.3%	10.5%	10.1%	8.9%	11.4%	10.0%	12.0%	9.9%	10.7%
	Rarely	Count	42	24	51	16	17	12	36	30	228
		Col %	2.7%	1.6%	3.9%	1.8%	3.0%	1.5%	3.2%	3.3%	2.6%
	Not at all	Count	11	11	4	8	5	7	9	9	64
		Col %	.7%	.8%	.3%	.9%	.9%	.9%	.8%	1.0%	.7%
	Total	Count	1,564	1,464	1,318	884	559	806	1,112	922	8,629
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Male 18 to 34	Chi-square	39.442
	df	28
	Sig.	.074(a)
All Other Gender and Ages	Chi-square	48.129
	df	28
	Sig.	.010(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.
a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

Table D-19. 18- to 34-year-old males: Ever stopped by police during the day for not wearing seat belt?

			May 07	Jun 07	Sep 07	Nov 07	Feb 08	Apr 08	May 08	Aug 08	Total
Male 18 to 34	Yes, I got a ticket	Count	43	51	50	26	15	16	33	26	260
		Col %	14.2%	17.7%	22.0%	17.6%	16.7%	10.8%	16.0%	16.1%	16.6%
	Yes, I got a warning	Count	8	14	13	9	3	4	7	4	62
		Col %	2.6%	4.9%	5.7%	6.1%	3.3%	2.7%	3.4%	2.5%	3.9%
	No	Count	251	223	164	113	72	128	166	131	1,248
		Col %	83.1%	77.4%	72.2%	76.4%	80.0%	86.5%	80.6%	81.4%	79.5%
	Total	Count	302	288	227	148	90	148	206	161	1,570
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Other Gender and Ages	Yes, I got a ticket	Count	85	117	85	70	36	50	66	55	564
		Col %	6.4%	9.4%	7.4%	9.1%	7.2%	7.2%	6.8%	6.9%	7.6%
	Yes, I got a warning	Count	27	33	31	12	11	18	20	16	168
		Col %	2.0%	2.7%	2.7%	1.6%	2.2%	2.6%	2.1%	2.0%	2.3%
	No	Count	1,213	1,092	1,027	691	452	630	878	728	6,711
		Col %	91.5%	87.9%	89.9%	89.4%	90.6%	90.3%	91.1%	91.1%	90.2%
	Total	Count	1,325	1,242	1,143	773	499	698	964	799	7,443
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Yes, I got a ticket	Count	128	168	135	96	51	66	99	81	824

		Col %	7.9%	11.0%	9.9%	10.4%	8.7%	7.8%	8.5%	8.4%	9.1%
	Yes, I got a warning	Count	35	47	44	21	14	22	27	20	230
		Col %	2.2%	3.1%	3.2%	2.3%	2.4%	2.6%	2.3%	2.1%	2.6%
	No	Count	1,464	1,315	1,191	804	524	758	1,044	859	7,959
		Col %	90.0%	85.9%	86.9%	87.3%	89.0%	89.6%	89.2%	89.5%	88.3%
	Total	Count	1,627	1,530	1,370	921	589	846	1,170	960	9,013
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Male 18 to 34	Chi-square	18.878
	df	14
	Sig.	.170
All Other Gender and Ages	Chi-square	17.446
	df	14
	Sig.	.233

Results are based on nonempty rows and columns in each innermost subtable.

Table D-20. 18- to 34-year-old males: Ever stopped by police at night for not wearing seat belt?

			May 07	Jun 07	Sep 07	Nov 07	Feb 08	Apr 08	May 08	Aug 08	Total
Male 18 to 34	Yes, I got a ticket	Count	8	9	16	7	3	3	8	7	61
		Col %	2.7%	3.2%	7.3%	5.0%	3.4%	2.0%	4.1%	4.6%	4.0%
	Yes, I got a warning	Count	6	6	4	2	4	3	5	1	31
		Col %	2.1%	2.2%	1.8%	1.4%	4.5%	2.0%	2.5%	.7%	2.0%
	No	Count	277	264	200	132	82	141	184	145	1,425
		Col %	95.2%	94.6%	90.9%	93.6%	92.1%	95.9%	93.4%	94.8%	93.9%
	Total	Count	291	279	220	141	89	147	197	153	1,517
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Other Gender and Ages	Yes, I got a ticket	Count	8	16	15	10	4	12	17	5	87
		Col %	.6%	1.3%	1.4%	1.4%	.8%	1.8%	1.8%	.7%	1.2%
	Yes, I got a warning	Count	6	11	8	3	1	3	9	6	47
		Col %	.5%	.9%	.7%	.4%	.2%	.5%	1.0%	.8%	.7%
	No	Count	1,260	1,159	1,076	721	474	641	895	745	6,971
		Col %	98.9%	97.7%	97.9%	98.2%	99.0%	97.7%	97.2%	98.5%	98.1%
	Total	Count	1,274	1,186	1,099	734	479	656	921	756	7,105
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Yes, I got a ticket	Count	16	25	31	17	7	15	25	12	148
		Col %	1.0%	1.7%	2.4%	1.9%	1.2%	1.9%	2.2%	1.3%	1.7%
	Yes, I got a warning	Count	12	17	12	5	5	6	14	7	78
		Col %	.8%	1.2%	.9%	.6%	.9%	.7%	1.3%	.8%	.9%
	No	Count	1,537	1,423	1,276	853	556	782	1,079	890	8,396
		Col %	98.2%	97.1%	96.7%	97.5%	97.9%	97.4%	96.5%	97.9%	97.4%
	Total	Count	1,565	1,465	1,319	875	568	803	1,118	909	8,622
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Male 18 to 34	Chi-square	14.378
	df	14
	Sig.	.422(a)
All Other Gender and Ages	Chi-square	18.039
	df	14
	Sig.	.205

Results are based on nonempty rows and columns in each innermost subtable.
a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

Table D-21. 18- to 34-year-old males: Have you recently noticed increased seat belt enforcement at night?

			May 07	Jun 07	Sep 07	Nov 07	Feb 08	Apr 08	May 08	Aug 08	Total
Male 18 to 34	Yes, I got a ticket	Count	9	9	6	5	0	4	5	6	44
		Col %	3.1%	3.1%	2.7%	3.4%	.0%	2.7%	2.5%	3.8%	2.8%
	Yes, I got a warning	Count	0	3	0	0	1	1	4	1	10
		Col %	.0%	1.0%	.0%	.0%	1.1%	.7%	2.0%	.6%	.6%
	Yes, I noticed but wasn't stopped	Count	36	102	62	49	28	45	38	35	395
		Col %	12.2%	35.3%	27.4%	33.3%	31.5%	30.2%	18.8%	22.0%	25.4%
	No	Count	250	175	158	93	60	99	155	117	1,107
		Col %	84.7%	60.6%	69.9%	63.3%	67.4%	66.4%	76.7%	73.6%	71.1%
	Total	Count	295	289	226	147	89	149	202	159	1,556
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Other Gender and Ages	Yes, I got a ticket	Count	6	16	15	5	7	12	11	6	78
		Col %	.5%	1.3%	1.3%	.7%	1.4%	1.7%	1.2%	.8%	1.1%
	Yes, I got a warning	Count	5	8	2	2	5	8	6	10	46
		Col %	.4%	.7%	.2%	.3%	1.0%	1.2%	.6%	1.3%	.6%
	Yes, I noticed but wasn't stopped	Count	96	291	162	180	75	89	116	113	1,122
		Col %	7.5%	24.0%	14.4%	23.8%	15.4%	12.8%	12.3%	14.4%	15.4%
	No	Count	1,176	895	946	570	399	584	812	658	6,040
		Col %	91.7%	74.0%	84.1%	75.3%	82.1%	84.3%	85.9%	83.6%	82.9%
	Total	Count	1,283	1,210	1,125	757	486	693	945	787	7,286
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Yes, I got a ticket	Count	15	25	21	10	7	16	16	12	122
		Col %	1.0%	1.7%	1.6%	1.1%	1.2%	1.9%	1.4%	1.3%	1.4%
	Yes, I got a warning	Count	5	11	2	2	6	9	10	11	56
		Col %	.3%	.7%	.1%	.2%	1.0%	1.1%	.9%	1.2%	.6%
	Yes, I noticed but wasn't stopped	Count	132	393	224	229	103	134	154	148	1,517
		Col %	8.4%	26.2%	16.6%	25.3%	17.9%	15.9%	13.4%	15.6%	17.2%
	No	Count	1,426	1,070	1,104	663	459	683	967	775	7,147
		Col %	90.4%	71.4%	81.7%	73.3%	79.8%	81.1%	84.3%	81.9%	80.8%
	Total	Count	1,578	1,499	1,351	904	575	842	1,147	946	8,842
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Male 18 to 34	Chi-square	71.815
	df	21
	Sig.	.000(*,a,b)
All Other Gender and Ages	Chi-square	213.032
	df	21
	Sig.	.000(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.
a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.
b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table D-22. 18- to 34-year-old males: How often get ticket for no seat belt during day?

			May 07	Jun 07	Sep 07	Nov 07	Feb 08	Apr 08	May 08	Aug 08	Total
Male 18 to 34	Always	Count	86	98	60	46	28	45	54	49	466
		Col %	28.5%	34.0%	26.7%	31.1%	31.8%	30.4%	26.5%	31.8%	29.9%
	Nearly Always	Count	50	45	52	36	13	40	43	32	311
		Col %	16.6%	15.6%	23.1%	24.3%	14.8%	27.0%	21.1%	20.8%	20.0%
	Sometimes	Count	95	107	71	51	32	39	70	41	506
		Col %	31.5%	37.2%	31.6%	34.5%	36.4%	26.4%	34.3%	26.6%	32.5%
	Seldom	Count	44	26	24	10	11	13	28	22	178
		Col %	14.6%	9.0%	10.7%	6.8%	12.5%	8.8%	13.7%	14.3%	11.4%
	Never	Count	27	12	18	5	4	11	9	10	96
		Col %	8.9%	4.2%	8.0%	3.4%	4.5%	7.4%	4.4%	6.5%	6.2%
	Total	Count	302	288	225	148	88	148	204	154	1,557
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Other Gender and Ages	Always	Count	427	420	420	267	178	234	297	255	2,498
		Col %	32.9%	34.3%	37.6%	35.5%	36.4%	34.6%	31.4%	32.9%	34.3%
	Nearly Always	Count	241	246	204	151	80	118	205	154	1,399
		Col %	18.6%	20.1%	18.2%	20.1%	16.4%	17.5%	21.6%	19.9%	19.2%
	Sometimes	Count	387	364	334	207	140	202	274	234	2,142
		Col %	29.9%	29.7%	29.9%	27.5%	28.6%	29.9%	28.9%	30.2%	29.4%
	Seldom	Count	152	102	88	76	59	71	103	74	725
		Col %	11.7%	8.3%	7.9%	10.1%	12.1%	10.5%	10.9%	9.5%	10.0%
	Never	Count	89	93	72	51	32	51	68	58	514
		Col %	6.9%	7.6%	6.4%	6.8%	6.5%	7.5%	7.2%	7.5%	7.1%
	Total	Count	1,296	1,225	1,118	752	489	676	947	775	7,278
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Always	Count	513	518	480	313	206	279	351	304	2,964
		Col %	32.1%	34.2%	35.7%	34.8%	35.7%	33.9%	30.5%	32.7%	33.5%
	Nearly Always	Count	291	291	256	187	93	158	248	186	1,710
		Col %	18.2%	19.2%	19.1%	20.8%	16.1%	19.2%	21.5%	20.0%	19.4%
	Sometimes	Count	482	471	405	258	172	241	344	275	2,648
		Col %	30.2%	31.1%	30.2%	28.7%	29.8%	29.2%	29.9%	29.6%	30.0%
	Seldom	Count	196	128	112	86	70	84	131	96	903
		Col %	12.3%	8.5%	8.3%	9.6%	12.1%	10.2%	11.4%	10.3%	10.2%
	Never	Count	116	105	90	56	36	62	77	68	610
		Col %	7.3%	6.9%	6.7%	6.2%	6.2%	7.5%	6.7%	7.3%	6.9%
	Total	Count	1,598	1,513	1,343	900	577	824	1,151	929	8,835
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Male 18 to 34	Chi-square	42.659
	df	28
	Sig.	.038(*)
All Other Gender and Ages	Chi-square	34.727
	df	28
	Sig.	.178

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

Table D-23. 18- to 34-year-old males: How often think get ticket for not wearing seat belt at night?

			May 07	Jun 07	Sep 07	Nov 07	Feb 08	Apr 08	May 08	Aug 08	Total
Male 18 to 34	Always	Count	81	90	57	45	26	45	53	48	445
		Col %	28.0%	32.6%	26.6%	32.1%	29.9%	31.7%	27.0%	32.7%	29.8%
	Nearly Always	Count	40	39	38	29	15	32	33	23	249
		Col %	13.8%	14.1%	17.8%	20.7%	17.2%	22.5%	16.8%	15.6%	16.7%
	Sometimes	Count	88	92	63	42	28	32	66	40	451
		Col %	30.4%	33.3%	29.4%	30.0%	32.2%	22.5%	33.7%	27.2%	30.2%
	Seldom	Count	48	38	33	15	11	22	33	25	225
		Col %	16.6%	13.8%	15.4%	10.7%	12.6%	15.5%	16.8%	17.0%	15.1%
	Never	Count	32	17	23	9	7	11	11	11	121
		Col %	11.1%	6.2%	10.7%	6.4%	8.0%	7.7%	5.6%	7.5%	8.1%
	Total	Count	289	276	214	140	87	142	196	147	1,491
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Other Gender and Ages	Always	Count	417	401	406	252	168	234	283	248	2,409
		Col %	33.2%	34.0%	37.5%	35.0%	35.7%	36.5%	31.4%	33.5%	34.4%
	Nearly Always	Count	219	200	172	124	73	94	167	133	1,182
		Col %	17.4%	16.9%	15.9%	17.2%	15.5%	14.7%	18.5%	18.0%	16.9%
	Sometimes	Count	328	333	299	191	123	174	249	203	1,900
		Col %	26.1%	28.2%	27.6%	26.5%	26.1%	27.1%	27.6%	27.4%	27.2%
	Seldom	Count	192	152	122	96	71	85	127	90	935
		Col %	15.3%	12.9%	11.3%	13.3%	15.1%	13.3%	14.1%	12.2%	13.4%
	Never	Count	100	95	84	57	36	54	76	66	568
		Col %	8.0%	8.0%	7.8%	7.9%	7.6%	8.4%	8.4%	8.9%	8.1%
	Total	Count	1,256	1,181	1,083	720	471	641	902	740	6,994
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	Always	Count	498	491	463	297	194	279	336	296	2,854
		Col %	32.2%	33.7%	35.7%	34.5%	34.8%	35.6%	30.6%	33.4%	33.6%
	Nearly Always	Count	259	239	210	153	88	126	200	156	1,431
		Col %	16.8%	16.4%	16.2%	17.8%	15.8%	16.1%	18.2%	17.6%	16.9%

	Sometimes	Count	416	425	362	233	151	206	315	243	2,351
		Col %	26.9%	29.2%	27.9%	27.1%	27.1%	26.3%	28.7%	27.4%	27.7%
	Seldom	Count	240	190	155	111	82	107	160	115	1,160
		Col %	15.5%	13.0%	12.0%	12.9%	14.7%	13.7%	14.6%	13.0%	13.7%
	Never	Count	132	112	107	66	43	65	87	77	689
		Col %	8.5%	7.7%	8.2%	7.7%	7.7%	8.3%	7.9%	8.7%	8.1%
	Total	Count	1,545	1,457	1,297	860	558	783	1,098	887	8,485
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Male 18 to 34	Chi-square	27.132
	df	28
	Sig.	.511
All Other Gender and Ages	Chi-square	24.558
	df	28
	Sig.	.652

Results are based on nonempty rows and columns in each innermost subtable.

Table D-24. 18- to 34-year-old males: What percentage of time would you be stopped for drunk driving during day?

			May 07	Jun 07	Sep 07	Nov 07	Feb 08	Apr 08	May 08	Aug 08	Total
Male 18 to 34	100%	Count	72	60	47	36	21	30	43	31	340
		Col %	24.2%	21.3%	21.6%	25.0%	24.1%	20.8%	22.1%	20.3%	22.4%
	75%	Count	51	52	46	24	16	35	37	22	283
		Col %	17.1%	18.4%	21.1%	16.7%	18.4%	24.3%	19.0%	14.4%	18.6%
	50%	Count	62	65	42	35	19	34	42	33	332
		Col %	20.8%	23.0%	19.3%	24.3%	21.8%	23.6%	21.5%	21.6%	21.8%
	25%	Count	23	30	32	26	8	15	29	20	183
		Col %	7.7%	10.6%	14.7%	18.1%	9.2%	10.4%	14.9%	13.1%	12.0%
	10%	Count	18	21	12	3	8	8	15	15	100
		Col %	6.0%	7.4%	5.5%	2.1%	9.2%	5.6%	7.7%	9.8%	6.6%
	Less than 10%	Count	45	33	23	16	8	11	12	20	168
		Col %	15.1%	11.7%	10.6%	11.1%	9.2%	7.6%	6.2%	13.1%	11.0%
	0%	Count	27	21	16	4	7	11	17	12	115
		Col %	9.1%	7.4%	7.3%	2.8%	8.0%	7.6%	8.7%	7.8%	7.6%
	Total	Count	298	282	218	144	87	144	195	153	1,521
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Other Gender and	100%	Count	321	272	274	192	119	158	234	180	1,750

Ages											
		Col %	25.9%	23.3%	25.3%	26.7%	25.1%	24.1%	25.7%	24.1%	25.0%
	75%	Count	215	213	207	125	100	129	145	152	1,286
		Col %	17.3%	18.3%	19.1%	17.4%	21.1%	19.7%	15.9%	20.4%	18.4%
	50%	Count	298	280	271	152	113	150	218	167	1,649
		Col %	24.0%	24.0%	25.1%	21.1%	23.8%	22.9%	23.9%	22.4%	23.6%
	25%	Count	143	149	124	70	44	74	101	82	787
		Col %	11.5%	12.8%	11.5%	9.7%	9.3%	11.3%	11.1%	11.0%	11.3%
	10%	Count	77	63	39	39	22	24	52	48	364
		Col %	6.2%	5.4%	3.6%	5.4%	4.6%	3.7%	5.7%	6.4%	5.2%
	Less than 10%	Count	81	80	84	58	42	70	80	69	564
		Col %	6.5%	6.9%	7.8%	8.1%	8.8%	10.7%	8.8%	9.2%	8.1%
	0%	Count	106	108	82	83	35	51	82	48	595
		Col %	8.5%	9.3%	7.6%	11.5%	7.4%	7.8%	9.0%	6.4%	8.5%
	Total	Count	1,241	1,165	1,081	719	475	656	912	746	6,995
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	100%	Count	393	332	321	228	140	188	277	211	2,090
		Col %	25.5%	22.9%	24.7%	26.4%	24.9%	23.5%	25.0%	23.5%	24.5%
	75%	Count	266	265	253	149	116	164	182	174	1,569
		Col %	17.3%	18.3%	19.5%	17.3%	20.6%	20.5%	16.4%	19.4%	18.4%
	50%	Count	360	345	313	187	132	184	260	200	1,981
		Col %	23.4%	23.8%	24.1%	21.7%	23.5%	23.0%	23.5%	22.2%	23.3%
	25%	Count	166	179	156	96	52	89	130	102	970
		Col %	10.8%	12.4%	12.0%	11.1%	9.3%	11.1%	11.7%	11.3%	11.4%
	10%	Count	95	84	51	42	30	32	67	63	464
		Col %	6.2%	5.8%	3.9%	4.9%	5.3%	4.0%	6.1%	7.0%	5.4%
	Less than 10%	Count	126	113	107	74	50	81	92	89	732
		Col %	8.2%	7.8%	8.2%	8.6%	8.9%	10.1%	8.3%	9.9%	8.6%
	0%	Count	133	129	98	87	42	62	99	60	710
		Col %	8.6%	8.9%	7.5%	10.1%	7.5%	7.8%	8.9%	6.7%	8.3%
	Total	Count	1,539	1,447	1,299	863	562	800	1107	899	8,516
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Male 18 to 34	Chi-square	47.700
	df	42
	Sig.	.252
All Other Gender and Ages	Chi-square	63.349
	df	42
	Sig.	.018(*)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.

Table D-25. 18- to 34-year-old males: What percentage of time would you be stopped for drunk driving at night?

			May 07	Jun 07	Sep 07	Nov 07	Feb 08	Apr 08	May 08	Aug 08	Total
Male 18 to 34	100%	Count	90	78	55	48	24	42	52	39	428
		Col %	30.6%	28.0%	25.7%	34.5%	27.6%	29.4%	27.4%	25.7%	28.6%
	75%	Count	68	67	61	28	20	42	46	33	365
		Col %	23.1%	24.0%	28.5%	20.1%	23.0%	29.4%	24.2%	21.7%	24.4%
	50%	Count	46	62	42	32	17	26	41	33	299
		Col %	15.6%	22.2%	19.6%	23.0%	19.5%	18.2%	21.6%	21.7%	20.0%
	25%	Count	17	23	18	12	6	11	18	13	118
		Col %	5.8%	8.2%	8.4%	8.6%	6.9%	7.7%	9.5%	8.6%	7.9%
	10%	Count	18	11	8	4	6	3	9	10	69
		Col %	6.1%	3.9%	3.7%	2.9%	6.9%	2.1%	4.7%	6.6%	4.6%
	Less than 10%	Count	34	18	15	12	8	9	6	14	116
		Col %	11.6%	6.5%	7.0%	8.6%	9.2%	6.3%	3.2%	9.2%	7.7%
	0%	Count	21	20	15	3	6	10	18	10	103
		Col %	7.1%	7.2%	7.0%	2.2%	6.9%	7.0%	9.5%	6.6%	6.9%
	Total	Count	294	279	214	139	87	143	190	152	1,498
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
All Other Gender and Ages	100%	Count	379	329	321	224	139	192	265	209	2,058
		Col %	30.7%	28.6%	30.2%	31.4%	29.4%	29.6%	29.5%	28.3%	29.7%
	75%	Count	300	289	275	178	137	155	203	202	1,739
		Col %	24.3%	25.1%	25.8%	24.9%	29.0%	23.9%	22.6%	27.3%	25.1%
	50%	Count	255	248	220	121	78	127	192	152	1,393
		Col %	20.6%	21.5%	20.7%	16.9%	16.5%	19.6%	21.4%	20.6%	20.1%
	25%	Count	99	95	91	44	45	49	74	56	553
		Col %	8.0%	8.3%	8.6%	6.2%	9.5%	7.6%	8.2%	7.6%	8.0%
	10%	Count	49	27	29	26	19	18	36	17	221
		Col %	4.0%	2.3%	2.7%	3.6%	4.0%	2.8%	4.0%	2.3%	3.2%
	Less than 10%	Count	51	58	51	43	25	58	52	58	396
		Col %	4.1%	5.0%	4.8%	6.0%	5.3%	9.0%	5.8%	7.8%	5.7%
	0%	Count	102	105	77	78	30	49	76	45	562
		Col %	8.3%	9.1%	7.2%	10.9%	6.3%	7.6%	8.5%	6.1%	8.1%
	Total	Count	1,235	1,151	1,064	714	473	648	898	739	6,922

		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total	100%	Count	469	407	376	272	163	234	317	248	2,486
		Col %	30.7%	28.5%	29.4%	31.9%	29.1%	29.6%	29.1%	27.8%	29.5%
	75%	Count	368	356	336	206	157	197	249	235	2,104
		Col %	24.1%	24.9%	26.3%	24.2%	28.0%	24.9%	22.9%	26.4%	25.0%
	50%	Count	301	310	262	153	95	153	233	185	1,692
		Col %	19.7%	21.7%	20.5%	17.9%	17.0%	19.3%	21.4%	20.8%	20.1%
	25%	Count	116	118	109	56	51	60	92	69	671
		Col %	7.6%	8.3%	8.5%	6.6%	9.1%	7.6%	8.5%	7.7%	8.0%
	10%	Count	67	38	37	30	25	21	45	27	290
		Col %	4.4%	2.7%	2.9%	3.5%	4.5%	2.7%	4.1%	3.0%	3.4%
	Less than 10%	Count	85	76	66	55	33	67	58	72	512
		Col %	5.6%	5.3%	5.2%	6.4%	5.9%	8.5%	5.3%	8.1%	6.1%
	0%	Count	123	125	92	81	36	59	94	55	665
		Col %	8.0%	8.7%	7.2%	9.5%	6.4%	7.5%	8.6%	6.2%	7.9%
	Total	Count	1,529	1,430	1,278	853	560	791	1,088	891	8,420
		Col %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson Chi-Square Tests

Male 18 to 34	Chi-square	41.958
	df	42
	Sig.	.473
All Other Gender and Ages	Chi-square	76.354
	df	42
	Sig.	.001(*)

Results are based on nonempty rows and columns in each innermost subtable.

* The chi-square statistic is significant at the 0.05 level.

Appendix E

Gas Station Intercept Survey Questionnaire

Refused Interview

___ No time ___ Not interested ___ Non-English speaking ___ Other _____

Site _____ (FC, FS, NC, NS, SH, SS, YA, YC)

(Survey Number = Observer + Page + Sequence #)

Survey Number _____ Start Date ____/____/____ Interviewer _____

Hi. My name is [first name only as printed on badge]. I'm working for the Washington Traffic Safety Commission to do a very brief survey related to traffic safety in Washington State. The interview is totally confidential and will take only a minute or so. The answers you give will be combined with thousands of other responses to help us learn more about safety needs and the effectiveness of our safety programs.

1. Are you the registered owner of the vehicle you drove here?

☐ 1. Yes ☐ 9. Refused
☐ 2. No

If no:
Without mentioning any names, who owns it, for example your spouse?

☐ 1. Spouse or partner ☐ 9. Refused
☐ 2. Other family member
☐ 3. Friend
☐ 4. Employer
☐ 5. Rental or leasing company
☐ 7. Other _____

2. Is this the vehicle you drive most often?

☐ 1. Yes ☐ 9. Refused
☐ 2. No

If no:
What type of vehicle do you drive most often? For example, an SUV.

If yes, interviewer record type <u>but do not ask</u>

☐ 1. Passenger car ☐ 9. Refused
☐ 2. Pick-up truck
☐ 3. Semi truck
☐ 4. SUV
☐ 5. Mini-van
☐ 6. Full-van
☐ 7. Other _____

3. About how many miles did you drive last year?

(Record actual answer) ☐ 9. Refused

4. Which of the following best describes the reason you are driving at this time?
(read each answer, check the first one mentioned and stop)

☐ 1. Work or work related ☐ 9. Refused
☐ 2. Shopping or another errand
☐ 3. School
☐ 4. Religious activity
☐ 5. Visiting a friend or relative
☐ 6. Medical, dental or other personal appointment
☐ 7. Other family and personal, e.g., pick up someone
☐ 8. Vacation
☐ A. Out to eat
☐ B. Other _____

5. When you pass a driver stopped by the police in the daytime, what do you think the stop was for?
(record only the first answer given)

☐ 1. Speeding
☐ 2. Seat Belt Violation
☐ 3. Drunk Driving
☐ 4. Reckless Driving
☐ 7. Other_____
☐ 8. Don't Know
☐ 9. Refused

6. When you pass a driver stopped by the police at night, what do you think the stop was for?
(record only the first answer given)

☐ 1. Speeding
☐ 2. Seat Belt Violation
☐ 3. Drunk Driving
☐ 4. Reckless Driving
☐ 7. Other_____
☐ 8. Don't Know
☐ 9. Refused

7. What percentage of the time do you wear your seat belt when driving during the day? When driving at night?

Day % _____
Night % _____
☐ 9. Refused

If night and day use are different:
Why do you wear your belt [more][less] at night?

(Record actual response)
☐ 9. Refused

8. Have you increased your seat belt use in the last two months?

☐ 1. Yes
☐ 2. No
☐ 9. Refused

If yes,
What caused you to increase your seat belt use?

(Record actual response—probe if necessary)
☐ 9. Refused

9. In the last 2 months, have you noticed a change in the amount of <u>nighttime</u> police enforcement on the road?	☐ 1. Yes ☐ 9. Refused ☐ 2. No
If yes: ***What change have you noticed?***	☐ 1. More enforcement ☐ 9. Refused ☐ 2. Less enforcement ☐ 7. Other_____
10. What do you think the police are looking for when they patrol the road <u>at night</u>? **(record only the first answer given)**	☐ 1. Speeding ☐ 9. Refused ☐ 2. Seat Belt Violation ☐ 3. Drunk Driving ☐ 4. Drugs ☐ 5. Reckless Driving ☐ 6. Criminals ☐ 7. Other_____ ☐ 8. Don't Know
11. Have you recently read, seen or heard anything about <u>nighttime</u> seat belt enforcement?	☐ 1. Yes ☐ 9. Refused ☐ 2. No
If yes: ***What did you see or hear? What did it say?***	(Record actual response—probe if necessary) ☐ 9. Refused
	Mentioned Click It or Ticket? ☐ 1. Yes ☐ 2. No Mentioned NTSBE content? ☐ 1. Yes ☐ 2. No
(Record your judgment of whether or not the person was describing material from the NTSBE program)	☐ 1. Definitely exposed to NTSBE ☐ 2. Likely exposed to NTSBE ☐ 3. Possibly exposed to NTSBE ☐ 4. Likely or definitely not exposed to NTSBE
12. In the past year, how often did you have a drink containing alcohol? **(Read the response categories to the interviewee)**	☐ (0) Never ☐ 9. Refused ☐ (1) Monthly or less ☐ (2) 2 to 4 times a month ☐ (3) 2 to 3 times a week ☐ (4) 4 or more times a week

13. In the past year, how many drinks containing alcohol did you have on a typical day when you are drinking?
(Read the response categories to the interviewee)

- ☐ (0) 1 or 2
- ☐ (1) 3 or 4
- ☐ (2) 5 or 6
- ☐ (3) 7, 8, or 9
- ☐ (4) 10 or more
- ☐ 9. Refused

14. In the past year, how often have you had [5 for males] [4 for females] or more drinks within a 2-hour period?
(Read the response categories to the interviewee)

- ☐ (0) Never
- ☐ (1) Less than monthly
- ☐ (2) Monthly
- ☐ (3) Weekly
- ☐ (4) Daily or almost daily

15. What is your date of birth?

(Record actual response) ☐ 9. Refused
(Write in age if that is all that is offered)

____/____/____
mm dd yy

16. Gender (observe—do not ask)

- ☐ 1. Male
- ☐ 2. Female
- ☐ 8. Don't Know

Appendix F

Intercept Survey Results by Sex, Age and for 18- to 34-Year-Old Males

Table F-1. Registered owner of vehicle: By sex and day/night

			Yes	No	Total
Day 6 a.m. - 5:59 p.m.	Male	Count	631	153	784
		Row N %	80.5%	19.5%	100.0%
	Female	Count	309	84	393
		Row N %	78.6%	21.4%	100.0%
	Total	Count	940	237	1,177
		Row N %	79.9%	20.1%	100.0%
Night 6 p.m. - 5:59 a.m.	Male	Count	383	95	478
		Row N %	80.1%	19.9%	100.0%
	Female	Count	156	35	191
		Row N %	81.7%	18.3%	100.0%
	Total	Count	539	130	669
		Row N %	80.6%	19.4%	100.0%
Total	Male	Count	1,014	248	1,262
		Row N %	80.3%	19.7%	100.0%
	Female	Count	465	119	584
		Row N %	79.6%	20.4%	100.0%
	Total	Count	1,479	367	1,846
		Row N %	80.1%	19.9%	100.0%

Pearson Chi-Square Tests

		Registered Owner?
Day 6 a.m. - 5:59 p.m.	Chi-square	.562
	df	1
	Sig.	.453
Night 6 p.m. - 5:59 a.m.	Chi-square	.209
	df	1
	Sig.	.647

Results are based on nonempty rows and columns in each innermost subtable.

Table F-2. Self-reported daytime belt use: By sex and day/night

			100%	90% to 99.99%	75% to 89.99%	50% - 74.99%	1% to 49.99%	0%	Total
Day 6 a.m. - 5:59 p.m.	Male	Count	661	58	16	15	14	9	773
		Row N %	85.5%	7.5%	2.1%	1.9%	1.8%	1.2%	100.0%
	Female	Count	360	15	4	6	1	2	388
		Row N %	92.8%	3.9%	1.0%	1.5%	.3%	.5%	100.0%
	Total	Count	1,021	73	20	21	15	11	1,161
		Row N %	87.9%	6.3%	1.7%	1.8%	1.3%	.9%	100.0%
Night 6 p.m. - 5:59 a.m.	Male	Count	400	30	17	12	12	4	475
		Row N %	84.2%	6.3%	3.6%	2.5%	2.5%	.8%	100.0%
	Female	Count	172	5	2	3	4	5	191
		Row N %	90.1%	2.6%	1.0%	1.6%	2.1%	2.6%	100.0%
	Total	Count	572	35	19	15	16	9	666
		Row N %	85.9%	5.3%	2.9%	2.3%	2.4%	1.4%	100.0%
Total	Male	Count	1,061	88	33	27	26	13	1,248
		Row N %	85.0%	7.1%	2.6%	2.2%	2.1%	1.0%	100.0%
	Female	Count	532	20	6	9	5	7	579
		Row N %	91.9%	3.5%	1.0%	1.6%	.9%	1.2%	100.0%
	Total	Count	1,593	108	39	36	31	20	1,827
		Row N %	87.2%	5.9%	2.1%	2.0%	1.7%	1.1%	100.0%

Pearson Chi-Square Tests

Day 6 a.m. - 5:59 p.m.	Chi-square	14.802
	df	5
	Sig.	.011(*)
Night 6 p.m. - 5:59 a.m.	Chi-square	10.984
	df	5
	Sig.	.052(a)

Results are based on nonempty rows and columns in each innermost subtable.

* The chi-square statistic is significant at the 0.05 level.

a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

Table F-3. Self-reported nighttime belt use: By sex and day/night

			100%	90% to 99.99%	75% to 89.99%	50% - 74.99%	1% to 49.99%	0%	Total
Day 6 a.m. - 5:59 p.m.	Male	Count	677	42	13	15	12	12	771
		Row N %	87.8%	5.4%	1.7%	1.9%	1.6%	1.6%	100.0%
	Female	Count	367	13	2	1	4	1	388
		Row N %	94.6%	3.4%	.5%	.3%	1.0%	.3%	100.0%
	Total	Count	1,044	55	15	16	16	13	1,159
		Row N %	90.1%	4.7%	1.3%	1.4%	1.4%	1.1%	100.0%
Night 6 p.m. - 5:59 a.m.	Male	Count	411	25	9	11	9	6	471
		Row N %	87.3%	5.3%	1.9%	2.3%	1.9%	1.3%	100.0%
	Female	Count	178	5	0	1	4	4	192
		Row N %	92.7%	2.6%	.0%	.5%	2.1%	2.1%	100.0%
	Total	Count	589	30	9	12	13	10	663
		Row N %	88.8%	4.5%	1.4%	1.8%	2.0%	1.5%	100.0%
Total	Male	Count	1,088	67	22	26	21	18	1,242
		Row N %	87.6%	5.4%	1.8%	2.1%	1.7%	1.4%	100.0%
	Female	Count	545	18	2	2	8	5	580
		Row N %	94.0%	3.1%	.3%	.3%	1.4%	.9%	100.0%
	Total	Count	1,633	85	24	28	29	23	1,822
		Row N %	89.6%	4.7%	1.3%	1.5%	1.6%	1.3%	100.0%

Pearson Chi-Square Tests

Day 6 a.m. - 5:59 p.m.	Chi-square	16.165
	df	5
	Sig.	.006(*)
Night 6 p.m. - 5:59 a.m.	Chi-square	9.423
	df	5
	Sig.	.093(a)

Results are based on nonempty rows and columns in each innermost subtable.

* The chi-square statistic is significant at the 0.05 level.

a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

Table F-4. Self-reported reason for dr iving: By sex and day/night

			Work	Shopping/Errand	School	Religious activity	Visiting Friend	Medical, dental, appointment	Other family/personal	Vacation	Refused	Out to eat	Other	Total
Day 6 a.m. - 5:59 p.m.	Male	Count	350	125	16	4	40	21	68	49	0	15	85	773
		Row N %	45.3%	16.2%	2.1%	.5%	5.2%	2.7%	8.8%	6.3%	.0%	1.9%	11.0%	100.0%
	Female	Count	170	65	16	3	14	16	54	17	0	6	27	388
		Row N %	43.8%	16.8%	4.1%	.8%	3.6%	4.1%	13.9%	4.4%	.0%	1.5%	7.0%	100.0%
	Total	Count	520	190	32	7	54	37	122	66	0	21	112	1,161
		Row N %	44.8%	16.4%	2.8%	.6%	4.7%	3.2%	10.5%	5.7%	.0%	1.8%	9.6%	100.0%
Night 6 p.m. - 5:59 a.m.	Male	Count	209	55	15	3	48	1	30	21	1	17	80	480
		Row N %	43.5%	11.5%	3.1%	.6%	10.0%	.2%	6.3%	4.4%	.2%	3.5%	16.7%	100.0%
	Female	Count	69	29	4	0	21	2	16	6	0	3	41	191
		Row N %	36.1%	15.2%	2.1%	.0%	11.0%	1.0%	8.4%	3.1%	.0%	1.6%	21.5%	100.0%
	Total	Count	278	84	19	3	69	3	46	27	1	20	121	671
		Row N %	41.4%	12.5%	2.8%	.4%	10.3%	.4%	6.9%	4.0%	.1%	3.0%	18.0%	100.0%
Total	Male	Count	559	180	31	7	88	22	98	70	1	32	165	1,253
		Row N %	44.6%	14.4%	2.5%	.6%	7.0%	1.8%	7.8%	5.6%	.1%	2.6%	13.2%	100.0%
	Female	Count	239	94	20	3	35	18	70	23	0	9	68	579
		Row N %	41.3%	16.2%	3.5%	.5%	6.0%	3.1%	12.1%	4.0%	.0%	1.6%	11.7%	100.0%
	Total	Count	798	274	51	10	123	40	168	93	1	41	233	1,832
		Row N %	43.6%	15.0%	2.8%	.5%	6.7%	2.2%	9.2%	5.1%	.1%	2.2%	12.7%	100.0%

Pearson Chi-Square Tests

		Reason for driving today?
Day 6 a.m. - 5:59 p.m.	Chi-square	20.153
	df	9
	Sig.	.017(*)
Night 6 p.m. - 5:59 a.m.	Chi-square	12.658
	df	10
	Sig.	.243(a,b)

Results are based on nonempty rows and columns in each innermost subtable.

* The chi-square statistic is significant at the 0.05 level.

a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table F-5. Opinion of why drivers are stopped during day by police: By sex and day/night

			Speeding	Seat Belt Violation	Drunk Driving	Reckless Driving	Other	Don't Know	Refused	Total
Day 6 a.m. - 5:59 p.m.	Male	Count	627	11	8	0	64	65	0	775
		Row N %	80.9%	1.4%	1.0%	.0%	8.3%	8.4%	.0%	100.0%
	Female	Count	338	5	0	0	25	23	0	391
		Row N %	86.4%	1.3%	.0%	.0%	6.4%	5.9%	.0%	100.0%
	Total	Count	965	16	8	0	89	88	0	1,166
		Row N %	82.8%	1.4%	.7%	.0%	7.6%	7.5%	.0%	100.0%
Night 6 p.m. - 5:59 a.m.	Male	Count	350	25	9	0	71	26	0	481
		Row N %	72.8%	5.2%	1.9%	.0%	14.8%	5.4%	.0%	100.0%
	Female	Count	150	4	1	0	27	9	1	192
		Row N %	78.1%	2.1%	.5%	.0%	14.1%	4.7%	.5%	100.0%
	Total	Count	500	29	10	0	98	35	1	673
		Row N %	74.3%	4.3%	1.5%	.0%	14.6%	5.2%	.1%	100.0%
Total	Male	Count	977	36	17	0	135	91	0	1,256
		Row N %	77.8%	2.9%	1.4%	.0%	10.7%	7.2%	.0%	100.0%
	Female	Count	488	9	1	0	52	32	1	583
		Row N %	83.7%	1.5%	.2%	.0%	8.9%	5.5%	.2%	100.0%
	Total	Count	1,465	45	18	0	187	123	1	1,839
		Row N %	79.7%	2.4%	1.0%	.0%	10.2%	6.7%	.1%	100.0%

Pearson Chi-Square Tests

		Why police stop driver during day?
Day 6 a.m. - 5:59 p.m.	Chi-square	8.382
	df	4
	Sig.	.079(a)
Night 6 p.m. - 5:59 a.m.	Chi-square	7.990
	df	5
	Sig.	.157(a,b)

Results are based on nonempty rows and columns in each innermost subtable.

a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table F-6. Opinion of why drivers are stopped at night by police: By sex and day/night

			Speeding	Seat Belt Violation	Drunk Driving	Reckless Driving	Other	Don't Know	Refused	Total
Day 6 a.m. - 5:59 p.m.	Male	Count	387	3	240	0	84	61	0	775
		Row N %	49.9%	.4%	31.0%	.0%	10.8%	7.9%	.0%	100.0%
	Female	Count	202	1	115	0	31	40	0	389
		Row N %	51.9%	.3%	29.6%	.0%	8.0%	10.3%	.0%	100.0%
	Total	Count	589	4	355	0	115	101	0	1,164
		Row N %	50.6%	.3%	30.5%	.0%	9.9%	8.7%	.0%	100.0%
Night 6 p.m. - 5:59 a.m.	Male	Count	174	6	175	0	86	36	1	478
		Row N %	36.4%	1.3%	36.6%	.0%	18.0%	7.5%	.2%	100.0%
	Female	Count	79	5	77	0	21	8	1	191
		Row N %	41.4%	2.6%	40.3%	.0%	11.0%	4.2%	.5%	100.0%
	Total	Count	253	11	252	0	107	44	2	669
		Row N %	37.8%	1.6%	37.7%	.0%	16.0%	6.6%	.3%	100.0%
Total	Male	Count	561	9	415	0	170	97	1	1,253
		Row N %	44.8%	.7%	33.1%	.0%	13.6%	7.7%	.1%	100.0%
	Female	Count	281	6	192	0	52	48	1	580
		Row N %	48.4%	1.0%	33.1%	.0%	9.0%	8.3%	.2%	100.0%
	Total	Count	842	15	607	0	222	145	2	1,833
		Row N %	45.9%	.8%	33.1%	.0%	12.1%	7.9%	.1%	100.0%

Pearson Chi-Square Tests

		Why police stop driver during night?
Day 6 a.m. - 5:59 p.m.	Chi-square	4.393
	df	4
	Sig.	.355(a)
Night 6 p.m. - 5:59 a.m.	Chi-square	9.872
	df	5
	Sig.	.079(a,b)

Results are based on nonempty rows and columns in each innermost subtable.

a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table F-7. What are police looking for when they patrol the road at night?: By sex and day/night

			Speeding	Seat belt violation	Drunk driving	Drugs	Reckless driving	Criminals	Other	Don't know	Refused	Total
Day 6 a.m. - 5:59 p.m.	Male	Count	152	13	342	22	40	38	88	51	0	746
		Row N %	20.4%	1.7%	45.8%	2.9%	5.4%	5.1%	11.8%	6.8%	.0%	100.0%
	Female	Count	67	6	151	20	44	14	45	21	2	370
		Row N %	18.1%	1.6%	40.8%	5.4%	11.9%	3.8%	12.2%	5.7%	.5%	100.0%
	Total	Count	219	19	493	42	84	52	133	72	2	1,116
		Row N %	19.6%	1.7%	44.2%	3.8%	7.5%	4.7%	11.9%	6.5%	.2%	100.0%
Night 6 p.m. - 5:59 a.m.	Male	Count	75	9	193	27	22	43	77	18	1	465
		Row N %	16.1%	1.9%	41.5%	5.8%	4.7%	9.2%	16.6%	3.9%	.2%	100.0%
	Female	Count	29	1	82	8	8	18	31	8	0	185
		Row N %	15.7%	.5%	44.3%	4.3%	4.3%	9.7%	16.8%	4.3%	.0%	100.0%
	Total	Count	104	10	275	35	30	61	108	26	1	650
		Row N %	16.0%	1.5%	42.3%	5.4%	4.6%	9.4%	16.6%	4.0%	.2%	100.0%
Total	Male	Count	227	22	535	49	62	81	165	69	1	1,211
		Row N %	18.7%	1.8%	44.2%	4.0%	5.1%	6.7%	13.6%	5.7%	.1%	100.0%
	Female	Count	96	7	233	28	52	32	76	29	2	555
		Row N %	17.3%	1.3%	42.0%	5.0%	9.4%	5.8%	13.7%	5.2%	.4%	100.0%
	Total	Count	323	29	768	77	114	113	241	98	3	1,766
		Row N %	18.3%	1.6%	43.5%	4.4%	6.5%	6.4%	13.6%	5.5%	.2%	100.0%

Pearson Chi-Square Tests

		What police look for at night?
Day 6 a.m. - 5:59 p.m.	Chi-square	25.552
	df	8
	Sig.	.001(*,a)
Night 6 p.m. - 5:59 a.m.	Chi-square	3.029
	df	8
	Sig.	.933(a)

Results are based on nonempty rows and columns in each innermost subtable.

* The chi-square statistic is significant at the 0.05 level.

a The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table F-8. In past year, how often had an alcoholic drink? By sex and day/night

			Never	Monthly or less	2 to 4 Times a Month	2 to 3 Times a week	4 or more times a week	Refused	Total
Day 6 a.m. - 5:59 p.m.	Male	Count	230	171	154	126	78	9	768
		Row N %	29.9%	22.3%	20.1%	16.4%	10.2%	1.2%	100.0%
	Female	Count	121	122	74	43	20	8	388
		Row N %	31.2%	31.4%	19.1%	11.1%	5.2%	2.1%	100.0%
	Total	Count	351	293	228	169	98	17	1,156
		Row N %	30.4%	25.3%	19.7%	14.6%	8.5%	1.5%	100.0%
Night 6 p.m. - 5:59 a.m.	Male	Count	165	138	83	56	29	5	476
		Row N %	34.7%	29.0%	17.4%	11.8%	6.1%	1.1%	100.0%
	Female	Count	66	63	26	26	4	3	188
		Row N %	35.1%	33.5%	13.8%	13.8%	2.1%	1.6%	100.0%
	Total	Count	231	201	109	82	33	8	664
		Row N %	34.8%	30.3%	16.4%	12.3%	5.0%	1.2%	100.0%
Total	Male	Count	395	309	237	182	107	14	1,244
		Row N %	31.8%	24.8%	19.1%	14.6%	8.6%	1.1%	100.0%
	Female	Count	187	185	100	69	24	11	576
		Row N %	32.5%	32.1%	17.4%	12.0%	4.2%	1.9%	100.0%
	Total	Count	582	494	337	251	131	25	1,820
		Row N %	32.0%	27.1%	18.5%	13.8%	7.2%	1.4%	100.0%

Pearson Chi-Square Tests

		In past year, how often have alcoholic drink?
Day 6 a.m. - 5:59 p.m.	Chi-square	22.814
	df	5
	Sig.	.000(*)
Night 6 p.m. - 5:59 a.m.	Chi-square	7.046
	df	5
	Sig.	.217

Results are based on nonempty rows and columns in each innermost subtable.

* The chi-square statistic is significant at the 0.05 level.

Table F-9. How many drinks have when drinking? By sex and day/night

			1 or 2	3 or 4	5 or 6	7 to 9	10 or more	Refused	Total
Day 6 a.m. - 5:59 p.m.	Male	Count	343	112	50	11	7	11	534
		Row N %	64.2%	21.0%	9.4%	2.1%	1.3%	2.1%	100.0%
	Female	Count	200	46	9	3	2	7	267
		Row N %	74.9%	17.2%	3.4%	1.1%	.7%	2.6%	100.0%
	Total	Count	543	158	59	14	9	18	801
		Row N %	67.8%	19.7%	7.4%	1.7%	1.1%	2.2%	100.0%
Night 6 p.m. - 5:59 a.m.	Male	Count	154	97	34	10	7	6	308
		Row N %	50.0%	31.5%	11.0%	3.2%	2.3%	1.9%	100.0%
	Female	Count	72	36	9	1	1	3	122
		Row N %	59.0%	29.5%	7.4%	.8%	.8%	2.5%	100.0%
	Total	Count	226	133	43	11	8	9	430
		Row N %	52.6%	30.9%	10.0%	2.6%	1.9%	2.1%	100.0%
Total	Male	Count	497	209	84	21	14	17	842
		Row N %	59.0%	24.8%	10.0%	2.5%	1.7%	2.0%	100.0%
	Female	Count	272	82	18	4	3	10	389
		Row N %	69.9%	21.1%	4.6%	1.0%	.8%	2.6%	100.0%
	Total	Count	769	291	102	25	17	27	1,231
		Row N %	62.5%	23.6%	8.3%	2.0%	1.4%	2.2%	100.0%

Pearson Chi-Square Tests

		Alcohol 2 Recode
Day 6 a.m. - 5:59 p.m.	Chi-square	14.578
	df	5
	Sig.	.012(*)
Night 6 p.m. - 5:59 a.m.	Chi-square	5.748
	df	5
	Sig.	.332(a)

Results are based on nonempty rows and columns in each innermost subtable.

* The chi-square statistic is significant at the 0.05 level.

a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

Table F-10. How often have [5 or more for males; 4 or more for females] drinks when in 2 hours? By sex and day/night

			Never	Less than monthly	Monthly	Weekly	Daily or almost daily	Refused	Total
Day 6 a.m. - 5:59 p.m.	Male	Count	309	138	50	22	3	3	525
		Row N %	58.9%	26.3%	9.5%	4.2%	.6%	.6%	100.0%
	Female	Count	190	50	19	3	0	2	264
		Row N %	72.0%	18.9%	7.2%	1.1%	.0%	.8%	100.0%
	Total	Count	499	188	69	25	3	5	789
		Row N %	63.2%	23.8%	8.7%	3.2%	.4%	.6%	100.0%
Night 6 p.m. - 5:59 a.m.	Male	Count	192	68	26	13	5	2	306
		Row N %	62.7%	22.2%	8.5%	4.2%	1.6%	.7%	100.0%
	Female	Count	74	26	13	3	2	0	118
		Row N %	62.7%	22.0%	11.0%	2.5%	1.7%	.0%	100.0%
	Total	Count	266	94	39	16	7	2	424
		Row N %	62.7%	22.2%	9.2%	3.8%	1.7%	.5%	100.0%
Total	Male	Count	501	206	76	35	8	5	831
		Row N %	60.3%	24.8%	9.1%	4.2%	1.0%	.6%	100.0%
	Female	Count	264	76	32	6	2	2	382
		Row N %	69.1%	19.9%	8.4%	1.6%	.5%	.5%	100.0%
	Total	Count	765	282	108	41	10	7	1,213
		Row N %	63.1%	23.2%	8.9%	3.4%	.8%	.6%	100.0%

Pearson Chi-Square Tests

		Alcohol 3 Recode
Day 6 a.m. - 5:59 p.m.	Chi-square	16.618
	df	5
	Sig.	.005(*,a)
Night 6 p.m. - 5:59 a.m.	Chi-square	2.019
	df	5
	Sig.	.846(a,b)

Results are based on nonempty rows and columns in each innermost subtable.

* The chi-square statistic is significant at the 0.05 level.

a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table F-11. Registered owner of vehicle: By age and day/night

			Yes	No	Total
Day 6 a.m. - 5:59 p.m.	< 18 years old	Count	2	1	3
		Row N %	66.7%	33.3%	100.0%
	18- to 34 years old	Count	320	102	422
		Row N %	75.8%	24.2%	100.0%
	35 + years old	Count	636	137	773
		Row N %	82.3%	17.7%	100.0%
	Total	Count	958	240	1,198
		Row N %	80.0%	20.0%	100.0%
Night 6 p.m. - 5:59 a.m.	< 18 years old	Count	1	1	2
		Row N %	50.0%	50.0%	100.0%
	18- to 34 years old	Count	246	86	332
		Row N %	74.1%	25.9%	100.0%
	35 + years old	Count	288	41	329
		Row N %	87.5%	12.5%	100.0%
	Total	Count	535	128	663
		Row N %	80.7%	19.3%	100.0%
Total	< 18 years old	Count	3	2	5
		Row N %	60.0%	40.0%	100.0%
	18- to 34 years old	Count	566	188	754
		Row N %	75.1%	24.9%	100.0%
	35 + years old	Count	924	178	1,102
		Row N %	83.8%	16.2%	100.0%
	Total	Count	1,493	368	1,861
		Row N %	80.2%	19.8%	100.0%

Pearson Chi-Square Tests

		Registered Owner?
Day 6 a.m. - 5:59 p.m.	Chi-square	7.415
	df	2
	Sig.	.025(*,a,b)
Night 6 p.m. - 5:59 a.m.	Chi-square	20.378
	df	2
	Sig.	.000(*,a,b)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.
a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.
b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table F-12. Self-reported daytime belt use: By age and day/night

			100%	90% to 99.99%	75% to 89.99%	50% - 74.99%	1% to 49.99%	0%	Total
Day 6 a.m. - 5:59 p.m.	< 18 years old	Count	3	0	0	0	0	0	3
		Row N %	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	18- to 34 years old	Count	354	32	8	12	8	3	417
		Row N %	84.9%	7.7%	1.9%	2.9%	1.9%	.7%	100.0%
	35 + years old	Count	682	44	12	9	7	8	762
		Row N %	89.5%	5.8%	1.6%	1.2%	.9%	1.0%	100.0%
	Total	Count	1039	76	20	21	15	11	1,182
		Row N %	87.9%	6.4%	1.7%	1.8%	1.3%	.9%	100.0%
Night 6 p.m. - 5:59 a.m.	< 18 years old	Count	2	0	0	0	0	0	2
		Row N %	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	18- to 34 years old	Count	288	19	8	6	6	5	332
		Row N %	86.7%	5.7%	2.4%	1.8%	1.8%	1.5%	100.0%
	35 + years old	Count	280	16	11	6	10	4	327
		Row N %	85.6%	4.9%	3.4%	1.8%	3.1%	1.2%	100.0%
	Total	Count	570	35	19	12	16	9	661
		Row N %	86.2%	5.3%	2.9%	1.8%	2.4%	1.4%	100.0%
Total	< 18 years old	Count	5	0	0	0	0	0	5
		Row N %	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	18- to 34 years old	Count	642	51	16	18	14	8	749
		Row N %	85.7%	6.8%	2.1%	2.4%	1.9%	1.1%	100.0%
	35 + years old	Count	962	60	23	15	17	12	1089
		Row N %	88.3%	5.5%	2.1%	1.4%	1.6%	1.1%	100.0%
	Total	Count	1,609	111	39	33	31	20	1,843
		Row N %	87.3%	6.0%	2.1%	1.8%	1.7%	1.1%	100.0%

Pearson Chi-Square Tests

Day 6 a.m. - 5:59 p.m.	Chi-square	9.572
	df	10
	Sig.	.479(a,b)
Night 6 p.m. - 5:59 a.m.	Chi-square	2.243
	df	10
	Sig.	.994(a,b)

Results are based on nonempty rows and columns in each innermost subtable.
a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.
b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table F-13. Self-reported nighttime belt use: By age and day/night

			100%	90% to 99.99%	75% to 89.99%	50% - 74.99%	1% to 49.99%	0%	Total
Day 6 a.m. - 5:59 p.m.	< 18 years old	Count	3	0	0	0	0	0	3
		Row N %	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	18- to 34 years old	Count	365	21	8	9	8	4	415
		Row N %	88.0%	5.1%	1.9%	2.2%	1.9%	1.0%	100.0%
	35 + years old	Count	692	37	7	7	8	9	760
		Row N %	91.1%	4.9%	.9%	.9%	1.1%	1.2%	100.0%
	Total	Count	1,060	58	15	16	16	13	1,178
		Row N %	90.0%	4.9%	1.3%	1.4%	1.4%	1.1%	100.0%
Night 6 p.m. - 5:59 a.m.	< 18 years old	Count	2	0	0	0	0	0	2
		Row N %	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	18- to 34 years old	Count	297	14	3	5	5	6	330
		Row N %	90.0%	4.2%	.9%	1.5%	1.5%	1.8%	100.0%
	35 + years old	Count	288	16	6	4	8	4	326
		Row N %	88.3%	4.9%	1.8%	1.2%	2.5%	1.2%	100.0%
	Total	Count	587	30	9	9	13	10	658
		Row N %	89.2%	4.6%	1.4%	1.4%	2.0%	1.5%	100.0%
Total	< 18 years old	Count	5	0	0	0	0	0	5
		Row N %	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	18- to 34 years old	Count	662	35	11	14	13	10	745
		Row N %	88.9%	4.7%	1.5%	1.9%	1.7%	1.3%	100.0%
	35 + years old	Count	980	53	13	11	16	13	1,086
		Row N %	90.2%	4.9%	1.2%	1.0%	1.5%	1.2%	100.0%
	Total	Count	1,647	88	24	25	29	23	1,836
		Row N %	89.7%	4.8%	1.3%	1.4%	1.6%	1.3%	100.0%

Pearson Chi-Square Tests

Day 6 a.m. - 5:59 p.m.	Chi-square	7.486
	df	10
	Sig.	.679(a,b)
Night 6 p.m. - 5:59 a.m.	Chi-square	2.701
	df	10
	Sig.	.988(a,b)

Results are based on nonempty rows and columns in each innermost subtable.

a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table F-14. Self-reported reason for driving: By age and day/night

			Work	Shopping/Errand	School	Religious activity	Visiting Friend	Medical appointment	Other family/personal	Vacation	Refused	Out to eat	Other	Total
Day 6 a.m. - 5:59 p.m.	< 18 years old	Count	1	0	0	0	0	0	2	0	0	0	0	3
		Row %	33.3%	.0%	.0%	.0%	.0%	.0%	66.7%	.0%	.0%	.0%	.0%	100.0%
	18 to 34 years old	Count	200	57	26	2	17	6	38	16	0	6	47	415
		Row %	48.2%	13.7%	6.3%	.5%	4.1%	1.4%	9.2%	3.9%	.0%	1.4%	11.3%	100.0%
	35 + years old	Count	327	140	6	5	39	31	84	50	0	15	67	764
		Row %	42.8%	18.3%	.8%	.7%	5.1%	4.1%	11.0%	6.5%	.0%	2.0%	8.8%	100.0%
	Total	Count	528	197	32	7	56	37	124	66	0	21	114	1,182
		Row N %	44.7%	16.7%	2.7%	.6%	4.7%	3.1%	10.5%	5.6%	.0%	1.8%	9.6%	100.0%
Night 6 p.m. - 5:59 a.m.	< 18 years old	Count	0	0	0	0	0	0	0	1	0	1	0	2
		Row N %	.0%	.0%	.0%	.0%	.0%	.0%	.0%	50.0%	.0%	50.0%	.0%	100.0%
	18 to34 years old	Count	132	45	12	1	43	2	25	8	0	9	58	335
		Row N %	39.4%	13.4%	3.6%	.3%	12.8%	.6%	7.5%	2.4%	.0%	2.7%	17.3%	100.0%
	35 + years old	Count	147	38	7	2	24	1	21	18	1	8	62	329
		Row N %	44.7%	11.6%	2.1%	.6%	7.3%	.3%	6.4%	5.5%	.3%	2.4%	18.8%	100.0%
	Total	Count	279	83	19	3	67	3	46	27	1	18	120	666
		Row N %	41.9%	12.5%	2.9%	.5%	10.1%	.5%	6.9%	4.1%	.2%	2.7%	18.0%	100.0%
Total	< 18 years old	Count	1	0	0	0	0	0	2	1	0	1	0	5
		Row N	20.0%	.0%	.0%	.0%	.0%	.0%	40.0%	20.0%	.0%	20.0%	.0%	100.0%

		%												
	18 to 34 years old	Count	332	102	38	3	60	8	63	24	0	15	105	750
		Row N %	44.3%	13.6%	5.1%	.4%	8.0%	1.1%	8.4%	3.2%	.0%	2.0%	14.0%	100.0%
	35 + years old	Count	474	178	13	7	63	32	105	68	1	23	129	1,093
		Row N %	43.4%	16.3%	1.2%	.6%	5.8%	2.9%	9.6%	6.2%	.1%	2.1%	11.8%	100.0%
	Total	Count	807	280	51	10	123	40	170	93	1	39	234	1,848
		Row %	43.7%	15.2%	2.8%	.5%	6.7%	2.2%	9.2%	5.0%	.1%	2.1%	12.7%	100.0%

Pearson Chi-Square Tests

		Reason for driving today?
Day 6 a.m. - 5:59 p.m.	Chi-square	58.607
	df	18
	Sig.	.000(*,a,b)
Night 6 p.m. - 5:59 a.m.	Chi-square	42.911
	df	20
	Sig.	.002(*,a,b)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.
a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.
b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table F-15. Opinion of why drivers are stopped during day by police: By age and day/night

			Speeding	Seat Belt Violation	Drunk Driving	Reckless Driving	Other	Don't Know	Refused	Total
Day 6 a.m. - 5:59 p.m.	< 18 years old	Count	3	0	0	0	0	0	0	3
		Row N %	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	18 to 34 years old	Count	354	5	3	0	34	21	0	417
		Row N %	84.9%	1.2%	.7%	.0%	8.2%	5.0%	.0%	100.0%
	35 + years old	Count	622	12	5	0	58	70	0	767
		Row N %	81.1%	1.6%	.7%	.0%	7.6%	9.1%	.0%	100.0%
	Total	Count	979	17	8	0	92	91	0	1,187
		Row N %	82.5%	1.4%	.7%	.0%	7.8%	7.7%	.0%	100.0%
Night 6 p.m. - 5:59 a.m.	< 18 years old	Count	2	0	0	0	0	0	0	2
		Row N %	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	18 to 34 years old	Count	258	13	6	0	42	15	1	335
		Row N %	77.0%	3.9%	1.8%	.0%	12.5%	4.5%	.3%	100.0%
	35 + years old	Count	233	17	4	0	56	21	0	331
		Row N %	70.4%	5.1%	1.2%	.0%	16.9%	6.3%	.0%	100.0%
	Total	Count	493	30	10	0	98	36	1	668
		Row N %	73.8%	4.5%	1.5%	.0%	14.7%	5.4%	.1%	100.0%
Total	< 18 years old	Count	5	0	0	0	0	0	0	5
		Row N %	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	18 to 34 years old	Count	612	18	9	0	76	36	1	752
		Row N %	81.4%	2.4%	1.2%	.0%	10.1%	4.8%	.1%	100.0%
	35 + years old	Count	855	29	9	0	114	91	0	1,098
		Row N %	77.9%	2.6%	.8%	.0%	10.4%	8.3%	.0%	100.0%
	Total	Count	1,472	47	18	0	190	127	1	1,855
		Row N %	79.4%	2.5%	1.0%	.0%	10.2%	6.8%	.1%	100.0%

Pearson Chi-Square Tests

		Why police stop driver during day?
Day 6 a.m. - 5:59 p.m.	Chi-square	7.399
	df	8
	Sig.	.494(a,b)
Night 6 p.m. - 5:59 a.m.	Chi-square	6.909
	df	10
	Sig.	.734(a,b)

Results are based on nonempty rows and columns in each innermost subtable.
a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.
b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table F-16. Opinion of why drivers are stopped at night by police: By age and day/night

			Speeding	Seat Belt Violation	Drunk Driving	Reckless Driving	Other	Don't Know	Refused	Total
Day 6 a.m. - 5:59 p.m.	< 18 years old	Count	0	0	3	0	0	0	0	3
		Row N %	.0%	.0%	100.0%	.0%	.0%	.0%	.0%	100.0%
	18 to 34 years old	Count	211	2	127	0	48	29	0	417
		Row N %	50.6%	.5%	30.5%	.0%	11.5%	7.0%	.0%	100.0%
	35 + years old	Count	387	2	232	0	70	74	0	765
		Row N %	50.6%	.3%	30.3%	.0%	9.2%	9.7%	.0%	100.0%
	Total	Count	598	4	362	0	118	103	0	1,185
		Row N %	50.5%	.3%	30.5%	.0%	10.0%	8.7%	.0%	100.0%
Night 6 p.m. - 5:59 a.m.	< 18 years old	Count	2	0	0	0	0	0	0	2
		Row N %	100.0%	.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	18 to 34 years old	Count	118	6	139	0	50	21	1	335
		Row N %	35.2%	1.8%	41.5%	.0%	14.9%	6.3%	.3%	100.0%
	35 + years old	Count	127	5	112	0	58	24	1	327
		Row N %	38.8%	1.5%	34.3%	.0%	17.7%	7.3%	.3%	100.0%
	Total	Count	247	11	251	0	108	45	2	664
		Row N %	37.2%	1.7%	37.8%	.0%	16.3%	6.8%	.3%	100.0%
Total	< 18 years old	Count	2	0	3	0	0	0	0	5
		Row N %	40.0%	.0%	60.0%	.0%	.0%	.0%	.0%	100.0%

	18 to 34 years old	Count	329	8	266	0	98	50	1	752
		Row N %	43.8%	1.1%	35.4%	.0%	13.0%	6.6%	.1%	100.0%
	35 + years old	Count	514	7	344	0	128	98	1	1,092
		Row N %	47.1%	.6%	31.5%	.0%	11.7%	9.0%	.1%	100.0%
	Total	Count	845	15	613	0	226	148	2	1,849
		Row N %	45.7%	.8%	33.2%	.0%	12.2%	8.0%	.1%	100.0%

Pearson Chi-Square Tests

		Why police stop driver during night?
Day 6 a.m. - 5:59 p.m.	Chi-square	11.025
	df	8
	Sig.	.200(a,b)
Night 6 p.m. - 5:59 a.m.	Chi-square	7.417
	df	10
	Sig.	.686(a,b)

Results are based on nonempty rows and columns in each innermost subtable.
a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.
b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table F-17. What police looking for when patrol the road at night: By age, day/night

			Speeding	Seat belt violation	Drunk driving	Drugs	Reckless driving	Criminals	Other	Don't know	Refused	Total
Day 6 a.m. - 5:59 p.m.	< 18 years old	Count	0	0	2	0	1	0	0	0	0	3
		Row N %	.0%	.0%	66.7%	.0%	33.3%	.0%	.0%	.0%	.0%	100.0%
	18 to 34 years old	Count	73	6	187	12	29	13	56	22	2	400
		Row N %	18.3%	1.5%	46.8%	3.0%	7.3%	3.3%	14.0%	5.5%	.5%	100.0%
	35 + years old	Count	149	13	313	31	58	39	80	51	0	734
		Row N %	20.3%	1.8%	42.6%	4.2%	7.9%	5.3%	10.9%	6.9%	.0%	100.0%
	Total	Count	222	19	502	43	88	52	136	73	2	1,137
		Row N %	19.5%	1.7%	44.2%	3.8%	7.7%	4.6%	12.0%	6.4%	.2%	100.0%
Night 6 p.m. - 5:59 a.m.	< 18 years old	Count	0	0	1	0	0	0	1	0	0	2
		Row N %	.0%	.0%	50.0%	.0%	.0%	.0%	50.0%	.0%	.0%	100.0%
	18 to 34 years old	Count	43	6	151	17	16	34	48	11	0	326
		Row N %	13.2%	1.8%	46.3%	5.2%	4.9%	10.4%	14.7%	3.4%	.0%	100.0%
	35 + years old	Count	58	4	118	19	14	27	61	15	1	317
		Row N %	18.3%	1.3%	37.2%	6.0%	4.4%	8.5%	19.2%	4.7%	.3%	100.0%
	Total	Count	101	10	270	36	30	61	110	26	1	645
		Row N %	15.7%	1.6%	41.9%	5.6%	4.7%	9.5%	17.1%	4.0%	.2%	100.0%
Total	< 18 years old	Count	0	0	3	0	1	0	1	0	0	5
		Row N %	.0%	.0%	60.0%	.0%	20.0%	.0%	20.0%	.0%	.0%	100.0%
	18 to 34 years old	Count	116	12	338	29	45	47	104	33	2	726
		Row N %	16.0%	1.7%	46.6%	4.0%	6.2%	6.5%	14.3%	4.5%	.3%	100.0%
	35 + years old	Count	207	17	431	50	72	66	141	66	1	1,051
		Row N %	19.7%	1.6%	41.0%	4.8%	6.9%	6.3%	13.4%	6.3%	.1%	100.0%

	Total	Count	323	29	772	79	118	113	246	99	3	1,782
		Row N %	18.1%	1.6%	43.3%	4.4%	6.6%	6.3%	13.8%	5.6%	.2%	100.0%

Pearson Chi-Square Tests

		What police look for at night?
Day 6 a.m. - 5:59 p.m.	Chi-square	16.182
	df	16
	Sig.	.440(a,b)
Night 6 p.m. - 5:59 a.m.	Chi-square	12.903
	df	16
	Sig.	.680(a,b)

Results are based on nonempty rows and columns in each innermost subtable.
a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.
b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table F-18. In past year, how often had an alcoholic drink? By age and day/night

			Never	Monthly or less	2 to 4 Times a Month	2 to 3 Times a week	4 or more times a week	Refused	Total
Day 6 a.m. - 5:59 p.m.	< 18 years old	Count	3	0	0	0	0	0	3
		Row N %	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	18 to 34 years old	Count	112	111	93	65	29	4	414
		Row N %	27.1%	26.8%	22.5%	15.7%	7.0%	1.0%	100.0%
	35 + years old	Count	240	190	139	108	71	12	760
		Row N %	31.6%	25.0%	18.3%	14.2%	9.3%	1.6%	100.0%
	Total	Count	355	301	232	173	100	16	1,177
		Row N %	30.2%	25.6%	19.7%	14.7%	8.5%	1.4%	100.0%
Night 6 p.m. - 5:59 a.m.	< 18 years old	Count	2	0	0	0	0	0	2
		Row N %	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	18 to 34 years old	Count	112	104	51	48	16	1	332
		Row N %	33.7%	31.3%	15.4%	14.5%	4.8%	.3%	100.0%
	35 + years old	Count	117	95	58	32	15	7	324
		Row N %	36.1%	29.3%	17.9%	9.9%	4.6%	2.2%	100.0%
	Total	Count	231	199	109	80	31	8	658
		Row N %	35.1%	30.2%	16.6%	12.2%	4.7%	1.2%	100.0%
Total	< 18 years old	Count	5	0	0	0	0	0	5
		Row N %	100.0%	.0%	.0%	.0%	.0%	.0%	100.0%
	18 to 34 years old	Count	224	215	144	113	45	5	746
		Row N %	30.0%	28.8%	19.3%	15.1%	6.0%	.7%	100.0%
	35 + years old	Count	357	285	197	140	86	19	1,084
		Row N %	32.9%	26.3%	18.2%	12.9%	7.9%	1.8%	100.0%
	Total	Count	586	500	341	253	131	24	1,835
		Row N %	31.9%	27.2%	18.6%	13.8%	7.1%	1.3%	100.0%

Pearson Chi-Square Tests

		In past year, how often have alcoholic drink?
Day 6 a.m. - 5:59 p.m.	Chi-square	14.366
	df	10
	Sig.	.157(a,b)
Night 6 p.m. - 5:59 a.m.	Chi-square	12.334
	df	10
	Sig.	.263(a,b)

Results are based on nonempty rows and columns in each innermost subtable.
a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.
b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table F-19. How many drinks have when drinking? By age and day/night

			1 or 2	3 or 4	5 or 6	7 to 9	10 or more	Refused	Total
Day 6 a.m. - 5:59 p.m.	< 18 years old	Count	0	0	0	0	0	0	0
		Row N %	.0%	.0%	.0%	.0%	.0%	.0%	.0%
	18 to 34 years old	Count	166	80	34	10	8	3	301
		Row N %	55.1%	26.6%	11.3%	3.3%	2.7%	1.0%	100.0%
	35 + years old	Count	390	83	24	4	1	15	517
		Row N %	75.4%	16.1%	4.6%	.8%	.2%	2.9%	100.0%
	Total	Count	556	163	58	14	9	18	818
		Row N %	68.0%	19.9%	7.1%	1.7%	1.1%	2.2%	100.0%
Night 6 p.m. - 5:59 a.m.	< 18 years old	Count	0	0	0	0	0	0	0
		Row N %	.0%	.0%	.0%	.0%	.0%	.0%	.0%
	18 to 34 years old	Count	89	83	29	10	7	2	220
		Row N %	40.5%	37.7%	13.2%	4.5%	3.2%	.9%	100.0%
	35 + years old	Count	136	46	12	1	1	7	203
		Row N %	67.0%	22.7%	5.9%	.5%	.5%	3.4%	100.0%
	Total	Count	225	129	41	11	8	9	423
		Row N %	53.2%	30.5%	9.7%	2.6%	1.9%	2.1%	100.0%
Total	< 18 years old	Count	0	0	0	0	0	0	0
		Row N %	.0%	.0%	.0%	.0%	.0%	.0%	.0%
	18 to 34 years old	Count	255	163	63	20	15	5	521
		Row N %	48.9%	31.3%	12.1%	3.8%	2.9%	1.0%	100.0%
	35 + years old	Count	526	129	36	5	2	22	720

		Row N %	73.1%	17.9%	5.0%	.7%	.3%	3.1%	100.0%
	Total	Count	781	292	99	25	17	27	1,241
		Row N %	62.9%	23.5%	8.0%	2.0%	1.4%	2.2%	100.0%

Pearson Chi-Square Tests

		Alcohol 2 Recode
Day 6 a.m. - 5:59 p.m.	Chi-square	54.826
	df	5
	Sig.	.000(*,a)
Night 6 p.m. - 5:59 a.m.	Chi-square	41.504
	df	5
	Sig.	.000(*,a)

Results are based on nonempty rows and columns in each innermost subtable.

* The chi-square statistic is significant at the 0.05 level.

a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

Table F-20. How often have (5 or more for males; 4 or more for females) drinks when in 2 hours? By age and day/night

			Never	Less than monthly	Monthly	Weekly	Daily or almost daily	Refused	Total
Day 6 a.m. - 5:59 p.m.	< 18 years old	Count	0	0	0	0	0	0	0
		Row N %	.0%	.0%	.0%	.0%	.0%	.0%	.0%
	18 to 34 years old	Count	152	88	41	14	3	0	298
		Row N %	51.0%	29.5%	13.8%	4.7%	1.0%	.0%	100.0%
	35 + years old	Count	356	106	29	12	0	5	508
		Row N %	70.1%	20.9%	5.7%	2.4%	.0%	1.0%	100.0%
	Total	Count	508	194	70	26	3	5	806
		Row N %	63.0%	24.1%	8.7%	3.2%	.4%	.6%	100.0%
Night 6 p.m. - 5:59 a.m.	< 18 years old	Count	0	0	0	0	0	0	0
		Row N %	.0%	.0%	.0%	.0%	.0%	.0%	.0%
	18 to 34 years old	Count	111	59	27	14	6	0	217
		Row N %	51.2%	27.2%	12.4%	6.5%	2.8%	.0%	100.0%
	35 + years old	Count	150	35	12	1	1	2	201
		Row N %	74.6%	17.4%	6.0%	.5%	.5%	1.0%	100.0%
	Total	Count	261	94	39	15	7	2	418
		Row N %	62.4%	22.5%	9.3%	3.6%	1.7%	.5%	100.0%
Total	< 18 years old	Count	0	0	0	0	0	0	0
		Row N %	.0%	.0%	.0%	.0%	.0%	.0%	.0%
	18 to 34 years old	Count	263	147	68	28	9	0	515
		Row N %	51.1%	28.5%	13.2%	5.4%	1.7%	.0%	100.0%
	35 + years old	Count	506	141	41	13	1	7	709
		Row N %	71.4%	19.9%	5.8%	1.8%	.1%	1.0%	100.0%
	Total	Count	769	288	109	41	10	7	1,224
		Row N %	62.8%	23.5%	8.9%	3.3%	.8%	.6%	100.0%

Pearson Chi-Square Tests

		Alcohol 3 Recode
Day 6 a.m. - 5:59 p.m.	Chi-square	41.934
	df	5
	Sig.	.000(*,a)
Night 6 p.m. - 5:59 a.m.	Chi-square	34.000
	df	5
	Sig.	.000(*,a,b)

Results are based on nonempty rows and columns in each innermost subtable.

* The chi-square statistic is significant at the 0.05 level.

a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table F-21. Registered owner of vehicle: 18- to 34-year-old males

			Registered Owner?		
			Yes	No	Total
Day 6 a.m. - 5:59 p.m.	18- to 34-year-old males	Count	209	56	265
		Row N %	78.9%	21.1%	100.0%
	All other respondents	Count	729	179	908
		Row N %	80.3%	19.7%	100.0%
	Total	Count	938	235	1,173
		Row N %	80.0%	20.0%	100.0%
Night 6 p.m. - 5:59 a.m.	18- to 34-year-old males	Count	176	62	238
		Row N %	73.9%	26.1%	100.0%
	All other respondents	Count	350	65	415
		Row N %	84.3%	15.7%	100.0%
	Total	Count	526	127	653
		Row N %	80.6%	19.4%	100.0%
Total	18- to 34-year-old males	Count	385	118	503
		Row N %	76.5%	23.5%	100.0%
	All other respondents	Count	1,079	244	1,323
		Row N %	81.6%	18.4%	100.0%
	Total	Count	1,464	362	1,826
		Row N %	80.2%	19.8%	100.0%

Pearson Chi-Square Tests

		Registered Owner?
Day 6 a.m. - 5:59 p.m.	Chi-square	.258
	df	1
	Sig.	.612
Night 6 p.m. - 5:59 a.m.	Chi-square	10.418
	df	1
	Sig.	.001(*)

Results are based on nonempty rows and columns in each innermost subtable.

* The chi-square statistic is significant at the 0.05 level.

Table F-22. Self-reported daytime belt use: 18- to 34-year-old males

			100%	90% to 99.99%	75% to 89.99%	50% - 74.99%	1% to 49.99%	0%	Total
Day 6 a.m. - 5:59 p.m.	18- to 34-year-old males	Count	210	23	7	9	8	3	260
		Row N %	80.8%	8.8%	2.7%	3.5%	3.1%	1.2%	100.0%
	All other respondents	Count	807	50	13	12	7	8	897
		Row N %	90.0%	5.6%	1.4%	1.3%	.8%	.9%	100.0%
	Total	Count	1,017	73	20	21	15	11	1,157
		Row N %	87.9%	6.3%	1.7%	1.8%	1.3%	1.0%	100.0%
Night 6 p.m. - 5:59 a.m.	18- to 34-year-old males	Count	205	15	7	4	3	3	237
		Row N %	86.5%	6.3%	3.0%	1.7%	1.3%	1.3%	100.0%
	All other respondents	Count	356	19	12	8	13	6	414
		Row N %	86.0%	4.6%	2.9%	1.9%	3.1%	1.4%	100.0%
	Total	Count	561	34	19	12	16	9	651
		Row N %	86.2%	5.2%	2.9%	1.8%	2.5%	1.4%	100.0%
Total	18- to 34-year-old males	Count	415	38	14	13	11	6	497
		Row N %	83.5%	7.6%	2.8%	2.6%	2.2%	1.2%	100.0%
	All other respondents	Count	1,163	69	25	20	20	14	1,311
		Row N %	88.7%	5.3%	1.9%	1.5%	1.5%	1.1%	100.0%
	Total	Count	1,578	107	39	33	31	20	1,808
		Row N %	87.3%	5.9%	2.2%	1.8%	1.7%	1.1%	100.0%

Pearson Chi-Square Tests

Day 6 a.m. - 5:59 p.m.	Chi-square	20.517
	df	5
	Sig.	.001(*,a)
Night 6 p.m. - 5:59 a.m.	Chi-square	3.119
	df	5
	Sig.	.682

Results are based on nonempty rows and columns in each innermost subtable.

* The chi-square statistic is significant at the 0.05 level.

a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

Table F-23. Self-reported nighttime belt use: 18- to 34-year-old males

			100%	90% to 99.99%	75% to 89.99%	50% - 74.99%	1% to 49.99%	0%	Total
Day 6 a.m. - 5:59 p.m.	18- to 34-year-old males	Count	219	14	7	9	6	4	259
		Row N %	84.6%	5.4%	2.7%	3.5%	2.3%	1.5%	100.0%
	All other respondents	Count	821	41	8	7	10	9	896
		Row N %	91.6%	4.6%	.9%	.8%	1.1%	1.0%	100.0%
	Total	Count	1,040	55	15	16	16	13	1,155
		Row N %	90.0%	4.8%	1.3%	1.4%	1.4%	1.1%	100.0%
Night 6 p.m. - 5:59 a.m.	18- to 34-year-old males	Count	210	10	3	5	3	4	235
		Row N %	89.4%	4.3%	1.3%	2.1%	1.3%	1.7%	100.0%
	All other respondents	Count	368	19	6	4	10	6	413
		Row N %	89.1%	4.6%	1.5%	1.0%	2.4%	1.5%	100.0%
	Total	Count	578	29	9	9	13	10	648
		Row N %	89.2%	4.5%	1.4%	1.4%	2.0%	1.5%	100.0%
Total	18- to 34-year-old males	Count	429	24	10	14	9	8	494
		Row N %	86.8%	4.9%	2.0%	2.8%	1.8%	1.6%	100.0%
	All other respondents	Count	1,189	60	14	11	20	15	1,309
		Row N %	90.8%	4.6%	1.1%	.8%	1.5%	1.1%	100.0%
	Total	Count	1,618	84	24	25	29	23	1,803
		Row N %	89.7%	4.7%	1.3%	1.4%	1.6%	1.3%	100.0%

Pearson Chi-Square Tests

Day 6 a.m. - 5:59 p.m.	Chi-square	19.609
	df	5
	Sig.	.001(*,a)
Night 6 p.m. - 5:59 a.m.	Chi-square	2.562
	df	5
	Sig.	.767(a)

Results are based on nonempty rows and columns in each innermost subtable.

* The chi-square statistic is significant at the 0.05 level.

a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

Table F-24. Self-reported reason for driving: 18- to 34-year-old males

			Work	Shopping/Errand	School	Religious activity	Visiting Friend	Medical, dental, appointment	Other family/personal	Vacation	Refused	Out to eat	Other	Total
Day 6 a.m. -5:59 p.m.	18- to 34-year-old males	Count	122	37	13	2	13	4	19	11	0	5	35	261
		Row N %	46.7%	14.2%	5.0%	.8%	5.0%	1.5%	7.3%	4.2%	.0%	1.9%	13.4%	100.0%
	All other respondents	Count	396	153	19	5	41	33	102	54	0	16	77	896
		Row N %	44.2%	17.1%	2.1%	.6%	4.6%	3.7%	11.4%	6.0%	.0%	1.8%	8.6%	100.0%
	Total	Count	518	190	32	7	54	37	121	65	0	21	112	1,157
		Row N %	44.8%	16.4%	2.8%	.6%	4.7%	3.2%	10.5%	5.6%	.0%	1.8%	9.7%	100.0%
Night 6 p.m. -5:59 a.m.	18- to 34-year-old males	Count	98	29	9	1	30	1	17	6	0	8	42	241
		Row N %	40.7%	12.0%	3.7%	.4%	12.4%	.4%	7.1%	2.5%	.0%	3.3%	17.4%	100.0%
	All other respondents	Count	176	52	10	2	37	2	29	21	1	10	75	415
		Row N %	42.4%	12.5%	2.4%	.5%	8.9%	.5%	7.0%	5.1%	.2%	2.4%	18.1%	100.0%
	Total	Count	274	81	19	3	67	3	46	27	1	18	117	656
		Row N %	41.8%	12.3%	2.9%	.5%	10.2%	.5%	7.0%	4.1%	.2%	2.7%	17.8%	100.0%
Total	18- to 34-year-old males	Count	220	66	22	3	43	5	36	17	0	13	77	502
		Row N %	43.8%	13.1%	4.4%	.6%	8.6%	1.0%	7.2%	3.4%	.0%	2.6%	15.3%	100.0%
	All other respondents	Count	572	205	29	7	78	35	131	75	1	26	152	1,311
		Row N %	43.6%	15.6%	2.2%	.5%	5.9%	2.7%	10.0%	5.7%	.1%	2.0%	11.6%	100.0%
	Total	Count	792	271	51	10	121	40	167	92	1	39	229	1,813
		Row N %	43.7%	14.9%	2.8%	.6%	6.7%	2.2%	9.2%	5.1%	.1%	2.2%	12.6%	100.0%

Pearson Chi-Square Tests

		Reason for driving today?
Day 6 a.m. - 5:59 p.m.	Chi-square	19.745
	df	9
	Sig.	.020(*)
Night 6 p.m. - 5:59 a.m.	Chi-square	6.483
	df	10
	Sig.	.773(a,b)

Results are based on nonempty rows and columns in each innermost subtable.

* The chi-square statistic is significant at the 0.05 level.

a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table F-25. Opinion of why drivers are stopped during day by police: 18- to 34-year-old males

			Speeding	Seat Belt Violation	Drunk Driving	Reckless Driving	Other	Don't Know	Refused	Total
Day 6 a.m. - 5:59 p.m.	18- to 34-year-old males	Count	215	2	3	0	26	14	0	260
		Row N %	82.7%	.8%	1.2%	.0%	10.0%	5.4%	.0%	100.0%
	All other respondents	Count	746	14	5	0	63	74	0	902
		Row N %	82.7%	1.6%	.6%	.0%	7.0%	8.2%	.0%	100.0%
	Total	Count	961	16	8	0	89	88	0	1,162
		Row N %	82.7%	1.4%	.7%	.0%	7.7%	7.6%	.0%	100.0%
Night 6 p.m. - 5:59 a.m.	18- to 34-year-old males	Count	177	11	5	0	35	12	0	240
		Row N %	73.8%	4.6%	2.1%	.0%	14.6%	5.0%	.0%	100.0%
	All other respondents	Count	310	18	5	0	62	22	1	418
		Row N %	74.2%	4.3%	1.2%	.0%	14.8%	5.3%	.2%	100.0%
	Total	Count	487	29	10	0	97	34	1	658
		Row N %	74.0%	4.4%	1.5%	.0%	14.7%	5.2%	.2%	100.0%
Total	18- to 34-year-old males	Count	392	13	8	0	61	26	0	500
		Row N %	78.4%	2.6%	1.6%	.0%	12.2%	5.2%	.0%	100.0%
	All other respondents	Count	1,056	32	10	0	125	96	1	1,320
		Row N %	80.0%	2.4%	.8%	.0%	9.5%	7.3%	.1%	100.0%
	Total	Count	1,448	45	18	0	186	122	1	1,820
		Row N %	79.6%	2.5%	1.0%	.0%	10.2%	6.7%	.1%	100.0%

Pearson Chi-Square Tests

		Why police stop driver during day?
Day 6 a.m. - 5:59 p.m.	Chi-square	6.467
	df	4
	Sig.	.167(a)
Night 6 p.m. - 5:59 a.m.	Chi-square	1.421
	df	5
	Sig.	.922(a,b)

Results are based on nonempty rows and columns in each innermost subtable.
a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.
b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table F-26. Opinion of why drivers are stopped at night by police: 18- to 34-year-old males

			Speeding	Seat Belt Violation	Drunk Driving	Reckless Driving	Other	Don't Know	Refused	Total
Day 6 a.m. - 5:59 p.m.	18- to 34-year-old males	Count	132	1	79	0	35	14	0	261
		Row N %	50.6%	.4%	30.3%	.0%	13.4%	5.4%	.0%	100.0%
	All other respondents	Count	455	3	274	0	80	87	0	899
		Row N %	50.6%	.3%	30.5%	.0%	8.9%	9.7%	.0%	100.0%
	Total	Count	587	4	353	0	115	101	0	1,160
		Row N %	50.6%	.3%	30.4%	.0%	9.9%	8.7%	.0%	100.0%
Night 6 p.m. - 5:59 a.m.	18- to 34-year-old males	Count	80	2	98	0	43	17	0	240
		Row N %	33.3%	.8%	40.8%	.0%	17.9%	7.1%	.0%	100.0%
	All other respondents	Count	163	9	152	0	62	26	2	414
		Row N %	39.4%	2.2%	36.7%	.0%	15.0%	6.3%	.5%	100.0%
	Total	Count	243	11	250	0	105	43	2	654
		Row N %	37.2%	1.7%	38.2%	.0%	16.1%	6.6%	.3%	100.0%
Total	18- to 34-year-old males	Count	212	3	177	0	78	31	0	501
		Row N %	42.3%	.6%	35.3%	.0%	15.6%	6.2%	.0%	100.0%
	All other respondents	Count	618	12	426	0	142	113	2	1,313
		Row N %	47.1%	.9%	32.4%	.0%	10.8%	8.6%	.2%	100.0%
	Total	Count	830	15	603	0	220	144	2	1,814
		Row N %	45.8%	.8%	33.2%	.0%	12.1%	7.9%	.1%	100.0%

Pearson Chi-Square Tests

		Why police stop driver during night?
Day 6 a.m. - 5:59 p.m.	Chi-square	8.492
	df	4
	Sig.	.075(a,b)
Night 6 p.m. - 5:59 a.m.	Chi-square	5.915
	df	5
	Sig.	.315(a,b)

Results are based on nonempty rows and columns in each innermost subtable.
a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.
b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table F-27. In past year, how often had an alcoholic drink? 18- to 34-year-old males

			Never	Monthly or less	2 to 4 Times a Month	2 to 3 Times a week	4 or more times a week	Refused	Total
Day 6 a.m. - 5:59 p.m.	18- to 34-year-old males	Count	75	59	55	44	23	2	258
		Row N %	29.1%	22.9%	21.3%	17.1%	8.9%	.8%	100.0%
	All other respondents	Count	275	234	173	123	75	14	894
		Row N %	30.8%	26.2%	19.4%	13.8%	8.4%	1.6%	100.0%
	Total	Count	350	293	228	167	98	16	1,152
		Row N %	30.4%	25.4%	19.8%	14.5%	8.5%	1.4%	100.0%
Night 6 p.m. - 5:59 a.m.	18- to 34-year-old males	Count	81	73	37	33	15	0	239
		Row N %	33.9%	30.5%	15.5%	13.8%	6.3%	.0%	100.0%
	All other respondents	Count	147	122	71	46	16	8	410
		Row N %	35.9%	29.8%	17.3%	11.2%	3.9%	2.0%	100.0%
	Total	Count	228	195	108	79	31	8	649
		Row N %	35.1%	30.0%	16.6%	12.2%	4.8%	1.2%	100.0%
Total	18- to 34-year-old males	Count	156	132	92	77	38	2	497
		Row N %	31.4%	26.6%	18.5%	15.5%	7.6%	.4%	100.0%
	All other respondents	Count	422	356	244	169	91	22	1,304
		Row N %	32.4%	27.3%	18.7%	13.0%	7.0%	1.7%	100.0%
	Total	Count	578	488	336	246	129	24	1,801
		Row N %	32.1%	27.1%	18.7%	13.7%	7.2%	1.3%	100.0%

Pearson Chi-Square Tests

		In past year, how often have alcoholic drink?
Day 6 a.m. - 5:59 p.m.	Chi-square	3.907
	df	5
	Sig.	.563
Night 6 p.m. - 5:59 a.m.	Chi-square	7.778
	df	5
	Sig.	.169

Results are based on nonempty rows and columns in each innermost subtable.

Table F-28. How many drinks have when drinking? 18- to 34-year-old males

			1 or 2	3 or 4	5 or 6	7 to 9	10 or more	Refused	Total
Day 6 a.m. - 5:59 p.m.	18- to 34-year-old males	Count	90	49	26	9	6	2	182
		Row N %	49.5%	26.9%	14.3%	4.9%	3.3%	1.1%	100.0%
	All other respondents	Count	451	109	32	5	3	16	616
		Row N %	73.2%	17.7%	5.2%	.8%	.5%	2.6%	100.0%
	Total	Count	541	158	58	14	9	18	798
		Row N %	67.8%	19.8%	7.3%	1.8%	1.1%	2.3%	100.0%
Night 6 p.m. - 5:59 a.m.	18- to 34-year-old males	Count	56	62	24	9	6	1	158
		Row N %	35.4%	39.2%	15.2%	5.7%	3.8%	.6%	100.0%
	All other respondents	Count	164	67	17	2	2	8	260
		Row N %	63.1%	25.8%	6.5%	.8%	.8%	3.1%	100.0%
	Total	Count	220	129	41	11	8	9	418
		Row N %	52.6%	30.9%	9.8%	2.6%	1.9%	2.2%	100.0%
Total	18- to 34-year-old males	Count	146	111	50	18	12	3	340
		Row N %	42.9%	32.6%	14.7%	5.3%	3.5%	.9%	100.0%
	All other respondents	Count	615	176	49	7	5	24	876
		Row N %	70.2%	20.1%	5.6%	.8%	.6%	2.7%	100.0%
	Total	Count	761	287	99	25	17	27	1,216
		Row N %	62.6%	23.6%	8.1%	2.1%	1.4%	2.2%	100.0%

Pearson Chi-Square Tests

		Alcohol 2 Recode
Day 6 a.m. - 5:59 p.m.	Chi-square	58.634
	df	5
	Sig.	.000(*,a)
Night 6 p.m. - 5:59 a.m.	Chi-square	44.038
	df	5
	Sig.	.000(*,a)

Results are based on nonempty rows and columns in each innermost subtable.

* The chi-square statistic is significant at the 0.05 level.

a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

Table F-29. How often have (5 or more for males; 4 or more for females) drinks in 2 hours? By age and day/night

			Never	Less than monthly	Monthly	Weekly	Daily or almost daily	Refused	Total
Day 6 a.m. - 5:59 p.m.	18- to 34-year-old males	Count	81	58	26	12	3	0	180
		Row N %	45.0%	32.2%	14.4%	6.7%	1.7%	.0%	100.0%
	All other respondents	Count	416	129	43	13	0	5	606
		Row N %	68.6%	21.3%	7.1%	2.1%	.0%	.8%	100.0%
	Total	Count	497	187	69	25	3	5	786
		Row N %	63.2%	23.8%	8.8%	3.2%	.4%	.6%	100.0%
Night 6 p.m. - 5:59 a.m.	18- to 34-year-old males	Count	81	40	19	12	5	0	157
		Row N %	51.6%	25.5%	12.1%	7.6%	3.2%	.0%	100.0%
	All other respondents	Count	177	52	19	3	2	2	255
		Row N %	69.4%	20.4%	7.5%	1.2%	.8%	.8%	100.0%
	Total	Count	258	92	38	15	7	2	412
		Row N %	62.6%	22.3%	9.2%	3.6%	1.7%	.5%	100.0%
Total	18- to 34-year-old males	Count	162	98	45	24	8	0	337
		Row N %	48.1%	29.1%	13.4%	7.1%	2.4%	.0%	100.0%
	All other respondents	Count	593	181	62	16	2	7	861
		Row N %	68.9%	21.0%	7.2%	1.9%	.2%	.8%	100.0%
	Total	Count	755	279	107	40	10	7	1,198
		Row N %	63.0%	23.3%	8.9%	3.3%	.8%	.6%	100.0%

Pearson Chi-Square Tests

		Alcohol 3 Recode
Day 6 a.m. - 5:59 p.m.	Chi-square	48.290
	df	5
	Sig.	.000(*,a,b)
Night 6 p.m. - 5:59 a.m.	Chi-square	24.020
	df	5
	Sig.	.000(*,a,b)

Results are based on nonempty rows and columns in each innermost subtable.
* The chi-square statistic is significant at the 0.05 level.
a More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.
b The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

Table F-30. What are police looking for when they patrol the road at night?: 18- to 34-year-old males

			Speeding	Seat belt violation	Drunk driving	Drugs	Reckless driving	Criminals	Other	Don't know	Refused	Total
Day 6 a.m. - 5:59 p.m.	18- to 34-year-old males	Count	49	5	120	5	13	10	33	17	0	252
		Row N %	19.4%	2.0%	47.6%	2.0%	5.2%	4.0%	13.1%	6.7%	.0%	100.0%
	All other respondents	Count	170	14	369	37	71	42	100	55	2	860
		Row N %	19.8%	1.6%	42.9%	4.3%	8.3%	4.9%	11.6%	6.4%	.2%	100.0%
	Total	Count	219	19	489	42	84	52	133	72	2	1,112
		Row N %	19.7%	1.7%	44.0%	3.8%	7.6%	4.7%	12.0%	6.5%	.2%	100.0%
Night 6 p.m. - 5:59 a.m.	18- to 34-year-old males	Count	30	6	104	15	12	27	32	8	0	234
		Row N %	12.8%	2.6%	44.4%	6.4%	5.1%	11.5%	13.7%	3.4%	.0%	100.0%
	All other respondents	Count	70	4	162	20	18	34	74	18	1	401
		Row N %	17.5%	1.0%	40.4%	5.0%	4.5%	8.5%	18.5%	4.5%	.2%	100.0%
	Total	Count	100	10	266	35	30	61	106	26	1	635
		Row N %	15.7%	1.6%	41.9%	5.5%	4.7%	9.6%	16.7%	4.1%	.2%	100.0%
Total	18- to 34-year-old males	Count	79	11	224	20	25	37	65	25	0	486
		Row N %	16.3%	2.3%	46.1%	4.1%	5.1%	7.6%	13.4%	5.1%	.0%	100.0%
	All other respondents	Count	240	18	531	57	89	76	174	73	3	1,261
		Row N %	19.0%	1.4%	42.1%	4.5%	7.1%	6.0%	13.8%	5.8%	.2%	100.0%
	Total	Count	319	29	755	77	114	113	239	98	3	1,747
		Row N %	18.3%	1.7%	43.2%	4.4%	6.5%	6.5%	13.7%	5.6%	.2%	100.0%

Pearson Chi-Square Tests

		What police look for at night?
Day 6 a.m. - 5:59 p.m.	Chi-square	7.710
	df	8
	Sig.	.462(a)
Night 6 p.m. - 5:59 a.m.	Chi-square	10.026
	df	8
	Sig.	.263(a)

Results are based on nonempty rows and columns in each innermost subtable.

a The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

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