# September 2013

Governor's Highway Safety Program Study

Prepared for Vermont Department of Public Safety

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Moreover, no information regarding these findings will be released without the written consent of an authorized representative of the Vermont Department of Public Safety.

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#### INTRODUCTION

The Center for Research & Public Policy (CRPP) is pleased to present the results of a 2013 Governor's Highway Safety Program Survey on behalf of the Vermont Department of Public Safety. The survey was conducted among licensed drivers throughout the State of Vermont. The 2013 survey replicated most of the questions held in 2010, 2011 and 2012 survey instruments.

The survey was designed to provide resident input on law enforcement, personal driving behavior and awareness of the Governor's Highway Safety Program messages.

The research study included a comprehensive telephone survey. Interviews were conducted among residents of the State of Vermont by phone. For tracking purposes, the Department of Public Safety and CRPP utilized many of the same questions posed in the 2010, 2011 and 2012 surveys. However, in 2013, three questions were slightly re-worded and six new questions were added. Where this occurs, notes regarding such adjustments / additions are included with the results.

In 2010, the Vermont Department of Health added several questions within the statewide survey instrument. These questions were continued in 2013 as well.

This report summarizes information collected from telephone surveys conducted August 16 - 30, 2013. Survey approval was received on August 14, 2013.

The survey instrument employed in the Governor's Highway Safety Program survey included the following areas for investigation:

- Perceptions of the likelihood of an arrest after drinking and driving;
- Perceptions of the likelihood of a ticket after speeding or not wearing a safety belt;
- Awareness of the age and weight requirements for children in child car seats;
- Perceived danger levels for texting while driving and use of hands-free cell phones while driving;
- Recall for messages on alcohol impaired driving, texting and driving, seat belt laws or speed enforcement;
- Frequency of driving after drinking, safety belt use during the day and at night, speeding or using cellular devices;
- Prevalence of driving under the influence of alcohol, illegal drugs or prescribed medications; and
- > Demographics.

Section II of this report discusses the Methodology used in the study, while Section III includes Highlights derived from an analysis of the quantitative research. Section IV is a Summary of Findings for the residential telephone surveys - a narrative account of the data.

Section V is an Appendix to the report which holds a copy of the survey instrument and the composite aggregate data.

#### **METHODOLOGY**

Using a quantitative research design, CRPP completed 500 interviews among licensed drivers residing in the State of Vermont.

All telephone interviews were conducted during August 16 – 30, 2013. Residents were contacted between 5:00 p.m. and 9:00 p.m. weekdays and 10:00 a.m. and 4:00 p.m. on the weekend.

Survey input was provided by the Vermont Department of Public Safety.

Survey design at CRPP is a careful, deliberative process to ensure fair, objective and balanced surveys. Staff members, with years of survey design experience, edit out any bias. Further, all scales used by CRPP (either numeric, such as one through ten, or wording such as strongly agree, somewhat agree, somewhat disagree, or strongly agree) are balanced evenly. And, placement of questions is carefully accomplished so that order has minimal impact.

All population-based surveys conducted by CRPP are proportional to population contributions within States, towns, and known census tract, group blocks and blocks. This distribution ensures truly representative results without significant under or over representation of various geographic or demographic groups within a sampling frame.

CRPP utilized a "super random digit" sampling procedure, which derives a working telephone sample of both listed and unlisted telephone numbers. This method of sample selection eliminates any bias toward only listed telephone numbers. Additionally, this process allows randomization of numbers, which equalizes the probability of qualified respondents being included in the sampling frame.

Respondents qualified for the survey if they confirmed they held a Vermont Driver's License and were at least eighteen years of age.

Survey approval was received on August 14, 2013. Training of telephone researchers and pre-test of the survey instrument occurred on August 16, 2013.

All facets of the study were completed by CRPP's senior staff and researchers. These aspects include: survey design, pre-test, computer programming, fielding, coding, editing, data entry, verification, validation and logic checks, computer analysis, analysis, and report writing.

Completion rates are a critical aspect of any telephone survey research. Because one group of people might be easier to reach than another group, it is important that concentrated efforts are made to

reach all groups to an equal degree. A high completion rate means that a high percentage of the respondents within the original sample were actually contacted, and the resulting sample is not biased toward one potential audience. CRPP maintained a 73.0% completion rate on all calls made during this Survey. And, a high completion rate, many times indicates an interest in the topic.

Statistically, a sample of 500 surveys represents a margin for error of +/-4.5% at a 95% confidence level.

In theory, a sample of Vermont licensed drivers will differ no more than  $\pm$ -4.5% than if all Vermont residents were contacted and included in the survey. That is, if random probability sampling procedures were reiterated over and over again, sample results may be expected to approximate the large population values within plus or minus 4.5% -- 95 out of 100 times.

Readers of this report should note that any survey is analogous to a snapshot in time and results are only reflective of the time period in which the survey was undertaken. Should concerted public relations or information campaigns be undertaken during or shortly after the fielding of the survey, the results contained herein may be expected to change and should be, therefore, carefully interpreted and extrapolated.

Furthermore, it is important to note that all surveys contain some component of "sampling error". Error that is attributable to systematic bias has been significantly reduced by utilizing strict random probability procedures. This sample was strictly random in that selection of each potential respondent was an independent event, based on known probabilities.

Each qualified household within the State of Vermont had an equal chance for participating in the study. Statistical random error, however, can never be eliminated but may be significantly reduced by increasing sample size.

**HIGHLIGHTS** 

#### ON ENFORCEMENT...

- ➤ Three-quarters of all respondents, 73.2%, indicated they thought it was very (23.6%) or somewhat likely (49.6%) someone impaired by alcohol or other drugs would be arrested. Another 23.2% indicated they felt an arrest would be somewhat unlikely or not at all likely.
- ➤ Just under half of all respondents, 47.0%, believe the chances of getting a ticket for not wearing a safety belt was very (15.0%) or somewhat likely (32.0%). The majority, 51.0%, suggested getting a ticket was somewhat unlikely or not at all likely.
- Further, three-quarters, 74.4%, considered it very (25.2%) or somewhat likely (49.2%) someone would get a ticket for driving over the posted speed limit.

#### ON MEDIA REACH...

- > Just over two-thirds of all respondents, 68.0%, indicated they have read, seen or heard messages about alcohol or drug impaired or drunk driving enforcement by police.
- ➤ Of this group, nearly half (49.1%) suggested they saw the messages on TV followed by the newspaper at 35.0%.
- > Slightly over half of those surveyed, 50.2%, indicated they have read, heard or seen messages about seat belt enforcement by police.
- ➤ Of this group, television was cited as the source for the messages by 48.2% followed by signs and banners and the newspaper 40.6% and 15.1% respectively.
- In a new question for 2013, researchers asked each how aware they would say they are of the age and weight requirements for children in child car seats. Nearly three-quarters, 71.0% suggested they were very or somewhat aware of the requirements.
- ➤ In a second new question for 2013, all respondents were asked if they had read, seen, or heard messages about texting and driving. A large majority, 88.6%, indicated seeing, hearing or reading messages about texting and driving.
- ➤ In a follow-up to the text message awareness question, researchers asked each respondent to use a scale of one to ten to describe how dangerous they perceived texting to be while driving. One represented very dangerous and ten meant they felt texting and driving was "not at all dangerous". The cumulative total for those

- indicating one through four (dangerous) was 95.4%. Those offering "one" (very dangerous) was 80.6% and those offering seven through ten (not at all dangerous) was 3.6%.
- ➤ On speed enforcement, just under half, 47.4%, of all respondents suggested they have read, seen or heard messages about speed enforcement being conducted by police.

#### ON PERSONAL BEHAVIOR...

- > Two-thirds of all respondents, 67.6%, indicated they have never driven a motor vehicle within two hours after drinking alcoholic beverages over the last year.

  Another 0.8% were unsure or refused and the remainder suggested they had done so once or as many as more than ten times.
- ➤ Over the years 2010 through 2012, researchers asked respondents how frequently they use their safety belts when they drive or ride in a car, van, sport utility vehicle or pick-up. In 2013, the question was split between "daytime" and "at night". Those suggesting they "always" wear their safety belt during the day was recorded at 92.2% while those indicating they "always" wear their safety belt at night was 94.4%.
- > Just 19.4% of all respondents could offer that they "never" drive faster than 35 miles per hour on a local road with a posted speed limit of 30 miles per hour.
- ➤ However, over one-half, 52.8%, suggested they "never" drive faster than 75 miles per hour on a road with a posted speed limit of 65 miles per hour.
- ➤ On using an electronic communication device such as a cell phone, tablet or pad, nearly half, 45.8%, were able to tell researchers they "never" have used such a device while driving. One quarter, 24.2%, suggested they do so frequently or occasionally.

➤ In a new question on the use of hands-free cell phones, researchers asked respondents to use a scale of one to ten to indicate how dangerous they considered hands-free device usage to be while driving. One meant very dangerous while ten mean not at all dangerous. The cumulative total for those offering one through four (dangerous) was 39.6% while those offering ratings of seven through ten was 28.4%.

- Relatively small, but important percentages of respondents said they had (over the last 30 days) driven a car or other vehicle while having had perhaps too much to drink, or when they had been using marijuana or hashish 0.8% and 1.4% respectively.
- ➤ Within the last 12 months, 1.6% and 1.8% suggested they had driven a car or other vehicle after taking prescription pain relievers (such as Percoset) or prescription medications (such as Valium), respectively.

# **SUMMARY OF FINDINGS**

Readers are reminded that the following section summarizes statistics collected from surveys among 500 residents of the State of Vermont. Results for 2010, 2011, 2012 and 2013 are presented herein.

#### **ENFORCEMENT**

Researchers asked all respondents how likely they believed the chances were of getting arrested if they drove after drinking in the state of Vermont. Each was asked if they considered the chances very likely, somewhat likely, somewhat unlikely or very unlikely.

A majority, 73.2%, believed the chances were very (23.6%) or somewhat likely (49.6%). This is up slightly from 72.8%.

The following table holds the responses as collected.

Chances are of getting arrested if driving after drinking	Percent 2010	Percent 2011	Percent 2012	Percent 2013
Very likely	27.0	25.8	22.6	23.6
Somewhat likely	48.0	49.2	50.2	49.6
Somewhat unlikely	14.4	16.6	19.4	16.8
Very unlikely	5.8	5.6	4.2	6.4
Don't know/unsure	4.8	2.6	3.6	3.6
Refused	0.0	0.2		
Total very and somewhat likely	75.0	75.0	72.8	73.2

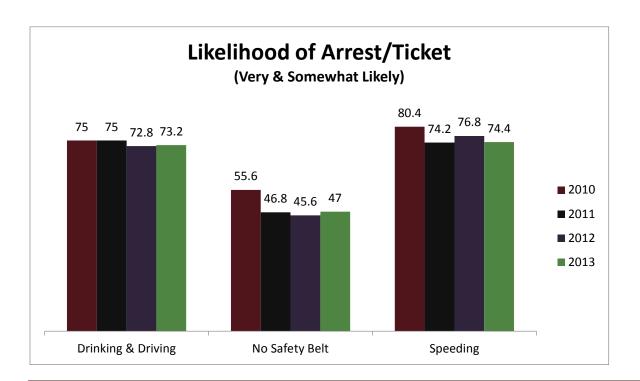
Just under half of all Vermont drivers surveyed, 47.0%, believed a ticket was very (15.0%) or somewhat likely (32.0%) for those driving without wearing a safety belt. This is up from 45.6% in 2012.

Chances are of getting a ticket when not wearing	Percent 2010	Percent 2011	Percent 2012	Percent 2013
a safety belt	2010	2011	2012	2013

Very likely	18.8	15.0	17.2	15.0
Somewhat likely	36.8	31.8	28.4	32.0
Somewhat unlikely	23.8	32.6	33.4	32.2
Very unlikely	17.4	19.2	18.6	18.8
Don't know/unsure	3.2	1.4	2.8	2.0
Total very and somewhat	55.6	46.8	45.6	47.0
likely				

Three quarters, 74.4%, suggested the chances of getting a ticket for driving over the speed limit was very (25.2%) or somewhat likely (49.2%). This is down slightly from 76.8% recorded in 2012.

Chances are of getting a ticket when speeding	Percent 2010	Percent 2011	Percent 2012	Percent 2013
Very likely	30.4	24.8	26.0	25.2
Somewhat likely	50.0	49.4	50.8	49.2
Somewhat unlikely	13.6	18.0	16.6	19.0
Very unlikely	4.2	6.8	5.0	5.0
Don't know/unsure	1.8	1.0	1.6	1.6
Total very and somewhat likely	80.4	74.2	76.8	74.4



#### MEDIA REACH

All respondents were asked if they had read, seen or heard anything about four Governor's Highway Safety Program messages.

Those suggesting they had heard messages about alcohol or drug impaired driving or drunk driving as well as seat belt law enforcement were asked to identify where they saw or heard each message.

#### **Alcohol Impaired Driving**

Over two-thirds of all respondents, 68.0%, indicated they had heard, read or seen messages about alcohol impaired driving or drunk driving enforcement by police. The percent was lower in 2010 at 60.8%, in 2011 at 56.4% and in 2012 at 66.8%.

The following table shows where aware respondents report seeing or hearing the alcohol impaired driving messages. Percentages add to more than 100% because multiple responses were allowed.

Where you saw or heard that message?	Percent 2010	Percent 2011	Percent 2012	Percent 2013
<b>セル・・</b>	4.6.1	55.0	467	40.1
Television	46.1	55.0	46.7	49.1
Newspaper	43.8	44.3	35.3	35.0
Radio	15.5	13.8	18.6	16.8
Signs / banners	8.2	5.0	12.3	14.7
Internet	2.3	2.1	6.6	4.7
Friend/relative	3.0	3.9	4.8	2.1
Personal observation on the	3.6	6.7	3.3	6.2
road / knowledge				
Employed in law enforcement	1.3	2.8	1.5	0.9
Other (schools)	5.6	2.1	1.5	1.8

#### Seat Belt Law Enforcement

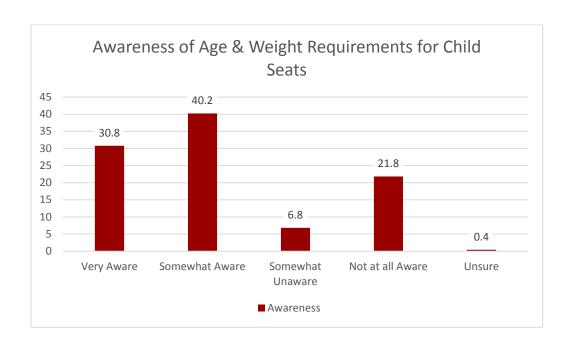
Just over half of all respondents, 50.2% suggested they had read, seen or heard messages about seat belt law enforcement by police. This percentage is down from 68.0% in 2010 and up from 42.8% and 47.8 in 2011 and 2012 respectively.

The results are depicted in the following table. Multiple responses were allowed.

Where you saw or heard that	Percent	Percent	Percent	Percent
message?	2010	2011	2012	2013
Television	57.9	51.4	45.2	48.2
Signs / banners	24.1	25.2	39.3	40.6
Radio	16.2	17.8	17.6	12.4
Newspaper	26.5	26.2	13.8	15.1
Internet	1.5	2.3	5.9	2.5
Personal observation on the road	5.9	3.7	2.5	6.1
/ knowledge				
Other	3.2	4.7	2.1	2.4
Employed in law enforcement	0.6	2.3	1.3	1.2
Friend/relative	2.4	2.8	0.1	2.0

#### **Child Car Seats**

All respondents were asked how aware they were of the age and weight requirements for children in car seats. Just under three-quarters, 71.0%, suggested they were very or somewhat aware of the requirements. The following graph depicts the results as collected.



#### **Texting and Driving**

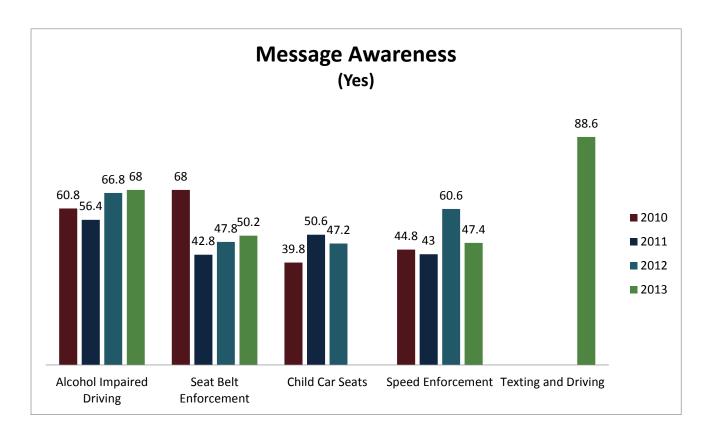
All respondents were asked if they have read, seen or heard any messages about texting and driving. A large majority, 88.6%, suggested they had. The following graph presents the results.



Researchers asked respondents to use a scale of one through ten to rate the dangers of driving while texting where one meant texting and driving was very dangerous and ten meant "not at all dangerous". The cumulative total for those offering ratings of one through four (dangerous) was 95.4%. Those offering "one" (very dangerous) was 80.6% while 3.6% indicated ten or "not at all dangerous".

#### **Speed Enforcement**

And, 47.4% of all respondents indicated they had read, heard or seen messages regarding speed enforcement recently. This is down from 60.6% in 2012 but up from 2010 (44.8%) and 2011 (43.0%).



#### PERSONAL BEHAVIOR

Researchers asked respondents how frequently, if at all, they drove a motor vehicle after drinking, without the use of safety belts during the day and at night, faster than the speed limit or while using electronic communication devices.

#### **Driving Within Two Hours of Drinking Alcohol**

Two-thirds of all respondents, 67.2%, said they never have driven within two hours of drinking alcohol over the past year. This is down from to results collected in 2010 - 75.4%, 2011 - 73.6% and 2012 - 70.8%.

Frequency of driving within two hours after drinking alcohol within the past year?	Percent 2010	Percent 2011	Percent 2012	Percent 2013
Never	75.4	73.6	70.8	67.6
Once or twice	15.2	15.6	19.4	20.2
Three or four times	3.2	3.8	3.0	7.2
Five to ten times	2.6	3.6	3.4	1.2
More than ten times	2.6	2.6	1.8	3.0
Unsure / Don't know	0.4	0.2	1.2	0.6
Refused	.06	0.6	0.4	0.2

#### Wearing Safety Belts When Driving

In 2013, researchers asked respondents how frequently they use safety belts during the day and at night. Prior to 2013, the survey only asked respondents how often they wear safety belts. The following table presents the results as collected.

Frequency of using safety belts when driving or riding?	Percent 2010	Percent 2011	Percent 2012	Percent 2013 During the Day	Percent 2013 at Night
Always	88.2	88.6	88.6	92.2	94.4
Frequently	6.2	6.2	7.4	5.0	2.6
Occasionally	2.8	1.8	1.6	1.2	1.2
Rarely	1.6	1.6	0.2	0.8	0.8
Never	1.2	1.8	2.2	0.8	1.0
Unsure / Don't know	0.0	0.0	0.0	0.0	0.0
Refused	0.0	0.0	0.0	0.0	0.0

#### Driving Faster than 35 mph in a 30 mph Zone

One fifth of all respondents, 19.4%, indicated to researchers they never drive faster than 35 miles per hour on a 30 miles per hour local road. Most others, to varying degrees, suggested they did. The following table depicts the results as collected. In 2010, 19.0% suggested they never drive faster

than 35 miles per hour on a 30 miles per hour local road. In 2011 and 2012, 18.4% and 22.0% respectively said the same.

Frequency of driving faster than 35 mph in a 30 mph zone	Percent 2010	Percent 2011	Percent 2012	Percent 2013
Most of the time	14.0	13.2	11.8	11.2
Half the time	20.0	17.6	19.6	20.6
Rarely	45.6	50.4	46.0	48.6
Never	19.0	18.4	22.0	19.4
Unsure / Don't know	1.0	0.4	0.6	0.2
Refused	0.2	0.0	0.0	0.0

#### Driving Faster than 75 mph in a 65 mph Zone

Over one half, 52.8%, suggested they never drive faster than 75 miles per hour on a road with 65 miles per hour speed limit. In 2012 and 2013, the survey tested for 75 mph while in 2010 and 2011, the survey tested for 70 mph. In 2010 and 2011, 36.4% and 35.0%, respectively, said they never drove faster than 70 miles per hour on a road posted at 65 miles per hour.

Frequency of driving faster than 70/75 mph in a 65 mph zone	Percent 2010 (at 70 mph)	Percent 2011 (at 70 mph)	Percent 2012 (at 75 mph)	Percent 2013 (at 75 mph)
Most of the time	8.2	12.0	3.4	2.0
Half the time	14.0	15.0	5.2	4.8
Rarely	40.8	37.8	33.4	40.4
Never	36.4	35.0	57.4	52.8
Unsure / Don't know	0.6	0.2	0.6	0.0
Refused	0.0	0.0	0.0	0.0

#### **Driving While Using Electronic Communications**

Just under half of all respondents, 45.8, suggested they never use an electronic communication device while driving. The remaining respondents suggested they did – at varied levels of frequency. In 2010 and 2011, 56.0% and 53.6%, respectively, suggested they never drove using an electronic communication device. In 2012 the percent was 48.6%.

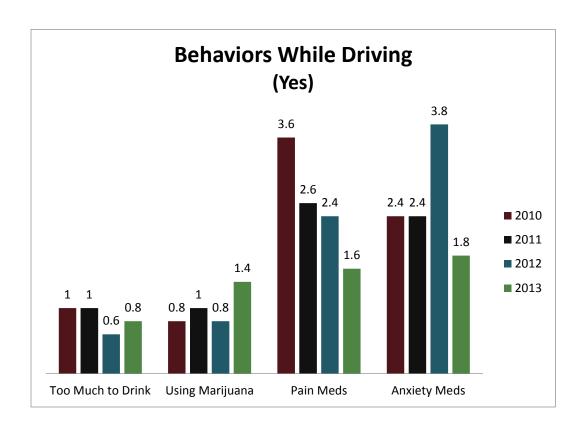
Frequency of driving while using electronic communications (added in 2013: "such as a cell phone, tablet or pad")	Percent 2010	Percent 2011	Percent 2012	Percent 2013
Frequently	5.0	5.4	6.2	5.4
Occasionally	14.0	14.6	17.2	18.8
Rarely	25.0	26.4	27.0	30.0
Never	56.0	53.6	48.6	45.8
Unsure / Don't know	0.0	0.0	0.8	0.0
Refused	0.0	0.0	0.4	0.0

All respondents were asked to report how dangerous they believed it is to drive using a hands-free cell phone. Each used a scale of one to ten where one was very dangerous and ten was not at all dangerous. The cumulative totals for those offering one through four (dangerous) was 39.6% while the cumulative totals for those offering seven through ten (not dangerous) was 28.4%. Those offering "one" (very dangerous) was 13.0% and those offering "ten" (not at all dangerous) was 6.6%.

Researchers asked all respondents if they have driven a car or other motor vehicle after drinking, using illegal drugs or prescribed medication.

Have you driven	Yes: 2010	Yes: 2011	Yes 2012	Yes 2013
after				

Having had	1.0	1.0	0.6	0.8
perhaps too much				
to drink?				
Using marijuana	0.8	1.0	0.8	1.4
or hashish?				
Taking a	3.6	2.6	2.4	1.6
prescription pain				
reliever such as				
Percoset,				
OxyContin,				
Vicodin?				
Taking	2.4	2.4	3.8	1.8
prescription				
anxiety medication				
such as Valium or				
Xanax?				



# **DEMOGRAPHICS**

Age	2010	2011	2012	2013
18 to 29	6.0	3.4	5.4	4.8
30 to 39	8.4	8.0	12.0	8.8
40 to 49	13.8	17.4	26.8	22.8
50 to 59	27.6	32.4	35.2	43.8
60 to 69	22.8	26.0	15.4	
60 to 64				10.0
65 to 69				4.8
70 or older	20.6	11.4	5.2	5.0
Refused	0.8	1.4		0.0

Education	2010	2011	2012	2013
8 <sup>th</sup> grade or less	1.2	0.2	0.4	0.2
Some high school	2.2	2.4	1.6	1.2
High school graduate or GED	27.2	27.4	21.8	20.2
Some technical school	1.4	1.0	3.2	0.8
Technical school graduate	1.0	0.8	2.0	2.0
Some college	16.4	16.8	17.0	18.6

College graduate	30.0	28.2	29.4	31.6
Post graduate	19.6	22.6	22.8	25.6
Refused	1.0	0.6	1.4	0.4

Income	2010	2011	2012	2013
Under \$15,000.00	7.0	7.4	3.4	2.8
\$15,000 to less than \$25,000	10.2	10.2	6.2	2.2
\$25,000 to less than \$35,000	9.8	9.2	7.6	7.0
\$35,000 to less than \$50,000	15.8	16.6	12.2	11.8
\$50,000 to less than \$75,000	18.0	20.8	16.0	17.8
\$75,000 to less than \$100,000	11.6	11.8	16.8	15.6
\$100,000 or more	13.0	12.8	20.4	20.8
DK/Unsure	1.4	2.8	4.4	1.8
Refused	13.2	8.4	13.0	20.2

The County you live in?	2010	2011	2012	2013
Chittenden	27.6	26.0	25.2	24.4
Rutland	10.4	10.4	7.0	11.2
Washington	7.6	9.0	6.0	10.2
Franklin	7.6	7.6	10.4	7.0
Addison	7.4	7.4	7.0	8.4
Caledonia	5.4	7.0	5.4	6.6
Windsor	2.2	7.0	4.8	8.8
Bennington	7.2	6.0	2.6	4.4
Orange	4.2	6.0	7.2	4.6
Lamoille	4.4	4.0	4.0	4.0
Windham	3.0	4.0	7.6	6.0
Orleans	4.0	3.2	11.0	3.8
Grand Isle	1.0	1.4	0.4	0.8
Essex	1.0	1.0	1.4	0.4

Gender	2010	2011	2012	2013
Male	47.4	50.0	45.6	45.2
Female	52.6	50.0	54.4	54.8

Miles Driven	2010	2011	2012	2013
Annual Average	13,574	15,165	14,790	16,290

Miles Driven	2011	2012	2013
10,000 or fewer	39.0	34.8	32.6
More than 10,000	61.0	65.2	67.4

### APPENDIX

#### INTERPRETATION OF AGGREGATE RESULTS

The computer processed data for this survey are presented in the following frequency distributions. It is important to note that the wordings of the variable labels and value labels in the computer-processed data are largely abbreviated descriptions of the Questionnaire items and available response categories.

The frequency distributions include the category or response for the question items. Responses deemed not appropriate for classification have been grouped together under the "Other" code.

The "NA" category label refers to "No Answer" or "Not Applicable." This code is also used to classify ambiguous responses. In addition, the "DK/RF" category includes those respondents who did not know their answer to a question or declined to answer it. In many of the tables, a group of responses may be tagged as "Missing" – occasionally, certain individual's responses may not be required to specific questions and thus are excluded. Although when this category of response is used, the computations of percentages are presented in two (2) ways in the frequency distributions: 1) with their inclusion (as a proportion of the total sample), and 2) their exclusion (as a proportion of a sample sub-group).

Each frequency distribution includes the absolute observed occurrence of each response (i.e. the total number of cases in each category). Immediately adjacent to the right of the column of absolute frequencies is the column of relative frequencies. These are the percentages of cases falling in each category response, including those cases designated as missing data. To the right of the relative frequency column is the adjusted frequency distribution column that contains the relative frequencies based on the legitimate (i.e. non-missing) cases. That is, the total base for the adjusted frequency distribution excludes the missing data. For many Questionnaire items, the relative frequencies and the adjusted frequencies will be nearly the same. However, some items that elicit a sizable number of missing data will produce quite substantial percentage differences between the two columns of frequencies. The careful analyst will cautiously consider both distributions.

The last column of data within the frequency distribution is the cumulative frequency distribution (Cum Freq.). This column is simply an adjusted frequency distribution of the sum of all previous categories of response and the current category of response. Its primary usefulness is to gauge some ordered or ranked meaning.