



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

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**DOT HS 806 951  
Final Report**

**December 1985**

# **Evaluation of New York State's Mandatory Occupant Restraint Law--Volume II Attitudinal Surveys of Licensed Drivers in New York State**

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1. Report No. DOT HS 806 951		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle EVALUATION OF NEW YORK STATE'S MANDATORY OCCUPANT RESTRAINT LAW -- Volume II Attitudinal Surveys of Licensed Drivers in New York State				5. Report Date December 1985	
				6. Performing Organization Code	
7. Author(s) Debra H. Rood and Patricia P. Kraichy				8. Performing Organization Report No.	
9. Performing Organization Name and Address Institute for Traffic Safety Management and Research 260 Washington Avenue Albany, New York 12210				10. Work Unit No. (TRAVIS)	
				11. Contract or Grant No. DTNH22-84-C-07467	
12. Sponsoring Agency Name and Address U.S. Department of Transportation National Highway Traffic Safety Administration 400 7th Street, S.W. Washington, D.C. 20590				13. Type of Report and Period Covered  Final	
				14. Sponsoring Agency Code	
15. Supplementary Notes					
16. Abstract  <p>This is the final report on the results of three attitudinal surveys of licensed drivers in New York State conducted as part of the evaluation of New York's Mandatory Occupant Restraint Law. The objective of the attitudinal surveys was to provide information on drivers' behaviors, attitudes, and perceptions which would help to explain any changes in actual restraint use measured in separate observational surveys. One thousand NYS drivers were contacted in each of the three telephone surveys. A baseline survey was conducted in October 1984 and post-law surveys were conducted in March 1985 and September 1985.</p> <p>The reported use of safety belts increased from 29% in October 1984 to 67% after implementation of the law, but then decreased somewhat in September 1985. In October 1984 nine out of ten drivers interviewed were aware of the Mandatory Occupant Restraint Law. After the law was in effect awareness was nearly 100%. Approximately 65% of the drivers expressed support for the law in both October 1984 and March 1985. Support increased to 71% in September 1985. Finally, the perception that enforcement of the law was strict decreased from 40% in October 1984 to 23% in September 1985. Demographic comparisons of drivers indicated that those who were least likely to buckle up were men, drivers 16 to 24 years of age, and drivers with less than a high school education.</p> <p>The results of the telephone surveys indicated that the decline in usage rates over time was related to a decrease in publicity and a low perception of the risk of enforcement, rather than a decrease in support for the law.</p>					
17. Key Words Seat Belt Use, Mandatory Occupant Restraint Law, Attitudinal Surveys, Safety Belt Usage Laws			18. Distribution Statement Document is available to the U.S. public through the National Technical Information Service, Springfield, VA 22161		
19. Security Classif. (of this report) Unclassified		20. Security Classif. (of this page) Unclassified		21. No. of Pages	22. Price

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## ACKNOWLEDGMENTS

The authors would like to thank those individuals who assisted with this project. Walter M. Ensel, Ph.D. consulted with the authors on the data analysis and the writing of the report. Ms. Jean Carubia, Ms. Jane Carman and Ms. Barbara Vorwerk assisted in the editing and preparation of the final report. Ms. Rosalie Lux and Ms. Janine Schultz provided administrative support on the project and assisted in the production of the final report.

## EXECUTIVE SUMMARY

New York State's Mandatory Occupant Restraint Law was implemented on December 1, 1984 and enforcement began on January 1, 1985. This is the final report on three telephone surveys conducted to determine the effects of the law on the behaviors, awareness, attitudes and perceptions of licensed drivers in the State. A baseline survey was conducted in October 1984 and post-law surveys were conducted in March 1985 and September 1985.

In each survey, a random sample of 1,000 licensed drivers was interviewed. A random-digit dialing technique was employed to generate the sample telephone numbers used.

The results of the three surveys are discussed in this report. Comparisons were made between the baseline survey and the first post-law survey and between the first and second post-law surveys. These comparisons are presented for the State as a whole, by region (Upstate, New York City, Long Island), and by selected demographic characteristics (sex, age, income, and education).

### STATEWIDE RESULTS

In the October 1984 baseline survey, 29 percent of the drivers said that they always wear safety belts. In the first post-law survey in March 1985, reported usage increased to 67 percent. By the second post-law survey in September 1985, reported usage, while remaining high, had decreased to 63 percent. In the post-law surveys, a large percentage of drivers said that they buckle up because of the law. However, safety was the reason given most consistently across all three surveys.

After implementation of the law, there were also increases in the proportions of children under the age of ten who were reported to use safety restraints always or most of the time (81% in October 1984, compared to 92% in March 1985 and 96% in September 1985). This was true for younger children as well as for children seven, eight and nine years of age who were not previously covered by mandatory use legislation.

Nine out of ten drivers contacted in the baseline survey were aware that New York State had passed a mandatory restraint use law. Awareness of the law was nearly 100 percent in both post-law surveys.

In all three surveys, the majority of drivers said they were in favor of the mandatory restraint use law. Approximately 65 percent of the drivers in both the baseline survey and the first post-law survey expressed support for the law. By the second post-law survey support had increased to 71 percent. The expected decrease in injuries and fatalities was the main reason given by the drivers in favor of the law in all three surveys.

Finally, the perception that enforcement of the law was strict decreased across the three surveys. Before the law took effect, 40 percent of the drivers anticipated that there would be strict enforcement. In the first post-law survey, only 27 percent of the drivers thought that the law was being strictly enforced. Even fewer drivers (23%) perceived strict enforcement in the second post-law survey.

## REGIONAL RESULTS

The results of the three surveys were further analyzed by region (Upstate, New York City, and Long Island) to identify differences among drivers living in the three major areas of New York State. Drivers in all three regions reported a large increase in usage to 67 percent between the baseline survey and the first post-law survey. In the second post-law survey, however, fewer Upstate and New York City drivers reported that they always buckle up (67% in March 1985 compared to 61% in September 1985 in both regions). Reported usage on Long Island did not change between the two post-law surveys (67%).

In all three surveys, the majority of drivers in each region were in favor of the law. The strongest support consistently came from the New York City and Long Island regions. Support in each region remained fairly consistent between the baseline survey and the first post-law survey. However, in the second post-law survey more drivers in each region said they were in favor of the law.

In the baseline survey, more than one-third of the drivers in each region anticipated that the law would be strictly enforced. However, after the law was in effect, fewer drivers in all three regions thought that strict enforcement actually was occurring (Upstate 28%, New York City 22%, Long Island 31% in March 1985). In the first post-law survey, New York City drivers were least likely to think that enforcement was strict. By the second post-law survey, however, the perceptions of enforcement among drivers in both the Upstate and Long Island regions had decreased to a level similar to that found in New York City.



#### ANALYSES BY DEMOGRAPHIC CHARACTERISTICS

Selected questions were also analyzed by the four demographic variables of sex, age, income and education. Differences within demographic groups were examined and the changes experienced over time were compared.

After the implementation of the law there were large increases in usage reported by drivers in each demographic group. The high usage rate reported by female drivers in the first post-law survey (68%) was sustained in the second post-law survey while usage among male drivers decreased (from 66% in March 1985 to 56% in September 1985). In all three surveys, women were more likely than men to report that they always wear safety belts.

In general, the large initial increases in usage reported by each of the age, income and education groups also declined somewhat over time. After the law was implemented, the oldest age group (55 years and older) had the greatest increase in the proportion of drivers who said they always buckle up and the highest usage of all age groups in both post-law surveys (76% in March 1985 and 70% in September 1985). In contrast, the youngest drivers were least likely to report compliance with the law.

Drivers with incomes of less than \$15,000 were least likely to report that they always buckle up in both the baseline survey and the first post-law survey. However, these drivers were most likely to report consistent safety belt use in the second post-law survey.

After implementation of the law, reported usage by drivers with less than a high school education differed somewhat from that of the more educated drivers. After reporting the highest usage rate in the first

post-law survey (79%), usage for this group decreased significantly in the second post-law survey (55%). In the other education groups, only small decreases in usage were reported in the second post-law survey.

In all three surveys, the majority of drivers in each demographic group were in favor of the law. Women consistently indicated greater support for the law than men. Between the two post-law surveys, there were significant increases in support among both men and women. Similarly, when the age groups were examined in the second post-law survey, there were significant increases in support within each age group of drivers, with the exception of those 25-34 years of age.

The majority of drivers in each income and education group also supported the law in all three surveys. In the second post-law survey, support tended to increase as income increased. In addition, in both post-law surveys, support for the law increased as education increased.

For all demographic groups, the perception of strict enforcement decreased over time. In each survey, women were more likely than men to think that enforcement was strict. In the two post-law surveys, drivers in the youngest and the oldest age groups were more likely to perceive that the law was being strictly enforced. In all three surveys, the perception of strict enforcement tended to decrease as income increased. Finally, in the two post-law surveys, the perception of strict enforcement decreased as education level increased.

## DISCUSSION

The three telephone surveys were conducted to provide information to help explain any changes in restraint use behavior documented in a separate series of observational surveys. The final report on the three observational surveys of restraint use concluded that a large increase in usage occurred after implementation of the law, and that the high level of usage declined over time.

The results of the telephone surveys indicated that the initial increase in restraint use was a result of the implementation of the law and the decline in use over time was related to a decrease in publicity about the law and a low perceived threat of enforcement.

The changes in usage were not related to changes in attitudes toward the law. Although the majority of drivers were in favor of the law in the pre-law period, usage rates were not affected until after the law took effect. In addition, more drivers expressed support for the law at the same time that lower usage was observed.

Changes in restraint use must be examined in conjunction with changes in casualty rates to establish the ultimate effectiveness of the law. A future study will analyze 1985 motor vehicle accident data to determine the effectiveness of the law in reducing injuries and fatalities. Since New York was the first state in the nation to implement this legislation, its experience should continue to be monitored closely.

1. INTRODUCTION

## BACKGROUND OF THE LAW

For many years New York State has been a leader in promoting the use of safety restraints as an important measure to improve highway safety. In the early 1960s, ahead of the 1966 federal mandate, New York required that all new automobiles sold in the State be equipped with safety belts.

In its 1982 report, a principal recommendation of the New York State Governor's Task Force on Alcohol and Highway Safety was the implementation of mandatory occupant restraint legislation. Mandated safety restraint use was recognized to be the most cost effective means of protecting all vehicle occupants involved in traffic accidents.

In April 1982, New York State implemented one of the strictest child restraint laws in the nation. Since that time, restraint use has been required for all children under the age of five. Children under four years of age must be restrained in federally-approved child restraint devices. The law allows for the substitution of safety belts for children between the ages of four and five. In April 1984, New York State enacted legislation that extended mandatory restraint use to children up to the age of seven and provided for the extension of the requirement to all children under ten years of age by 1987.

New York State had also begun to extend mandatory use to other categories of vehicle occupants, beginning with new drivers. In March 1983, drivers with learner permits were required to use safety restraints by the Commissioner of Motor Vehicles. Early in the 1984 New York State Legislative session, a law was passed that required new drivers with probationary licenses to buckle up beginning in September 1984.

In the early summer of 1984, this incremental approach culminated in New York becoming the first state to pass a general mandatory occupant restraint law covering adults as well as children. Since December 1, 1984, all front seat occupants and children under the age of ten, regardless of seating position, have been required to use safety restraints. Occupants of trucks over 18,000 pounds, emergency vehicles, taxis, buses, and vehicles which pre-date the safety belt installation requirement are exempted. After a one-month warning period, full enforcement of the law began. Since January 1, 1985, fines of up to fifty dollars have been imposed for violations of the law.

#### EVALUATION OF THE LAW

Both federal and state officials recognized the importance of a comprehensive evaluation of the effectiveness of the nation's first Mandatory Occupant Restraint Law. The Institute for Traffic Safety Management and Research, in cooperation with the National Highway Traffic Safety Administration and the New York State Governor's Traffic Safety Committee, developed a four-part evaluation plan that would assess the effects of the law on:

- 1) safety restraint use by front seat occupants and children under ten years of age;
- 2) behaviors, attitudes and perceptions of licensed drivers;
- 3) fatalities and injuries to occupants of vehicles involved in traffic accidents;
- 4) enforcement and convictions for violations.

## TELEPHONE SURVEYS OF NEW YORK STATE LICENSED DRIVERS

This is the final report on a series of telephone surveys which examined the effects of the Mandatory Occupant Restraint Law on licensed drivers' behaviors, attitudes and perceptions. One thousand New York State licensed drivers were contacted in each of the three telephone surveys. A baseline survey was conducted in October 1984 and post-law surveys were conducted in March 1985 and September 1985. The results of the first post-law survey were compared to those of the baseline survey to determine changes after the implementation of the law. The results of the second post-law survey were then compared to those of the first post-law survey to determine if further changes in reported behaviors, attitudes and perceptions had occurred over time.

Chapter 2 of this report describes the methodology used to select the three samples of licensed drivers and the survey procedures used. Chapters 3 and 4 present the statewide and regional results of the three surveys. Selected questions were further analyzed by the demographic characteristics of sex, age, income and education and the results are reported in Chapter 5. A final discussion of the results of the three surveys is presented in Chapter 6.

## 2. SURVEY METHODOLOGY



## SAMPLING

The sampling frame for the attitudinal surveys was the population of New York State licensed drivers. A sample of 1,000 drivers was selected in each of the three surveys. The sampling design represented the distribution of licensed drivers in New York State's sixty-two counties. In each survey, the number of licensed drivers interviewed from each county was proportional to the total number of licensed drivers in that county. Because of the small number of drivers sampled in some counties, inferences to the county level were not possible. The counties were, however, grouped into three regions:

- 1) New York City - comprised of the Bronx, Kings, New York, Queens and Richmond Counties
- 2) Long Island - comprised of Nassau and Suffolk Counties
- 3) Upstate - comprised of all the remaining counties in the State

Random-digit dialing was the sampling technique used in the three surveys. This sampling technique provides a method of generating random telephone numbers so that all households with telephones, including unlisted and newly listed numbers, have an equal and unbiased probability of inclusion in the sample.<sup>1</sup> Prior to each survey, six-digit prefixes were extracted from New York State telephone directories. A seventh "random" digit was added to each sampling prefix to generate the sample telephone numbers used (i.e. Prefix = 456-123, Random Digit 4, Sample Number = 456-1234). The six-digit sample prefixes were randomly chosen to represent urban, suburban, and rural areas within each county.

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Gerald J. Glasser and Gale D. Metzger, "Random-Digit Dialing as a Method of Telephone Sampling," Journal of Marketing Research, Vol. IX (February 1972), pp. 59-64.

Once a random number was generated, the probability sampling technique employed for this survey provided for the random selection of a licensed driver from within each household contacted. Using the "Last Birthday" selection method, the licensed driver whose birthday had most recently passed was selected from the licensed drivers residing in the randomly selected household. If the selected respondent was unavailable, up to five attempts to contact that driver were made before a substitute number was employed. This rigorous sampling procedure maximized the representativeness of all segments of the total licensed driver population and eliminated sample bias that would have occurred in a sample of convenience where callbacks were not conducted.

Based on the probability sampling design, the procedures employed, and the sample size of 1,000 respondents, the statistical sampling error associated with the findings is expected to range, in theory, +1.9% - 3.1% (95% confidence interval).

#### QUESTIONNAIRE DEVELOPMENT

The questionnaire used in the three surveys appears in Appendix A of this report. The first question was asked to confirm that the respondents were active users of private vehicles for transportation. The next three questions provided descriptive information about the vehicles used by the drivers contacted. The results of these questions and the demographic characteristics of the sample are reported in Appendix B.

Questions 5 through 7 concentrated on the use of safety restraints by drivers and their passengers. The results of Question 6 which concerned the drivers' accident experience also appear in Appendix B. In Question 8, parents with children under ten years of age were asked about their children's use of safety restraints. The age distribution of the children in each survey appears in Appendix C. Finally, Questions 9 through 12 were asked to determine awareness, attitudes and perceptions related to New York State's Mandatory Occupant Restraint Law.

#### DATA COLLECTION

All telephone interviews were conducted by experienced survey personnel. In addition, two-hour training sessions were held prior to each survey. During these training sessions the telephone interviewers were instructed in all survey procedures and provided with background information on New York's Mandatory Occupant Restraint Law. The questionnaire was carefully reviewed to assure that the interviewers understood each question.

Each survey was conducted over a two-week period. Calls were made Monday through Friday, between 5:00 p.m. and 9:00 p.m.. Supervision was provided by staff members of the Institute for Traffic Safety Management and Research.

#### CODING AND DATA ANALYSIS

The telephone interviewers were responsible for coding the data from the completed questionnaires. The data were verified prior to data entry onto computer tape and again after data entry was completed. All analyses were conducted using the SPSSX statistical software package. Where appropriate, statistical tests of significance were conducted.

3. STATEWIDE RESULTS

## INTRODUCTION

This chapter presents the results for the statewide samples of 1,000 licensed drivers contacted in the baseline survey conducted in October 1984 and the post-law surveys conducted in March 1985 and September 1985. The results are presented in four sections. The first section discusses behaviors and attitudes related to the use of safety restraints. Respondents were asked about their personal use of safety belts and whether they request their passengers to buckle up. Parents of children under ten years of age were also asked how frequently their children use safety restraints.

The next three sections of this chapter relate specifically to the Mandatory Occupant Restraint Law in New York State. Awareness of the law is assessed and then attitudes toward the law and perceptions of how strictly the law is being enforced are discussed.

The results of the baseline survey and the first post-law survey were compared to determine if changes occurred after the implementation of the law. In addition, the results of the two post-law surveys were compared to determine whether further changes occurred over time. Where appropriate, tests of significance were conducted and significance levels are reported.

## BEHAVIORS AND ATTITUDES RELATED TO THE USE OF SAFETY RESTRAINTS

### Drivers

In order to determine self-reported usage rates, the licensed drivers interviewed in each survey were asked how frequently they wear safety belts. As Table 3.1 indicates, reported usage was much higher after implementation of the mandatory restraint use law. In the March 1985 survey, 67 percent of the drivers said they always wear safety belts compared to 29 percent in October 1984. In the second post-law survey, 63

percent of the drivers reported that they always wear safety belts, indicating that usage had decreased somewhat since the first post-law survey (from 67% in March 1985 to 63% in September 1985,  $Z=2.06$ ). However, while there were fewer drivers in the second post-law survey who said they always wear safety belts, the proportions reporting that they never buckle up was the same in both post-law surveys (6%).

<u>TABLE 3.1</u>			
FREQUENCY OF SAFETY RESTRAINT USE BY DRIVERS			
In general, do you wear a safety belt...	Baseline Oct.1984 %	First Post-Law Mar.1985 %	Second Post-Law Sept.1985 %
Always	29.0	66.9	62.5
Most of the time	16.6	17.3	19.0
Sometimes	22.4	9.6	12.1
Never	32.0	6.2	6.4

Follow-up questions were asked of the drivers in each usage category. The drivers who reported wearing safety belts always or most of the time were asked further questions regarding their safety belt habits. The largest proportion of drivers who were buckling up on a regular basis before the law took effect gave safety as the reason (Table 3.2). The responses received in the first post-law survey indicated that the implementation of the law was largely responsible for the increase in licensed drivers reporting consistent use of safety belts. In the second post-law survey, over a third of the drivers again said that they buckle up because of the law. However, the largest proportion of drivers gave safety as the reason for their regular belt use.

TABLE 3.2

DRIVERS WHO USE SAFETY RESTRAINTS  
ALWAYS OR MOST OF THE TIME

	Baseline Oct.1984 N=455 %	First Post-Law Mar.1985 N=842 %	Second Post-Law Sept.1985 N=815 %
Why do you wear safety belts regularly?			
Mandatory seat belt law has passed	4.9	49.7	36.4
Safety	66.1	38.7	52.1
Habit	16.5	5.6	6.4
Greater peace of mind when driving	7.1	3.2	4.1
Part of car equipment	1.6	1.4	0.5
Other	3.8	1.4	0.5
How long have you been wearing safety belts?			
Just started	6.2	42.4	9.1
Less than a year	10.0	13.2	36.7
One to two years	17.2	8.4	12.3
Two to five years	25.0	9.2	12.9
More than five years	41.6	26.8	29.0
What influenced you to start wearing safety belts?			
Passage of mandatory seat belt law	4.5	52.1	42.6
Increased concern for personal safety	16.6	10.2	10.3
Increased awareness of effectiveness	13.0	8.9	13.7
Mass media campaigns, publicity	24.0	6.3	7.8
Relatives and/or friends	9.1	5.0	7.2
Relative/friend involved in accident	9.1	4.0	5.0
Involved in accident	7.7	4.0	4.3
Driver education class	5.7	2.8	2.7
Set example for family/friends	3.2	1.6	2.6
Other	7.1	5.1	3.8

In the baseline survey, two-thirds of the drivers who buckle up always or most of the time said that they had used safety belts on a regular basis for at least two years (Table 3.2). However, in both post-law surveys, it appeared that many drivers who said that they regularly buckle up were new safety belt users. These drivers reported that they had either just started using safety belts or had used them for less than one year (56% in March 1985 and 46% in September 1985). Finally, these drivers were asked what had influenced them to start buckling up. In both post-law surveys, the implementation of the law was mentioned most often as the reason for beginning to use safety belts on a regular basis.

In all three surveys, the most frequently given reason for wearing safety belts only some of the time was that drivers either have not formed the habit or forget to buckle up (Table 3.3). However, in the second post-law survey, the inconvenience of buckling up on short trips (27%) was mentioned as the reason for inconsistent use almost as frequently as forgetting to buckle up (30%).

<u>TABLE 3.3</u>			
REASONS WHY DRIVERS USE SAFETY RESTRAINTS ONLY <u>SOME OF THE TIME</u>			
Why do you wear safety belts only <u>some of the time</u> ?	Baseline Oct.1984 N=224 %	First Post-Law Mar.1985 N=95 %	Second Post-Law Sept.1985 N=121 %
I forget, never formed habit	35.8	40.8	30.2
Too much trouble/short distances	19.7	19.4	26.9
Too confining/uncomfortable	9.2	17.1	15.1
Opposed to law	-	6.5	4.2
Wear on long trips/bad weather	16.1	5.4	7.6
Would be trapped/safer to be thrown clear	0.9	2.2	3.4
Not required by law yet	3.7	-	-
Other	14.6	8.6	12.6



The drivers who reported that they never use safety belts were most likely to say that restraints are uncomfortable or too confining (Table 3.4). This was true both before and after use became mandatory. The frequency of this response increased over time (from 33% in October 1984 to 39% in September 1985), while these drivers mentioned forgetting to buckle up less frequently over time (from 28% in October 1984 to 17% in September 1985). In addition, between the first and second post-law surveys, there was a significant decrease in drivers who said they never buckle up because they oppose the law (19% in March 1985 compared to 6% in September 1985,  $Z=2.17$ ). Finally, in both the baseline survey and the first post-law survey, only seven percent of the nonusers said that they are afraid of being trapped in their vehicles. In the second post-law survey, only three percent of these drivers gave this response.

What is the main reason you <u>never</u> wear safety belts?	Baseline Oct.1984 N=319 %	First Post-Law Mar.1985 N=62 %	Second Post-Law Sept.1985 N=64 %
Too confining/uncomfortable	32.8	32.8	38.5
I forget, never formed habit	28.0	20.7	16.9
Too much trouble/short distances	18.3	10.3	13.8
Personal choice/opposed to law	4.2	19.0	6.2
Would be trapped/safer to be thrown clear	7.1	6.9	3.1
No good/cause injuries	3.5	5.2	4.6
Not required by law yet	1.0	-	-
Other	5.1	5.1	16.9

## Passengers

Drivers' attitudes toward restraint use by their passengers were also of interest. Three-quarters of the drivers contacted in each of the post-law surveys said that they ask passengers riding with them to use safety restraints always or most of the time, compared to 37 percent in the October 1984 baseline survey (Table 3.5). The fact that New York's law states that the driver is responsible for restraint use by front seat passengers under age sixteen and back seat passengers under age ten has probably contributed to this increase. Between the two post-law surveys there was also a significant decrease in the drivers who said that they never ask their passengers to buckle up (16% in March 1985 compared to 12% in September 1985,  $Z=2.25$ ).

<u>TABLE 3.5</u>			
FREQUENCY OF DRIVERS ASKING PASSENGERS TO USE SAFETY RESTRAINTS			
When you are the driver, do you ask your passengers to wear safety belts...	Baseline Oct.1984 %	First Post-Law Mar.1985 %	Second Post-Law Sept.1985 %
Always	21.1	60.9	58.4
Most of the time	15.6	14.6	17.3
Sometimes	18.9	8.4	11.9
Never	44.4	16.1	12.4

## Children Under Ten

New York's Mandatory Occupant Restraint Law also requires restraint use by all children under ten years of age, regardless of seating position in the vehicle. At the time of the baseline survey, restraint use was already required for all children under the age of seven, with children under the age of four required to be restrained in federally-approved child safety seats. The baseline survey in October 1984 provided usage rates, as reported by parents, for the two age groups of children (0-3 years and 4-6 years) covered by earlier legislation, as well as for children seven, eight, and nine years of age who would be covered when the new Mandatory Occupant Restraint Law took effect. The two surveys conducted in March 1985 and September 1985 again provided usage rates for these three age groups of children.

About one-quarter of the drivers contacted in each of the three surveys had children under ten years of age. The age distributions of the children in the three samples appear in Appendix C. The parents were asked the age and frequency of safety restraint use for each of their children. Safety restraint use rates for the three samples of children are presented in Table 3.6.

After implementation of the law there was a significant increase in the proportion of children under the age of ten who were reported to use safety restraints always or most of the time (from 81% in October 1984 to 92% in March 1985,  $Z=4.19$ ). Between the two post-law surveys, there was a further increase in the proportion of children reported to use safety restraints on a regular basis (to 96% in September 1985).

TABLE 3.6

FREQUENCY OF SAFETY RESTRAINT USE  
BY CHILDREN UNDER AGE TEN

RESTRAINT USE	Baseline	First	Second
	Oct.1984 N=355 %	Post-Law Mar.1985 N=384 %	Post-Law Sept.1985 N=382 %
Always	74.9	84.6	83.5
Most of the time	6.2	7.6	12.1
Sometimes	9.6	4.9	3.4
Never	9.3	2.9	1.0

Safety restraint usage rates for the three age groups of children (0-3 years, 4-6 years, and 7-9 years) are shown in Table 3.7. Comparisons among the age groups indicated that the increased usage rates reported for the total samples of children in the post-law surveys were not entirely a result of increased usage among the children who were not covered by earlier legislation. While children seven, eight and nine years of age experienced the largest increase in usage after the implementation of the law (those who were reported to always use restraints increased from 52% in October 1984 to 74% in March 1985,  $Z=3.44$ ), the extension of mandatory safety restraint use to the general population resulted in higher reported compliance rates for younger children as well. Finally, across the three surveys, the number of children in each of the three age groups who were reported to never use safety restraints decreased.

TABLE 3.7

FREQUENCY OF SAFETY RESTRAINT USE  
BY CHILDREN IN THREE AGE GROUPS

	Baseline Oct. 1984 N=133 %	First Post-Law Mar. 1985 N=146 %	Second Post-Law Sept. 1985 N=142 %
<b>0-3 YEARS</b>			
Always	94.0	93.2	95.8
Most of the time	0.0	5.5	2.8
Sometimes	1.5	0.0	1.4
Never	4.5	1.3	0.0
<b>4-6 YEARS</b>	N=115 %	N=117 %	N=119 %
Always	73.0	84.6	79.8
Most of the time	8.7	9.4	16.9
Sometimes	7.0	3.4	2.5
Never	11.3	2.6	0.8
<b>7-9 YEARS</b>	N=105 %	N=121 %	N=119 %
Always	52.4	74.4	73.9
Most of the time	11.4	8.3	17.7
Sometimes	22.9	12.3	6.7
Never	13.3	5.0	1.7

#### AWARENESS OF THE MANDATORY OCCUPANT RESTRAINT LAW

Ninety percent of the drivers contacted in the baseline survey were aware that New York State had passed a mandatory safety restraint law (Table 3.8). Awareness was nearly 100 percent in the first post-law survey and remained at that level in the second post-law survey. More than 90 percent of the drivers in each of the three surveys said that they had become aware of the law through publicity.

New York's law provides for a maximum fine of fifty dollars to be levied against violators of the safety belt law. Before the law took effect about one-third of the drivers contacted believed a mandatory fifty dollar penalty would be assessed, while the largest proportion of drivers said they did not know what the penalty would be. After the law was implemented, 86 percent of the drivers said that the penalty for non-compliance was a fine. However, 72 percent said the amount of the fine was fifty dollars. This misconception about a mandatory fifty dollar fine continued over time, with almost two-thirds of the drivers giving this same response in the second post-law survey.

After implementation of the law, there was no change in the small proportion of drivers who specifically said that the penalty was a fine of up to fifty dollars (4% in both post-law surveys). However, there was a significant increase in drivers who said that they did not know the penalty for noncompliance (from 10% in March 1985 to 15% in September 1985,  $Z=3.52$ ).

TABLE 3.8

AWARENESS OF MANDATORY OCCUPANT RESTRAINT LAW

Are you aware that New York State has passed a law requiring all drivers, front seat passengers and children under ten to use safety restraints?	Baseline Oct.1984 %	First Post-Law Mar.1985 %	Second Post-Law Sept.1985 %
Yes	89.5	99.4	99.4
No	10.5	0.6	0.6
(If yes) How did you become aware of this law?			
Publicity, news media	93.6	92.8	90.8
Friends, relatives	3.7	3.8	4.5
Other	2.7	3.4	4.7
Can you tell me what the penalty is for not complying with the law?			
Fine of <u>up to \$50</u>	5.7	3.5	3.6
\$50 fine	31.6	71.9	65.6
Fine	18.1	10.9	11.8
Ticket	2.3	3.1	2.1
Warning	3.9	0.6	1.1
Other	1.1	0.1	0.7
Don't know	37.3	9.9	15.1

ATTITUDES TOWARD THE MANDATORY OCCUPANT RESTRAINT LAW

The majority of licensed drivers in New York State were consistently supportive of the Mandatory Occupant Restraint Law across the three surveys. Prior to the implementation of the safety belt law, 64 percent of the licensed drivers interviewed indicated they were in favor of New York's passage of mandatory restraint legislation (Table 3.9). No significant change in drivers' attitudes was measured in the first survey after the law took effect. However, the results of the second post-law survey indicated that support for the law had increased to 71 percent in September 1985.

The greatest shifts in attitudes were among those drivers who were very much in favor (from 41% in March 1985 to 49% in September 1985,  $Z=3.73$ ) and very much against the law (from 14% in March 1985 to 9% in September 1985,  $Z=3.20$ ).

The reasons given by drivers for their attitudes toward the law were fairly consistent across the three surveys. The expected decrease in fatalities and injuries was the main reason given in support of the law and the main argument in opposition was that the law violates individual freedom of choice.

TABLE 3.9

ATTITUDES TOWARD MANDATORY OCCUPANT RESTRAINT LAW

How do you feel about this law? Are you...	Baseline Oct.1984 %	First Post-Law Mar.1985 %	Second Post-Law Sept.1985 %
Very much in favor	40.8	41.1	49.1
Somewhat in favor	22.8	23.6	21.6
Undecided	11.6	10.6	10.7
Somewhat against	10.8	10.9	9.2
Very much against	14.0	13.8	9.4
Why?			
Will save lives, prevent injuries	52.4	48.3	55.7
Infringes on personal freedom	21.6	25.7	19.8
Will force more people to wear them	6.7	6.6	5.3
Good to protect children, adults should have choice	8.9	6.5	8.3
Seat belts cause injuries, trap people in the car	4.0	5.3	7.6
Other	6.4	7.6	3.3



## PERCEPTION OF ENFORCEMENT OF THE MANDATORY OCCUPANT RESTRAINT LAW

Drivers' perceptions of enforcement efforts related to the safety belt law were also assessed. Before the law took effect licensed drivers were asked how strict they thought enforcement would be. The drivers contacted after the law was implemented were asked how strictly they thought the law was actually being enforced. Compared to the number anticipating strict enforcement in the baseline survey, fewer drivers felt that enforcement was strict once the law was actually in effect (40% in October 1984 compared to 27% in March 1985,  $Z=5.11$ , Table 3.10). The perception among drivers that the law was being strictly enforced continued to decrease over time, dropping to 23 percent in September 1985. In fact, almost 12 percent of the drivers contacted in the second post-law survey thought that the law was not being enforced at all.

Drivers in the two post-law surveys were also asked if they knew anyone personally who had been stopped by the police in violation of the law since enforcement began in January 1985. This question provided a further indication of the enforcement level in New York State. In the first post-law survey, 11 percent said that they knew someone who had been stopped, and in the second post-law survey, 13 percent of the drivers contacted knew someone who had been stopped. These drivers were then asked if they knew what penalty had been received. In the first post-law survey, fines and warnings were each mentioned by 27 percent of the drivers who knew someone who had been stopped by the police. In the second post-law survey, the most frequently mentioned penalty was a ticket (35%), followed by a fine (27%), and only seven percent said the penalty received was a warning. The proportion of drivers who said that no penalty was imposed did not change over time (13%).

TABLE 3.10

PERCEPTION OF ENFORCEMENT  
OF MANDATORY OCCUPANT RESTRAINT LAW

How strictly do you think the law will be/is being enforced?	Baseline Oct.1984 %	First Post-Law Mar.1985 %	Second Post-Law Sept.1985 %
Very strictly	14.6	6.3	3.3
Somewhat strictly	25.2	20.8	19.8
Not sure	26.2	36.0	34.6
Not very strictly	27.1	31.0	30.8
Not enforced at all	6.9	5.9	11.5
Do you know anyone personally who has been stopped by the police when they were not wearing a safety belt since January 1st?*			
Yes	-	11.3	12.6
No	-	88.7	87.4
(If yes) What penalty did they receive?*			
Fine	-	26.9	26.6
Warning	-	26.9	7.3
Ticket	-	14.7	34.7
Nothing	-	13.0	12.9
Other	-	0.9	-
Don't know	-	17.6	18.5

\* Questions asked in two post-law surveys only

## SUMMARY

The results of the three telephone surveys indicated that the reported use of safety belts was much higher after implementation of the mandatory restraint law, but then decreased somewhat over time. In the post-law surveys, many drivers said they buckle up because of the law. However, safety was the reason given most consistently across all three surveys.

The proportion of children who were reported to use safety restraints on a regular basis increased steadily from the baseline survey. The extension of mandatory safety restraint use to the general population resulted in higher compliance rates for younger children as well as those seven, eight and nine years of age who were not previously covered by mandatory use legislation.

In the baseline survey, nine out of ten drivers interviewed were aware of the Mandatory Occupant Restraint Law. After the law was in effect, awareness was nearly 100 percent.

Support for the law was high in both the baseline survey and the first post-law survey and increased even further in the second post-law survey. In all three surveys, the main reason given in support of the law was the expected decrease in fatalities and injuries.

Finally, licensed drivers did not perceive that the law was being as strictly enforced as was anticipated prior to its implementation. The number of drivers who thought that the law was being strictly enforced decreased even further in the second post-law survey.

#### 4. REGIONAL RESULTS

## INTRODUCTION

To determine possible differences among the licensed drivers in different areas of New York State, the results from the three surveys were further analyzed by region. The State was divided into the three regions of New York City (the Bronx, Kings, New York, Queens and Richmond Counties), Long Island (Nassau and Suffolk Counties), and Upstate (all of the remaining counties in the State). The number of drivers interviewed in each region (New York City = 264, Long Island = 196, Upstate = 540) was based on the proportion of licensed drivers residing in the counties in each of those areas of the State.

The results of the regional analyses are presented in this chapter and the differences among the three regions are discussed. In addition, regional changes over time in behavior, awareness, attitudes and perceptions are identified. Where appropriate, tests of significance were conducted and significance levels are reported.

## SAFETY RESTRAINT USAGE

### Drivers

As Table 4.1 indicates, there were large increases in reported usage among drivers in all three regions after the implementation of the Mandatory Occupant Restraint Law. In the baseline survey, less than one-third of the drivers in each region reported that they always wear safety belts, compared to the first post-law survey when two-thirds of the drivers in each region reported consistent use. However, in the second post-law survey, fewer Upstate and New York City drivers reported that they always buckle up, indicating that usage, while still high, had declined somewhat over time in these two regions (61% in September 1985 compared to 67% in March 1985 in both regions). Reported usage among Long Island drivers, however, remained at 67 percent in the second post-law survey.

TABLE 4.1

REGIONAL DIFFERENCES IN FREQUENCY  
OF SAFETY RESTRAINT USE BY DRIVERS

	Baseline Oct.1984 %	First Post-Law Mar.1985 %	Second Post-Law Sept.1985 %
UPSTATE			
Always	28.0	66.8	61.2
Most of the time	16.0	17.4	20.6
Sometimes	21.3	8.9	11.7
Never	34.7	6.9	6.5
NEW YORK CITY			
Always	33.0	67.1	61.4
Most of the time	17.4	17.0	15.2
Sometimes	23.5	9.1	17.0
Never	26.1	6.8	6.4
LONG ISLAND			
Always	26.2	66.9	67.4
Most of the time	17.4	17.3	19.9
Sometimes	24.1	12.2	6.6
Never	32.3	3.6	6.1

## Children Under Age Ten

The proportions of children in each region who were reported to use safety restraints always or most of the time were also compared over time (Table 4.2). In general, the usage reported for all children in each region increased between the baseline survey and the first post-law survey. The results of the second post-law survey indicated that the high levels of usage measured in the first post-law survey were either sustained or increased further over time. This pattern was evident in each region for both the total sample of children under ten years of age and for each of the three age groups.

Prior to implementation of the Mandatory Occupant Restraint Law, the parents contacted in each region reported that safety restraints were most likely to be used by children under four years of age (Upstate 97%, New York City 78%, Long Island 100%). The regional usage rates reported for children four to six years of age, who were also covered by mandatory restraint use legislation at the time of the baseline survey, were somewhat lower (Upstate 87%, New York City 69%, Long Island 87%). The lowest baseline usage rates were reported for children seven to nine years of age (Upstate 72%, New York City 52%, Long Island 56%).

In the first post-law survey, significant increases in usage were reported for the oldest age group of children (7 to 9 years) in each region (Upstate 89%,  $Z=7.09$ , New York City 68%,  $Z=3.75$ , Long Island 86%,  $Z=6.41$ ). At this time, the usage rates reported for this age group were higher in the Upstate and Long Island regions than in the New York City region. However, in the second post-law survey, parents in New York City reported another significant usage increase among children in the oldest age group which resulted in comparable usage rates for all three regions in September 1985 (Upstate 90%, New York City 89%, Long Island 92%).

TABLE 4.2

REGIONAL DIFFERENCES AMONG CHILDREN UNDER AGE TEN  
WHO USE SAFETY RESTRAINTS ALWAYS OR MOST OF THE TIME

	Baseline Oct.1984 %	First Post-Law Mar.1985 %	Second Post-Law Sept.1985 %
UPSTATE			
<u>Total Sample</u>	86.4	95.3	94.9
<u>Age Groups</u>			
0-3 years	97.4	100.0	97.7
4-6 years	86.7	95.9	95.6
7-9 years	71.6	88.8	90.0
NEW YORK CITY			
<u>Total Sample</u>	65.9	86.6	94.6
<u>Age Groups</u>			
0-3 years	77.8	97.7	100.0
4-6 years	68.8	91.7	96.4
7-9 years	51.7	67.7	88.9
LONG ISLAND			
<u>Total Sample</u>	85.1	90.4	97.4
<u>Age Groups</u>			
0-3 years	100.0	96.0	100.0
4-6 years	86.9	90.0	100.0
7-9 years	56.3	85.7	92.0



AWARENESS OF THE MANDATORY OCCUPANT RESTRAINT LAW

Prior to implementation, awareness of the law was at a high level in all three regions (Table 4.3). After the law took effect, awareness in all three areas of the State increased to nearly 100 percent and remained at that level in the second post-law survey.

	Baseline Oct.1984 %	First Post-Law Mar.1985 %	Second Post-Law Sept.1985 %
UPSTATE	90.7	99.8	99.4
NEW YORK CITY	89.0	99.6	99.2
LONG ISLAND	87.2	98.0	99.5

ATTITUDES TOWARD THE MANDATORY OCCUPANT RESTRAINT LAW

The majority of drivers interviewed in each region were in favor of the law prior to its implementation and no significant changes in attitude were noted in the first post-law survey (Table 4.4). However, in all three regions support for the law was even stronger in the second post-law survey. Between the two post-law surveys, there was a significant increase among those in favor of the law in the Upstate region (from 59% in March 1985 to 65% in September 1985,  $Z=2.06$ ). In addition, support for the law increased from 74 percent to 78 percent in New York City and from 69 percent to 77 percent on Long Island.

In all three surveys, support for the law was stronger in the two downstate regions of New York City and Long Island. While the proportions of drivers in each region who were undecided about the law remained fairly stable over time (ranging from 9% to 12%), the Upstate region had the largest proportion of drivers who were opposed to the law in all three surveys. However, in the Upstate region as well as on Long Island, there were significant decreases in opposition to the law between the two post-law surveys (Upstate from 31% in March 1985 to 24% in September 1985,  $Z=2.58$ ; Long Island from 21% in March 1985 to 12% in September 1985,  $Z=2.22$ ).

TABLE 4.4

REGIONAL DIFFERENCES IN ATTITUDES  
TOWARD MANDATORY OCCUPANT RESTRAINT LAW

	Baseline Oct.1984 %	First Post-Law Mar.1985 %	Second Post-Law Sept.1985 %
UPSTATE			
In favor	57.0	58.7	64.8
Undecided	12.0	10.6	11.5
Against	31.0	30.7	23.7
NEW YORK CITY			
In favor	71.9	73.9	77.9
Undecided	11.8	10.6	9.2
Against	16.3	15.5	12.9
LONG ISLAND			
In favor	70.9	68.7	77.1
Undecided	9.7	10.8	10.7
Against	19.4	20.5	12.2

PERCEPTION OF ENFORCEMENT OF THE MANDATORY OCCUPANT RESTRAINT LAW

In the baseline survey, more than one-third of the drivers in each region anticipated that the law would be strictly enforced (Table 4.5). At that time, drivers in the Upstate area were most likely to think that enforcement would be strict (43%) and New York City drivers were least likely (34%) to think that the law would be strictly enforced. In the first post-law survey, however, fewer drivers in each region thought that strict enforcement was actually occurring. Again, New York City had the smallest proportion of drivers who thought that enforcement was strict (22% in March 1985, compared to 28% Upstate and 31% on Long Island). In the Upstate and New York City regions the decreases between the baseline survey and the first post-law survey were statistically significant (Upstate,  $Z=5.11$ ; New York City,  $Z=3.11$ ).

In the second post-law survey, the perception of strict enforcement decreased even further in both the Upstate region (to 24% in September 1985) and on Long Island (to 21% in September 1985), while remaining about the same in New York City. As a result, the proportions of drivers in each region who thought that the law was being strictly enforced were similar.

TABLE 4.5

REGIONAL DIFFERENCES IN  
PERCEPTIONS OF ENFORCEMENT OF  
MANDATORY OCCUPANT RESTRAINT LAW

	Baseline Oct.1984 %	First Post-Law Mar.1985 %	Second Post-Law Sept.1985 %
UPSTATE			
Strict	43.3	28.4	23.7
Don't know	26.4	39.0	34.9
Not strict	30.3	32.6	41.4
NEW YORK CITY			
Strict	33.7	21.6	23.6
Don't know	24.9	34.5	33.5
Not strict	41.4	43.9	42.9
LONG ISLAND			
Strict	38.3	31.3	20.9
Don't know	27.5	29.7	35.2
Not strict	34.2	39.0	43.9

SUMMARY

The regional patterns in restraint use behavior, awareness, attitudes, and perceptions were consistent with those experienced statewide across the three surveys.

Reported usage in all three regions increased to the same level after implementation of the mandatory safety belt law. In the second post-law survey, however, fewer Upstate and New York City drivers reported consistent safety belt use while reported usage on Long Island did not change.

In each region, increased restraint use was reported for all children under age ten after implementation of the law. These rates were either sustained or increased further in the second post-law survey. The largest increases in usage occurred among children seven to nine years of age who were not covered by earlier mandatory use legislation. The baseline rates for all ages of children in the New York City region were substantially lower than the rates in the other two regions. By the second post-law survey, however, the usage rates reported for the New York City children in all three age groups were comparable to those reported for children in the other two regions.

In all three regions, high levels of awareness of the law were reported in the baseline survey. After implementation of the law awareness increased to nearly 100 percent across the State.

Across the three surveys, the majority of drivers in each region were in favor of the law. In all three regions, support was fairly consistent between the baseline survey and the first post-law survey, and then increased in the second post-law survey. While more drivers in the two downstate regions (New York City and Long Island) were in favor of the law in each of the surveys, the greatest increase in support over time occurred among the drivers in the Upstate region.

In the first post-law survey, drivers in all three regions did not think that the law was being enforced as strictly as anticipated before the law took effect. New York City drivers were least likely to think that enforcement was strict in both the baseline survey and the first post-law survey. In the second post-law survey, the number of drivers who thought

that the law was being strictly enforced decreased even further in the Upstate and Long Island regions. As a result, similar proportions of drivers in all three regions thought that the law was being strictly enforced in September 1985.

5. ANALYSES BY DEMOGRAPHIC CHARACTERISTICS

## INTRODUCTION

Selected questions were also analyzed by the key demographic variables of sex, age, income and education. The results were analyzed in two ways. First, the responses within each demographic group were compared in each survey to identify differences among the sex, age, income and education groups. Second, the changes experienced across the three surveys by each of the demographic groups were compared. The general patterns and exceptions to these patterns found within individual surveys, as well as over time, are noted in this chapter. Where appropriate, tests of significance were conducted and significance levels are reported.

## SAFETY RESTRAINT USE

Both men and women reported large increases in restraint use after the implementation of the law (Table 5.1). In the first post-law survey, significant and similar increases in usage were noted for both male and female drivers (men 27% in October 1984 compared to 66% in March 1985,  $Z=17.31$ ; women 31% in October 1984 compared to 68% in March 1985,  $Z=16.64$ ). In the second post-law survey, the proportion of men who reported that they always buckle up significantly decreased (to 56% in September 1985,  $Z=4.44$ ). The proportion of women, however, remained the same (67% in September 1985). Finally, in all three surveys, more women than men reported that they always wear safety belts.

Within all of the age groups there was a large initial increase in usage which declined somewhat over time. Between the baseline survey and the first post-law survey, the greatest increase in usage was reported by the oldest drivers (55 years and older, 25% in October 1984 compared to 76% in March 1985). This age group also maintained the highest reported usage over time (70% in September 1985). In contrast, drivers in the youngest



age group (16-24 years) were least likely to say that they always buckle up in both post-law surveys (61% in March 1985 and 53% in September 1985). Finally, in the second post-law survey, fewer drivers in all the age groups reported they always use safety belts. For the youngest and the two oldest age groups, these decreases were statistically significant.

After the implementation of the law, a large increase in safety belt use was also reported by all income groups. However, in the second post-law survey, usage among drivers in each income group decreased, with the exception of drivers in the lowest income group. After starting at the lowest level in the baseline survey, usage by drivers in this income group (less than \$15,000) continued to increase over time (from 62% in March 1985 to 67% in September 1985,  $Z=2.10$ ). By the second post-law survey, drivers in the lowest income group reported the highest usage (67%).

Finally, the pattern of reported use was also consistent across the education groups. Again, there were large increases in use that declined over time. In the baseline survey, drivers who had attended college were significantly more likely to have reported that they always buckle up than the drivers who were less educated. In both post-law surveys, however, it was the drivers with less than a high school education whose usage differed from that of the other two groups. When first contacted after the law was implemented, 79 percent of the drivers who had not graduated from high school reported consistent safety belt use, compared to 65 percent of the high school graduates and 66 percent of the drivers with a college education. By the second post-law survey, reported usage for drivers in the two higher education groups decreased slightly, while usage among the least educated drivers dropped significantly (from 79% in March 1985 to 55% in September 1985,  $Z=11.45$ ). Consequently, these drivers had the lowest reported usage in the second post-law survey.

TABLE 5.1

COMPARISON OF DEMOGRAPHIC CHARACTERISTICS  
OF DRIVERS WHO ALWAYS USE SAFETY RESTRAINTS

	Baseline Oct.1984 %	First Post-Law Mar.1985 %	Second Post-Law Sept.1985 %
<u>Sex</u>			
Men	27.0	65.6	55.9
Women	30.8	68.0	66.8
<u>Age</u>			
16-24 years	27.1	61.1	53.3
25-34 years	30.9	61.9	60.6
35-44 years	29.4	66.4	62.5
45-54 years	32.6	65.2	59.1
55 + years	25.1	75.9	69.6
<u>Household Income</u>			
Less than \$15,000	25.5	61.9	66.7
\$15,000-\$25,000	27.4	65.6	59.9
\$25,000-\$35,000	30.2	64.8	59.3
\$35,000-\$50,000	30.0	65.8	64.2
\$50,000 +	28.7	69.2	61.2
<u>Education</u>			
Less than high school	21.0	78.7	54.5
High school graduate	23.8	65.1	61.2
College +	33.8	66.0	64.5

## ATTITUDES TOWARD THE MANDATORY OCCUPANT RESTRAINT LAW

The demographic characteristics of the licensed drivers who indicated support for the law were also examined. In all three surveys, the majority of drivers in each demographic group were in favor of the law (Table 5.2).

In each survey, women indicated greater support for the law than men. The proportions of both men and women who were in favor of the law remained fairly consistent between the baseline survey and the first post-law survey (men 61% in October 1984 compared to 60% in March 1985; women, 66% in October 1984 compared to 68% in March 1985). However, support for the law significantly increased among both male and female drivers in the second post-law survey (men 66% in September 1985,  $Z=2.78$ ; women 74% in September,  $Z=2.61$ ).

When the age groups were compared, no consistent pattern was found between the baseline survey and the first post-law survey. Support increased significantly among the oldest drivers who were least in favor of the law in the baseline survey. At the same time, support among the drivers 45-54 years of age dropped significantly. Within the three youngest age groups, support for the law remained relatively stable between the two surveys. Between the two post-law surveys, however, there were significant increases in support within each age group of drivers, with the exception of those 25-34 years of age.

When the income groups were compared in the baseline survey, support for the law was lowest among the drivers with incomes of less than \$15,000 (57% in October 1984). Support among the drivers in this income group did not change in the first post-law survey, and of all the income groups they remained least in favor of the law. However, by the second post-law

survey, support for the law among low income drivers increased to 68 percent, which was more consistent with the levels of support in the other income groups. With the exception of drivers in the \$15,000-25,000 income group, support for the law in the second post-law survey was significantly higher than in the first post-law survey. Finally, in both post-law surveys, support for the law generally increased as income increased.

Education was also found to be a factor affecting drivers' attitudes toward the law. In the baseline survey, support for the law was comparable among the three education groups. However, in each of the two post-law surveys support generally increased as education level increased. When examining changes over time, support for the law among those drivers with less than a high school education dropped in the first post-law survey (from 66% in October 1984 to 53% in March 1985,  $Z=5.81$ ) and then increased in the second post-law survey to approximately the baseline level (64% in September 1985,  $Z=4.89$ ). Support for the law among more educated drivers increased over time and was highest in the second post-law survey.

TABLE 5.2

COMPARISON OF DEMOGRAPHIC CHARACTERISTICS  
OF DRIVERS IN FAVOR OF  
MANDATORY OCCUPANT RESTRAINT LAW

	Baseline Oct.1984 %	First Post-Law Mar.1985 %	Second Post-Law Sept.1985 %
<u>Sex</u>			
Men	61.3	60.3	66.3
Women	65.6	68.4	73.7
<u>Age</u>			
16-24 years	66.7	66.7	75.7
25-34 years	69.9	71.5	67.9
35-44 years	61.6	65.8	74.3
45-54 years	66.7	49.6	69.7
55 + years	53.6	63.8	68.0
<u>Household Income</u>			
Less than \$15,000	57.2	56.4	68.1
\$15,000-\$25,000	64.1	67.9	65.4
\$25,000-\$35,000	69.2	64.8	71.7
\$35,000-\$50,000	61.3	69.8	76.7
\$50,000 +	63.0	68.2	76.3
<u>Education</u>			
Less than high school	65.6	52.8	63.6
High school graduate	61.3	60.0	69.9
College +	65.3	69.2	72.2

## PERCEPTIONS OF ENFORCEMENT OF THE MANDATORY OCCUPANT RESTRAINT LAW

The effect of demographic characteristics on drivers' perceptions of enforcement were also analyzed. The drivers who anticipated strict enforcement in the baseline survey were compared to the drivers in the two later surveys who thought that the actual post-law enforcement was strict. The trend over time, for both men and women and for all age, income and education groups, was a decrease in the proportion of drivers who thought that enforcement was strict (Table 5.3).

In each survey, women were more likely than men to think that enforcement was strict. However, the perception of strict enforcement among both men and women decreased over time (men 35% in October 1984 compared to 20% in September 1985; women 44% in October 1984 compared to 25% in September 1985).

For all age groups, with the exception of the youngest drivers (16-24 years), the largest decrease in the perception of enforcement occurred between the baseline survey and the first post-law survey. In the first post-law survey, 41 percent of the youngest drivers (16-24 years) thought that the law was being strictly enforced compared to less than 30 percent of the drivers in each of the older age groups. In the second post-law survey, however, the proportion of young drivers who thought that enforcement was strict dropped to 28 percent. Nevertheless, in this second post-law survey the youngest age group was second only to the oldest age group in the proportion of drivers who thought that enforcement was strict (16-24 years, 28% in September 1985; 55 years and older, 30% in September 1985).

In general, the perception of strict enforcement within each income group also decreased over time. Between the baseline survey and the first post-law survey, there was a significant decrease in every income group in the number of drivers who thought that enforcement was strict. By the second post-law survey, even fewer drivers in each income group perceived strict enforcement, with the exception of the drivers earning \$15,000-\$25,000.

Furthermore, in each survey there was a general pattern among income groups which indicated that as income increased the perception of strict enforcement decreased. In the baseline survey, 53 percent of the drivers with incomes of less than \$15,000 anticipated strict enforcement, compared to 32 percent in the highest income group. In the second post-law survey, the proportion of drivers in the lowest income group who thought that the law was being strictly enforced was down to 27 percent, while the proportion of drivers at the other end of the income scale (\$50,000 or more) decreased to 19 percent.

The examination of the effect of education on drivers' perceptions of enforcement also revealed that the perception of strict enforcement within each education group decreased over time. Between the baseline survey and the first post-law survey, there were significant decreases in the number of drivers in the two more educated groups who perceived strict enforcement (high school graduates 47% in October 1984 compared to 30% in March 1985,  $Z=7.79$ ; college and above 34% in October 1984 compared to 23% in March 1985,  $Z=5.30$ ). At the same time, the perception of drivers with less than a high school education remained the same (44%).

In the second post-law survey, fewer drivers in each education group thought that the law was being strictly enforced. Finally, in both post-law surveys, the number of drivers who perceived strict enforcement decreased as the education level increased.

TABLE 5.3

COMPARISON OF DEMOGRAPHIC CHARACTERISTICS  
OF DRIVERS WHO PERCEIVE STRICT ENFORCEMENT  
OF MANDATORY OCCUPANT RESTRAINT LAW

	Baseline Oct.1984 %	First Post-Law Mar.1985 %	Second Post-Law Sept.1985 %
<u>Sex</u>			
Men	35.4	23.2	20.1
Women	43.7	30.5	25.2
<u>Age</u>			
16-24 years	43.8	40.7	28.0
25-34 years	36.8	25.6	22.0
35-44 years	34.4	19.4	17.4
45-54 years	44.2	29.1	19.8
55 + years	43.7	28.9	29.7
<u>Household Income</u>			
Less than \$15,000	53.1	32.0	27.1
\$15,000-\$25,000	42.6	22.8	28.3
\$25,000-\$35,000	37.9	23.3	20.1
\$35,000-\$50,000	36.3	28.9	16.5
\$50,000 +	31.8	22.4	19.0
<u>Education</u>			
Less than high school	44.3	43.2	33.8
High school graduate	47.0	30.0	27.5
College +	33.6	22.9	18.7



## SUMMARY

Analyses by the key demographic variables of sex, age, income, and education revealed patterns over time consistent with the findings presented in the earlier chapters.

After the implementation of the law, there were large increases in restraint use reported by all demographic groups. In general, these high levels of usage declined somewhat over time. In a few cases, however, the usage rates reported in the first post-law survey were sustained. The drivers who were least likely to always buckle up were men, drivers between 16 and 24 years of age, and drivers with less than a high school education.

The majority of drivers in each demographic group were in favor of the law in all three surveys. Support within each group of drivers did not follow a consistent pattern between the baseline survey and the first post-law survey. By the second post-law survey, however, support for the law within each group had increased. Finally, in each survey male drivers were less in favor of the law than female drivers. In addition, support generally increased as the income or the education level increased.

The perception of strict enforcement among drivers in all demographic groups decreased across the three surveys. Male drivers had a consistently lower perception of enforcement than female drivers. Drivers in the youngest and the oldest age groups were more likely to think that enforcement of the law was strict than drivers of other ages. Finally, the higher the income or the education level, the lower the perception of strict enforcement.

The series of attitudinal surveys discussed in this report were conducted as part of the comprehensive evaluation of the first-year effects of New York State's Mandatory Occupant Restraint Law. The objective of these surveys was to provide information on the behaviors, attitudes, and perceptions of licensed drivers which would help to explain any changes in actual restraint use measured in separate observational surveys of front seat occupants.

The final report on the observational surveys concluded that there was a large increase in safety restraint use after implementation of the Mandatory Occupant Restraint Law, and that the high level of use declined<sup>1</sup> over time.

The restraint use behavior reported by drivers in the telephone surveys followed the same pattern over time as that actually documented in the roadside observational surveys. After implementation of the law there was also a large increase in reported usage which decreased somewhat by the second post-law survey. From the reasons given for buckling up, it appeared that the implementation of the law was responsible for the large increase in usage that was reported in the first post-law survey. However, in the second post-law survey, usage declined at the same time that fewer drivers said that they buckle up because of the law.

While it is apparent that restraint use increased dramatically after implementation of the mandatory use law, it is also clear that the existence of the law was not enough to sustain usage at a high level. The changes in usage rates in New York State in the first year were similar to

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Debra H. Rood, Patricia P. Kraichy and Jean Carubia. Evaluation of New York State's Mandatory Occupant Restraint Law: Observational Surveys of Safety Restraint Use. Final Report (Institute for Traffic Safety Management and Research, December 1985).

those experienced by other jurisdictions. It is generally thought that the initial high rates of compliance decline as publicity decreases and the public perceives that the law is not being strictly enforced. Several findings from the telephone surveys indicated that usage rates in New York State declined for these same reasons.

In both post-law surveys, the reasons given for not buckling up were more related to drivers failing to develop the habit of safety belt use than to drivers being strongly opposed to the law. It therefore seems likely that these drivers who started buckling up when the law took effect were buckling up in response to the law and were reminded by the publicity surrounding the law's implementation. It is possible that some of these drivers became less conscientious over time as the publicity and other reminders decreased and no real threat of enforcement was perceived.

This is further reinforced by changes in the perception of enforcement that occurred over time. In the baseline survey, 40 percent of the drivers anticipated that the law would be strictly enforced. In the first post-law survey a lower level of actual enforcement was perceived, and by the second post-law survey even fewer drivers thought that the law was being strictly enforced. This further decline in the perceived threat of enforcement was reported at the same time as the decline in restraint use was observed.

Finally, the changes in usage rates were not reflected in the changes in attitudes toward the law that were expressed in the three telephone surveys. Nearly two-thirds of the drivers contacted before the law went into effect (when usage statewide was observed at 16 percent) were in favor of the law. Support for the law remained at the same level in the first post-law survey in March 1985 while usage more than tripled to 57 percent.

Although usage dropped to 46 percent in September 1985, support for the law increased to 71 percent. It is clear then that the decline in usage rates over time was not caused by an increase in the number of drivers opposed to the law.

In summary, the results of the separate series of observational surveys provided objective evidence of the positive effects of the Mandatory Occupant Restraint Law. The results of the three attitudinal surveys presented in this report provided information that helps to explain the behavioral changes that were noted in the observation surveys.

First, it is clear from the reasons given by drivers who said that they wear safety belts that the initial increase in restraint use was a result of the implementation of the law. Furthermore, although the majority of drivers were in favor of the law in the pre-law period, usage rates did not increase until after the law took effect.

Second, comparisons of attitudes and perceptions between the two post-law surveys indicated that the decline in use was related to a decrease in publicity about the law and a low perceived risk of enforcement, rather than an increase in opposition to the law.

The telephone survey results presented in this report help to explain the effect of the law on restraint use in New York State. However, observational and attitudinal studies are not enough to establish the ultimate effectiveness of the law. Usage rates must be examined in conjunction with changes in casualty rates to determine whether the Mandatory Occupant Restraint Law has achieved the goal of reducing traffic fatalities and injuries. A future study will analyze 1985 motor vehicle accident data to determine the effects of the law on injury and fatality rates. Since New York was the first state in the nation to implement this legislation, its experience should continue to be monitored closely in the coming years.

APPENDIX A

INSTITUTE FOR TRAFFIC SAFETY  
MANAGEMENT AND RESEARCH

MANDATORY SAFETY BELT USE LAW  
TELEPHONE SURVEY

Questions not asked in October 1984 are marked with an \*.

1. Approximately how many miles a year do you drive or ride in a car? (10)
- 1) less than 5,000
  - 2) between 5,000 and 10,000
  - 3) between 10,000 and 15,000
  - 4) between 15,000 and 20,000
  - 5) over 20,000
- (DON'T READ)
- 6) none (terminate interview)
  - 8) don't know
  - 9) no answer
2. What type of passenger vehicle do you travel in most of the time? Is it a... (11)
- 1) sports car
  - 2) subcompact or small car
  - 3) standard or mid-sized car (include compact)
  - 4) large or full-sized car
  - 5) van, truck, or jeep
- (DON'T READ)
- 6) other \_\_\_\_\_
  - 8) don't know
  - 9) no answer
3. What model year is that vehicle? (DON'T READ) (12)
- 1) 1967 or earlier
  - 2) 1968 to 1970
  - 3) 1971 to 1973
  - 4) 1974 to 1976
  - 5) 1977 to 1980
  - 6) 1981 or newer
  - 8) don't know
  - 9) no answer
4. Is it equipped with safety belts? (13)
- 1) yes (GO TO 4a)
  - 2) no (GO TO 5)
  - 8) don't know (GO TO 5)
  - 9) no answer
- 4a. Does it have lap belts only or a shoulder/lap combination? (14)
- 1) lap only
  - 2) shoulder/lap
  - 8) don't know
  - 9) no answer

5. When you are the driver, do you ask your passengers to wear safety belts... (15)

- 1) always
- 2) most of the time
- 3) sometimes
- 4) never

(DON'T READ)

- 6) other \_\_\_\_\_
- 8) don't know
- 9) no answer

6. Have you been involved in an accident where someone was injured within the last three years? (16)

- 1) yes (GO TO 6a)
- 2) no (GO TO 7)
- 9) no answer

6a. Did you receive an injury that required medical treatment? (17)

- 1) yes
- 2) no
- 8) don't know
- 9) no answer

6b. Were you wearing a safety belt at the time of the accident? (18)

- 1) yes
- 2) no
- 8) don't know
- 9) no answer

7. In general, do you wear a safety belt... (19)

- 1) always (GO TO SECTION 7a, NEXT PAGE)
- 2) most of the time (GO TO SECTION 7a, NEXT PAGE)
- 3) sometimes (GO TO SECTION 7b, 2 PAGES AHEAD)
- 4) never (GO TO SECTION 7c, 3 PAGES AHEAD)

(DON'T READ)

- 8) don't know
- 9) no answer

SECTION 7a

- 7a. 1. Why do you wear safety belts regularly?  
(DON'T READ: RECORD FIRST ANSWER ONLY.) (20)
- 1) habit
  - 2) protection in accident, safety
  - 3) greater peace of mind when driving or riding, security
  - 4) part of car's equipment, "because they're there"
  - 5) mandatory seat belt law has been passed
  - 6) other \_\_\_\_\_
  - 8) don't know
  - 9) no answer
- 7a. 2. How long have you been wearing safety belts?  
(DON'T READ: IF "SINCE I STARTED TO DRIVE"  
ASK: "HOW LONG WOULD THAT BE?") (21)
- 1) just started
  - 2) less than a year
  - 3) one to two years
  - 4) two to five years
  - 5) more than five years
  - 8) don't know
  - 9) no answer
- 7a. 3. What influenced you to start wearing safety belts?  
(DON'T READ: RECORD FIRST ANSWER ONLY.) (22-23)
- 01) mass media campaigns, publicity
  - 02) driver education classes
  - 03) relatives and/or friends
  - 04) involved in accident
  - 05) relative or friend involved in accident
  - 06) want to set example for family/friends
  - 07) job
  - 08) increased concern for personal safety, older, more mature
  - 09) increased awareness of effectiveness of safety belts
  - 10) passage of mandatory seat belt law
  - 11) police, stopped for not wearing safety belt
  - 12) other \_\_\_\_\_
  - 98) don't know
  - 99) no answer

SKIP SECTIONS 7b, 7c - GO TO 8, 3 PAGES AHEAD



SECTION 7b

7b. 1. Why do you wear safety belts only some of the time?  
(DON'T READ: RECORD FIRST ANSWER ONLY.)

(24-25)

- 01) I forget, never formed habit
- 02) too much trouble, in and out of car, short distances
- 03) too confining, uncomfortable, wrinkles clothes
- 04) they don't do that much good, can cause injuries
- 05) I'm a careful driver, usually drive at low speeds
- 06) opposed to new law
- 07) would be trapped (fire, water), safer to thrown clear
- 08) it's my life, I don't want to
- 09) wear on long trips, in bad weather
- 10) wear to set a good example
- 11) wear on job
- 12) other \_\_\_\_\_
- 98) don't know
- 99) no answer

SKIP 7c, GO TO 8, TWO PAGES AHEAD

SECTION 7c

7c. 1. What is the main reason you don't wear safety belts?

(26-27)

(DON'T READ: RECORD FIRST ANSWER ONLY.)

- 01) I forget, never formed habit
- 02) too much trouble, in and out of car, short distances
- 03) too confining, uncomfortable, wrinkles clothes
- 04) belts don't do that much good, can cause injuries
- 05) I'm a careful driver, drive low speeds
- 06) opposed to new law
- 07) would be trapped (fire or water), safer to be thrown clear
- 08) I don't want to, it's my life
- 09) no seat belt in car, seat belt in car is broken
- 10) other \_\_\_\_\_
- 98) don't know
- 99) no answer

GO TO 8, NEXT PAGE

8. How many children do you have under 10 years of age?

(28)

- 1) 1 (GO TO 8a)
- 2) 2 (GO TO 8aa)
- 3) 3 (GO TO 8aa)
- 4) 4 (GO TO 8aa)
- 5) 5 (GO TO 8aa)
- 6) Other \_\_\_\_\_ (GO TO 8aa)
- 7) NONE (GO TO 9, NEXT PAGE)
- 8) don't know
- 9) no answer

8a. (IF ONLY ONE CHILD):  
How old is your child? (RECORD IN BLOCK AT LEFT)

8aa. (IF MORE THAN ONE CHILD):  
Starting with your youngest child, what are the ages of each of your children under ten? (RECORD IN BLOCK AT LEFT)

INTERVIEWER USE ONLY
Child 1 _____
Child 2 _____
Child 3 _____
Child 4 _____
Child 5 _____
Child 1 _____
Child 2 _____
Child 3 _____
Child 4 _____
Child 5 _____

- 11) under 1
  - 01) 1
  - 02) 2
  - 03) 3
  - 04) 4
  - 05) 5
  - 06) 6
  - 07) 7
  - 08) 8
  - 09) 9
  - 98) don't know
  - 99) no answer
- (29-30)  
(31-32)  
(33-34)  
(35-36)  
(37-38)

8b. When travelling, is your (fill in age) year old restrained in a safety restraint... (REPEAT FOR EACH CHILD; RECORD YOUNGEST TO OLDEST IN BLOCK AT LEFT)

- 1) always
  - 2) most of the time
  - 3) sometimes
  - 4) never
  - (DON'T READ)
  - 8) don't know
  - 9) no answer
- (39)  
(40)  
(41)  
(42)  
(43)

9. Are you aware that New York State law requires all drivers, front seat passengers, and children under ten to use safety restraints when travelling in motor vehicles equipped with safety belts?

(44)

- 1) yes (GO TO 9a)
- 2) no (GO TO 10)
- 8) don't know
- 9) no answer

9a. How did you become aware of this law?  
(DON'T READ: RECORD FIRST RESPONSE ONLY)

(45-46)

- 01) publicity, news media
- 02) legislator
- 03) DMV information
- 04) driver education classes
- 05) at work
- 06) doctor
- 07) friends, relatives
- 08) other \_\_\_\_\_
- 98) don't know
- 99) no answer

9b. Can you tell me what the penalty is for not complying with the law? (DON'T READ: RECORD FIRST RESPONSE ONLY)

(47)

- 1) up to \$50 fine
- 2) \$50 fine
- 3) fine (Ask: How much?) \_\_\_\_\_
- 4) ticket
- 5) warning
- 6) nothing
- 7) other \_\_\_\_\_
- 8) don't know
- 9) no answer

10. How do you feel about this law? Would you say you are...

(48)

- 1) very much in favor
- 2) somewhat in favor
- 3) undecided
- 4) somewhat against
- 5) very much against

(DON'T READ)

9) no answer

10a. Why? (DON'T READ: RECORD FIRST RESPONSE ONLY).

(49-50)

- 01) will save lives, prevent injuries
- 02) will force more people to wear them
- 03) good to protect children, adults should have choice
- 04) infringes on personal freedom, violates rights, police state
- 05) seat belts cause injuries, trap people in car
- 06) impossible to enforce
- 07) not most effective protection, airbags should be required
- 08) other \_\_\_\_\_
- 98) don't know
- 99) no answer

11. How strictly do you think the law will be/is being enforced?

(READ RESPONSES)

(51)

- 1) very strictly
- 2) somewhat strictly
- 3) not sure
- 4) not very strictly
- 5) not enforced at all

(DON'T READ)

9) no answer

12. Do you know anyone personally who has been stopped by the police when they were not wearing a safety belt since the law has been in effect?

\*  
(52)

- |                    |                          |
|--------------------|--------------------------|
| 1) yes (GO TO 12a) | 8) don't know (GO TO 13) |
| 2) no (GO TO 13)   | 9) no answer             |

12a. What penalty did they receive? (DON'T READ)

\*  
(53)

- 1) \_\_\_\_\_ fine (PROBE: "How much?")
- 2) ticket
- 3) warning
- 4) nothing
- 5) other \_\_\_\_\_
- 8) don't know
- 9) no answer

I'd like to ask you just a few more questions for statistical purposes:

13. What age group are you in?

(54)

- 1) 16-24
- 2) 25-34
- 3) 35-44
- 4) 45-54
- 5) 55 or over
- (DON'T READ)
- 6) Refused

14. Are you currently...

(55)

- 1) married
- 2) divorced
- 3) separated
- 4) widowed
- 5) single
  
- (DON'T READ)
- 8) don't know
- 9) no answer

15. What is the highest grade of school you completed?  
(DON'T READ)

(56-57)

- 00) no formal schooling
- 01-11) grade (code exact grade)
- 12) high school graduate
- 13) college 1-3 years (including busines, technical, junior college)
- 14) college graduate
- 15) some graduate school
- 16) graduate school (M.A., M.S.W., L.L.B., Ph.D., M.D., etc.)
- 17) other, specify \_\_\_\_\_
- 98) don't know
- 99) no answer

16. What county do you currently live in?

(58-59)

---

98) don't know

99) no answer

17. In which of these groups did your total family income fall in 1983, before taxes?

(60)

1) less than \$15,000

6) \$75,000-100,000

2) \$15,000-25,000

7) over \$100,000

3) \$25,000-35,000

(DON'T READ)

4) \$35,000-50,000

8) don't know

5) \$50,000-75,000

9) no answer

18. DO NOT ASK: 1) Male

2) Female

(61)

That concludes our survey. Thank you very much for your time and participation.

TABLE B.1

COMPARISON OF DEMOGRAPHIC CHARACTERISTICS  
OF NEW YORK STATE LICENSED DRIVERS  
AND SURVEY SAMPLES

	<u>Oct.</u> 1984 <u>Sample</u>	<u>Mar.</u> 1985 <u>Sample</u>	<u>Sept.</u> 1985 <u>Sample</u>	NYS <u>Licensed</u> <u>Drivers</u>
<u>Statewide</u>	1,000	1,000	1,000	9,535,111 <sup>1</sup>
<u>Region</u>				
% Upstate	54.0	54.0	54.0	54.0 <sup>1</sup>
% New York City	26.4	26.4	26.4	26.4
% Long Island	19.6	19.6	19.6	19.6
<u>Sex</u>				
% Male	46.7	45.9	40.0	54.7 <sup>1</sup>
% Female	53.3	54.1	60.0	45.3
<u>Age</u>				
% 16-24 years	14.4	10.8	10.8	16.8 <sup>1</sup>
% 25-34 years	28.7	27.1	24.7	23.8
% 35-54 years	34.4	36.4	38.7	33.5
% 55+ years	22.5	25.7	25.8	25.9
<u>Marital Status</u>				
% Not Married	41.2	36.5	38.1	48.0 <sup>2</sup>
% Married	58.8	63.5	61.9	52.0
<u>Household Income</u>				
% Less than \$15,000	16.5	20.9	16.1	45.2 <sup>2</sup>
% \$15,000-\$25,000	30.0	24.8	26.5	25.4
% \$25,000-\$35,000	24.1	24.9	22.2	15.2
% \$35,000-\$50,000	17.1	17.2	19.7	8.9
% \$50,000 +	12.3	12.2	15.5	5.3
<u>Education</u>				
% Less than high school	6.2	8.9	7.7	31.8 <sup>2</sup>
% High school graduate	40.2	35.2	36.4	35.0
% Some college	23.8	23.2	23.7	16.9
% College graduate	19.6	22.2	22.7	8.2
% Graduate school +	10.2	10.5	9.5	8.1

<sup>1</sup>Information based on drivers licenses in force in 1983; NYS Department of Motor Vehicles, Division of Data Processing Driver Related Systems.

<sup>2</sup>Information based on total adult population; NYS Department of Commerce, New York State Data Center, 1980 Census of Population Characteristics of People and Housing.



TABLE B.2

VEHICLE CHARACTERISTICS

	Baseline Oct.1984 %	First Post-Law Mar.1985 %	Second Post-Law Sept.1985 %
What type of passenger vehicle do you travel in most of the time?			
Sports car	5.7	6.1	5.1
Subcompact or small	23.8	21.7	20.8
Standard or mid-sized	44.5	40.6	45.4
Large or full-sized	19.7	23.4	22.3
Van, truck or jeep	6.3	8.2	6.4
 What model year is that vehicle?			
1967 or earlier	1.2	1.1	1.0
1968 to 1970	1.9	3.1	1.4
1971 to 1973	7.4	9.1	6.1
1974 to 1976	16.2	12.9	11.2
1977 to 1980	35.2	35.3	32.5
1981 or newer	38.1	38.5	47.8
 Is it equipped with safety belts?			
Yes	99.4	99.5	99.6
No	0.6	0.5	0.4
 (If yes) Does it have lap belts or a shoulder/lap combination?			
Shoulder/lap	89.9	93.0	94.6
Lap only	10.1	7.0	5.4

TABLE B.3

EXPOSURE

Approximately how many miles a year do you drive or ride in a car?	Baseline	First	Second
	Oct.1984	Post-Law Mar.1985	Post-Law Sept.1985
	%	%	%
Less than 5,000 miles	25.4	29.6	27.5
5,000 to 10,000 miles	34.8	30.2	33.5
10,000 to 15,000 miles	21.2	23.9	21.8
15,000 to 20,000 miles	9.6	7.4	8.3
Over 20,000 miles	9.0	8.9	8.9

TABLE B.4

ACCIDENT EXPERIENCE

Have you been involved in an accident where someone was injured within the last three years?	Baseline	First	Second
	Oct.1984	Post-Law Mar.1985	Post-Law Sept.1985
	%	%	%
Yes	5.6	4.5	6.5
No	94.4	95.5	93.5
 (If yes) Did you receive an injury that required medical treatment?			
	N=52	N=44	N=60
	%	%	%
Yes	51.9	47.2	58.3
No	48.1	52.8	41.7
 Were you wearing a safety belt at the time of the accident?			
Yes	29.4	41.9	48.3
No	70.6	58.1	51.7

TABLE C.1

AGE DISTRIBUTION OF CHILDREN  
UNDER TEN YEARS

	Baseline Oct.1984 N=357 %	First Post-Law Mar.1985 N=384 %	Second Post-Law Sept.1985 N=382 %
Less than 1 year	8.7	7.0	10.5
1 year	8.4	10.2	7.3
2 years	9.0	10.2	10.5
3 years	11.5	10.7	8.9
4 years	10.3	9.1	9.9
5 years	11.8	13.2	9.9
6 years	10.3	8.1	11.3
7 years	10.1	10.9	9.9
8 years	9.8	8.6	12.6
9 years	10.1	12.0	9.2