National Survey of and Other



VOLUME I: Methodology

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SAMPLE DESIGN

The survey was conducted by telephone by the national survey research organization of Schulman, Ronca & Bucuvalas, Inc (SRBI). A national household sample was constructed using random digit dialing. Each household was screened to determine the number of adult (age 16 or older) drivers in the household. One eligible driver was systematically selected in each eligible household by the interviewers, using computer-assisted telephone interviewing (CATI) to reduce interview length and minimize recording errors. A Spanish-language translation and bilingual interviewers were used to minimize language barriers to participation. The survey was conducted between February 20 and April 11, 1997. The telephone interviews averaged 30 minutes in length. A total of 6,000 interviews were completed with a participation rate of 73.5 percent.

Since this was the first national survey of speeding and unsafe driving practices the number of issues to be covered was extensive. In order to accommodate the number of questions required without unduly burdening the public, two versions of the questionnaire were developed. One questionnaire (Version 1) focused primarily on speeding issues. The other questionnaire (Version 2) focused primarily on other forms of unsafe driving. Each version was fielded as an independent national sample, constructed in an identical fashion. Hence, for some questions we have national estimates based on sample sizes of 3,000, while estimates for core questions about speeding and unsafe driving behavior, as well as driver and driving characteristics shared by both versions, are based on sample sizes of 6,000.

Unweighted Size of Sample Components								
	Split-Half							
	А	В	i otai					
Version 1 - Speeding	1,489	1,511	3,000					
Version 2 - Unsafe Driving	1,467	1,533	3,000					
Total 2,956 3,044 6,000								

TABLE 1

In addition to these component sample sizes, in a few instances a specific question was asked of a cross sample. That is, Version 1, Split A together with Version 2, Split B for an unweighted sample size of 3,022. The complement would be 2,978 which is made up of Version 1, Split B together with Version 2, Split A (see Table 1).

SAMPLE CONSTRUCTION

Most of the statistical formulas associated with sampling theories are based upon the assumption of simple random sampling. Specifically, the statistical formulas for specifying the sampling precision (estimates of sampling variance), given particular sample sizes, are premised on simple random sampling. Unfortunately, random sampling requires that all of the elements in the population have an equal chance of being selected. Since no enumeration of the total population of the United States (or its subdivisions) is available, all surveys of the general public are based upon an approximation of the actual population and survey samples are generated by a process closely resembling true random sampling.

The survey sample was based on a modified stratified random digit dialing method (RDD), using an area probability/RDD sample rather than a single-stage/RDD sample. There are several important advantages to using an area probability base: (1) it draws the sample proportionate to the geographic distribution of the target population rather than the geographic distribution of telephone households, which is vital to constructing unbiased population estimates from telephone surveys; (2) it allows greater geographic stratification of the sample to control for known geographic differences in non-response rates; and (3) it facilitates the use of Census estimates of population characteristics to weight the completed sample to correct for other forms of sampling bias. Moreover, the precision of sample estimates is generally improved by stratification.

Hence, as specified for the study design for the survey, the adult household population of the United States was stratified by the 10 NHTSA regions. The estimated distribution of the population by stratum was calculated on the basis of the Bureau of the Census, <u>Resident Population of the United States</u>, <u>Regions and States by Selected Age Groups</u> and <u>Sex: April 1, 1990 Census and July 1, 1990 to July 1, 1995 Estimates</u> (release date, August 1996). At the time of the survey, these were the most recent projections of the distribution of adult population by state. Based on these Census data on the geographic distribution of the target population, the total sample was proportionately allocated by stratum. The geographic allocation of the cross-sectional sample for the survey is presented in Table 2 (next page).

Once the sample had been geographically stratified with sample allocation proportionate to population distribution, a sample of assigned telephone banks were randomly selected from an enumeration of the Working Residential Hundred Blocks of the active telephone exchanges within the region. The Working Hundreds Blocks were defined as each block of 100 potential telephone numbers within an exchange that included 3 or more residential listings. (Exchanges with one or two listings were excluded because in most cases such listings represent errors in the published listings).

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Population Aged 16 and Over by NHTSA Region									
	States Covered	Populat	Sample Size						
Region	States Covered	Number Percent							
	Total U.S.	266,043,000	100.0%	6,000					
l	CT, ME, MA, NH, RI, VT	13,194,000	5.0	297					
11	NJ, NY	26,113,000	9.8	589					
111	DE, DC, MD, PA, VA, WV	27,140,000	10.2	612					
IV	AL, FL, GA, KY, MS, NC, SC, TN	48,851,000	18.4	1,102					
V	IL, IN, MI, MN, OH, WS	48,542,000	18.2	1,095					
VI	AR, LA, NM, OK, TX	30,761,000	11.6	694					
VII	IA, KS, MO, NE	12,478,000	4.7	281					
VIII	CO, MT, ND, SD, UT, WY	8,521,000	3.2	192					
IX	AZ, CA, HI, NV	39,799,000	15.0	898					
Х	AK, ID, OR, WA	10,644,000	4.0	240					

TABLE 2

Total does not add to 100% due to rounding.

Source: <u>Population Projections for States, by Age, Sex, Race, and Hispanic Origin: 1993 to 2020 (Current</u> <u>Population Reports, P25-1111)</u>, U.S. Bureau of the Census

The total driving population (see Table 3) was estimated using data from the Bureau of the Census' (U.S. Population Estimates by Age, Sex, Race and Hispanic Origin: 1990 to 1997), and 1996 Motor Vehicle Occupant Safety Survey. The single-year-of-age population estimates for November 1997 were aggregated to the categories used in the current study and then multiplied by the proportion of each age cohort who reported driving in the 1996 study. It should be kept in mind that this is an estimate of the driving population rather than the result of an enumeration of the population.

Estimate of the Total Population of Drivers by Age								
Age Total Population* % Who Drive# Total Drive								
16-20	19,069,000	81%	15,394,000					
21-24	13,785,000	90%	12,426,000					
25-34	35,813,000	94%	33,629,000					
35-44	44,124,000	96%	42,229,000					
45-54	33,948,000	96%	32,558,000					
55-64	22,035,000	94%	20,754,000					
65+	34,155,000	88%	29,999,000					

Table 3

* <u>U.S. Population Estimates by Age, Sex, Race and Hispanic Origin: 1990 to 1997</u>, for November 1997, as reported at the United States Bureau of the Census Web Site at <<u>http://www.census.gov/population/estimates/nation/natdoc_rl.txt></u>. # <u>1996 Motor Vehicle Occupant Safety Survey</u>, National Highway Traffic Safety Administration

The use of residential listings to identify working residential exchanges is generally described as "listed-assisted" or "truncated" RDD sampling. In a series of empirical studies, Brick, et. al. demonstrated that only about four percent of all telephone households are excluded in national samples using this method. In addition, these studies indicate that the differences between covered and uncovered samples are trivial in most instances, although no direct study of the relationship between driving and having a telephone at home has been made. The principal advantage of "list assisted" sampling is that an equal probability systematic sample of telephone numbers can be selected under this procedure and the variances of estimates from the list-assisted sample are usually lower than those from a clustered design like the Mitovsky-Waksberg RDD method.

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In the third stage sample, a two-digit number was randomly generated by computer for

each Working Residential Hundreds Block selected in the second stage sample. This third stage sampling process is the random digit dialing (RDD) component. Every telephone number within the Hundreds Block has an equal probability of selection, regardless of whether it is listed or unlisted.

The use of RDD sampling eliminates the otherwise serious problem of unlisted telephone numbers. Nationwide, approximately 20% of all phone subscribers have unlisted phones. Moreover, significant variation occurs among demographic groups, with the number of unlisted phones reaching a high of 26% in the West, 29% in large metropolitan areas, 25% among those earning \$5,000-\$10,000, and 32% among nonwhites.

The third stage RDD sample of telephone numbers was then dialed by SRBI interviewers to determine which were currently working residential household phone numbers. Non-working numbers and non-residential numbers were immediately replaced by other RDD numbers selected within the same stratum in the same fashion as the initial number. Ineligible households (e.g., no adult in the household, language barriers) were also immediately replaced. Non-answering numbers were not replaced until the research protocol (in this study, a five-call protocol) was exceeded. However, one or more open numbers per case (e.g., for ever case yet to be completed, there may be one or more numbers in working categories such as no answer, callback, etc.,) may have been permitted in order to permit the replicate to be completed within a reasonable period.

SCREENING TO DETERMINE HOUSEHOLD ELIGIBILITY

The sample construction process yielded a population-based, random-digit dialing sample of telephone numbers. The systematic dialing of those numbers to obtain a residential contact yielded an unbiased sample of telephone households. The next step was to select eligible households within the total sample of working numbers.

An adult respondent at each number drawn into the sampling frame was contacted about the composition of the household. Telephone numbers that yielded non-residential contacts such as businesses, churches, and college dormitories, were screened out. Only households, i.e., residences at which any number of related individuals or no more than five unrelated persons living together, were eligible for inclusion in the sample. This minimal screening was only to ascertain that the sample of telephone numbers reached by interviewers are residential households.

SELECTION OF RESPONDENT WITHIN HOUSEHOLD

The multi-stage sampling process described in the previous sections yielded an unbiased national sample of households with telephones, drawn proportionate to the population distribution. The final stage required the selection of one respondent per household for the interview.

A systematic selection procedure was used to select one designated respondent for each household sampled. The "most recent/next birthday method" was used for within household selection among multiple eligibles. The Within Household Selection Procedure is presented in Figure 1. The CATI system alternated the "most recent" and "next" birthday specification for the selected respondent to avoid a temporal bias for birthdays before (or after) the field period.

FIGURE 1
Within Household Selection Procedure: Adult Cross-Section
TIME START: TIME END: DATE: BATCH #: CATI RESP. #: SAMPLE POINT #: GENDER OF RESP.: MALE [] FEMALE [] RESP PHONE NUMBER: RESP POSITION IN HOUSEHOLD:
INTERVIEWER NAME:
 INTRODUCTION TO BE ADMINISTERED TO ANY ADULT HOUSEHOLD MEMBER: Hello, I'm calling for the U.S. Department of Transportation. We are conducting a study of Americans' attitudes about driving and current traffic laws. The interview is completely confidential. A. First, how many persons age 16 and older live in this household, even if they are not at home right now? NUMBER OF ADULTS
A1. How many of these persons age 16 and older drive a motor vehicle at least a few times a year? NUMBER OF DRIVERS
IF ONLY ONE, ASK TO SPEAK TO THAT PERSON, IF TWO OR MORE, SAY: B. In order to select just one person to interview, could I speak to the DRIVER in your household, age 16 and older, who has had the most recent/next birthday? Respondent is that person

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MONITORING OF TELEPHONE INTERVIEWERS

SRBI draws upon a staff of experienced telephone supervisors for its projects. All supervisors participated in the project training session. In addition, they underwent an additional review on interview editing instructions, refusal prevention and conversion, and study issues.

Two types of supervisors are utilized in SRBI telephone surveys: shift supervisors and monitors. A shift supervisor was on duty each of the 14 weekly shifts. They were responsible for quality control, maintaining production rates and supervising the monitors. In addition, SRBI assigned one monitor for every 10 interviewers.

Each interviewer was silently monitored by a line monitor at least twice each interviewing shift. The study monitor sat at a CRT where he/she can see what the interviewer has recorded, while audio-monitoring the interview. The audio-monitoring allowed the supervisor to determine the quality of the interviewer's performance in terms of:

- 1) Initial contact and recruitment procedures;
- 2) Reading the questions, fully and completely, as written;
- 3) Reading response categories, fully and completely, (or not reading them) according to study specifications;
- 4) Whether or not open-ended questions are properly probed;
- 5) Whether or not ambiguous or confused responses are clarified;
- 6) How well questions from the respondent are handled without alienating the respondent or biasing his/her response;
- 7) Avoiding bias by either comments or vocal inflection;
- 8) Ability to persuade wavering, disinterested or hostile respondents to continue the interview; and
- 9) General professional conduct throughout the interview.

The supervisor also monitored the interviewer's recording of survey responses on the CRT monitor. The supervisor's CRT emulates the interviewer's CRT. Consequently, the supervisor was able to see whether the interviewer entered the correct code, number or verbatim response to the question.

INITIAL CONTACT

Initial telephone contact was attempted during the hours of the day and days of the week which have the greatest probability of respondent contact. The primary interviewing period was from 5:30 p.m. to 10:00 p.m. on weekdays, from 9:00 a.m. to 10:00 p.m. on Saturdays, and from 10:00 a.m. to 10:00 p.m. on Sundays (all times are local time). Since interviewing was conducted across time zones, the interviewing shift lasted until 1:00 a.m. Eastern Time (10:00 p.m. Pacific Time).

If the interview was not conducted at the time of initial contact, the interview was rescheduled at a time convenient to the respondent. Although initial contact attempts were made on evenings and weekends, daytime interviews were scheduled when necessary. If four telephone contacts on the night and weekend shifts did not elicit a respondent contact, the fifth contact was attempted on a weekday.

Interviewers attempted a minimum of five calls to each telephone number. When the household was reached, the interviewer asked to speak to an adult to screen the household for eligibility and to determine the designated respondent. When the designated respondent was reached but an interview at that time was inconvenient or inappropriate, interviewers set up appointments with respondents. When contact was made with the household, but not the designated respondent(s), interviewers probed for appropriate callback times and attempted to set up an appointment.

SPANISH LANGUAGE INTERVIEWERS

Spanish language versions of the two survey instruments were developed in order to eliminate language barriers for a small proportion of the U.S. adult population. If the interviewer encountered a language barrier at the telephone number, either with the person answering the phone or with the designated respondent, the interviewer thanked the person and terminated the call. If the case was designated as Spanish language, it was turned over to the next available Spanish-speaking interviewer. All households in which a language barrier (Spanish) was encountered were assigned to a Spanish-speaking interviewer. These bilingual interviewers re-contacted the Spanish-speaking households to screen for eligibility and conduct interviews with eligible respondents.

REFUSAL CONVERSION

The process of converting terminations and refusals, once they had occurred, involved the following steps. First, there was a diagnostic period, when refusals and terminates were reported on a daily basis and the Project Director and Operations Manager reviewed them after each shift to see if anything unusual was occurring. Second, after enough time had passed to see a large enough sample of refusals and terminations, the Project Director and his staff developed a refusal conversion script. Third, the refusal conversion effort was fielded with re-interview attempts scheduled about a week after the initial refusal. Fourth, the Project Director and Operations Manager received the outcomes of the refusal conversion efforts on a daily basis. Minor revisions of the script and the procedures were made, as needed. The final refusal conversion script is shown in Figure 2 (next page).

FIGURE 2

Refusal Conversion Script

Hello, I'm ______ calling for The U.S. Department of Transportation. This is absolutely not a sales call. We are conducting an important study of American's attitudes about driving and current driving laws. The results will be used to evaluate public awareness of issues related to driving. Once again, I assure you that I have nothing to sell either now or later.

How did you get my number?

We don't know your name or address. The telephone number was selected randomly in your area, and participation by an adult member of your household will go towards guaranteeing fair representation of households in your region. The interview is completely confidential. May we begin?

Why do you need to speak to the next/last birthday respondent?

Our goal is to interview as much of a cross section of the American population as possible in each of the fifty states. When reaching a household with more than one resident, we use the birthday selection process to guarantee randomness and representation. Let me ask you the first question....

I don't have time?

I understand. Your participation in this important public opinion poll is very important. Much of the driving issues awareness among Americans is polled in this manner. May we contact you tomorrow evening when it's more convenient? We'd appreciate the opportunity to present you with our survey questionnaire when it's most convenient for you.

What's this about?

Several thousand Americans will be interviewed for this highly topical driving issues opinion poll being conducted for the U.S. Department of Transportation and the National Highway Traffic Safety Administration. Important and highly topical safety issues dealing with driving laws, drivers, etc. are contained in our questionnaire. Your opinions will be combined with those from your region and state. Therefore, your participation is rather important in our goal of fairly representing views from your part of the country. Let me ask you the first question...

If the respondent wonders how we got their number, whether unlisted or not:

Your telephone number was selected randomly by computer to include your opinions among those in your region. We don't know your name or any other information about you. Only a certain number of households have been selected to represent the opinions of people across the nation. May I begin now?"

FIELD OUTCOMES

The field interviewing for the study commenced on February 20, 1997, following training of the field interviewers, and was completed on April 11, 1997. Status of cases as of the end of the field period are reported using the categories defined below.

FIGURE 3

	Sample Disposition Categories
NIS/DIS/change #	The number was not in service, had been disconnected, or yielded a recording indicating that it was no longer an active number
Non-residential	The number yielded a contact with a business, government agency, pay telephone or other non-residential unit
Computer/fax	The number yielded an electronic tone indicating a fax machine or data line
No answer	The number rang, but no one answered
Busy	A busy signal was encountered
Answering machine	An answering machine was reached at the telephone number
Language	The interview could not be completed because of language barriers
Away for duration	The designated respondent was out of the area for the entire field period
Callback	Contact was made with the household, but not necessarily the designated respondent. By the end of the field period, the case had neither yielded a refusal or completed interview
Callback to complete	The interview was interrupted, but not terminated. The field period ended before the full interview could be completed
Refusal Initial	Someone in the household refused to participate in the study
Refusal Second	During a refusal conversion attempt, a second refusal to participate in the study was encountered
Terminate	A respondent began the interview but refused to finish
Complete	An interview was completed with the designated respondent

In total, 21,415 randomly selected telephone numbers were sampled within a geographically stratified national sampling frame, with the following results:

24% of the numbers were not active residential phone numbers, including 9% not-in-service, 12% business or government, and 3% computer or fax tones;

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- 15% of the numbers were no answers (despite repeated attempts) and 7% were answering machines; and
- 3% were households in which the designated respondent was not interviewable (away for an extended period, incapacitated, or deaf) and an additional 1% were non-interviewable due to language barriers (non-Spanish).

At the close of the field period, only 684 cases (3%) were in callback status.

The participation rate represents one of the most critical measures of potential sample bias because it indicates the degree of self-selection by potential respondents into or out of the survey. The participation rate is calculated as the number of completed interviews (a successful interview) plus respondents who screen out as ineligible (assumed to be a successful interview if an eligible person wound have been found) divided by the number of contacts (possibility of a successful interview existed — the sum of completed interviews, terminated interviews, screen outs and refusals to interview). The inclusion of screen outs in the numerator and denominator is mathematically equivalent to discounting the refusals by the estimated rate of non-eligibility among refusals, that is, it assumes that screen outs will be found in the same proportion among refusals as they were found among non-refusals. The participation rate is based on the following elements:

- 6,000 completed interviews;
- 1,244 cases in which someone in the household completed the household screen, but no one in the household was found to be eligible for the full interview; and
- 2,427 refusals to be interviewed (including 1,419 second refusals) and 190 terminated interviews.

Based on the standard calculations of participation rate, the participation rate for this survey was 73.5 percent.

The Final Summary Disposition sample is given in Table 4 (next page). The average interview length for the survey was 30 minutes.

Sample Disposition							
TOTAL NUMBERS DIAL	FOTAL NUMBERS DIALED21,415						
Ineligible Numbers Not in Service/Disc Non-residential Computer/FAX Other Reason Terr	5,208 1,916 2,625 568 99						
ELIGIBLE NUMBERS	[Total Numbers Dialed - Ineligible Numbers]	16,207					
Non-Contacts No Answer Answering Machine Busy Callback Not Available	Э	5,637 3,233 1,554 163 684 3					
Non-Interviews Language Health/Deaf/Decea Away for Duration	sed	709 13 560 136					
TOTAL CONTACTS	[Eligible Numbers - Non-Contacts - Non-Interviews]	9,861					
Non-Participants Refusals (Eligibility Unkno (Initial) (Second) Screen out	own)	3,671 2,427 (163) (845) (1,419) 1,244					
TOTAL QUALIFIED	[Total Contacts - Non-Participants]	6190					
Callback to comple Terminates	ete	0 190					
COMPLETES		6,000					
PARTICIPATION RATE	[(Completes + Screen out) / (Total Contacts)]	73.46%					

TABLE 4

4

SAMPLE WEIGHTING

The characteristics of a perfectly drawn sample of a population will vary from true population characteristics only within certain limits of sample variability (i.e., sampling error). Unfortunately, social surveys do not permit perfect samples. The sampling frames available to survey research are less than perfect. The absence of perfect cooperation from sampled units means that the completed sample will differ from the drawn sample. In order to correct these known problems of sample bias, the achieved sample is weighted to certain characteristics of the total population.

The weighting plan for the survey was a multi-stage sequential process of weighting the achieved sample to correct for sampling and non-sampling biases in the final sample. The first stage in the sample weighting procedures was designed to correct the cases in the completed sample for known selection biases in the sampling procedures. At the household selection stage, a random digit dialing process will give households with more than one telephone number an unequal likelihood of selection. Nationally, about 18% percent of households selected by random digit dialing will have more than one telephone number. This selection bias was corrected by giving each household a first stage weight equal to .5 if there was more than one different telephone number in the household.

The second step in the weighting process was to correct for selection procedures that yielded unequal probability of selection within sampled households. Although the survey was designed as a population survey, only one eligible person per household could be interviewed (because multiple interviews per household are burdensome and introduce additional design effects into the survey estimates). A respondent's probability for selection is inverse to the size (number of other eligible adults) of the household. Hence, the second stage weight was equal to the number of eligible respondents within the household.

The final step in the weighting process was designed to correct for the fact that the total number of cases in the weighted sample was larger than the unweighted sample size because of the use of the number of eligibles weight. In order to avoid misinterpretation of sample size, the total number of cases in the unweighted sample was divided by the total number of cases in the weighted sample to yield a sample size weight. When this weight is applied, the size of the weighted sample is identical to the size of the unweighted sample.

The final weight (WEIGHT3) incorporates all of the intermediate weighting steps described above. The final weight adjusts the 6,000 completed interviews in the achieved sample corrects for known sampling and participation biases, while maintaining the unweighted sample size.

PRECISION OF SAMPLE ESTIMATES

The objective of the sampling procedures used on this study was to produce an unbiased sample of the target population. An unbiased sample shares the same properties and characteristics of the total population from which it is drawn, subject to a certain level of sampling error. This means that with a properly drawn sample we can make statements about the properties and characteristics of the total population within certain specified limits of certainty and sampling variability.

The confidence interval for sample estimates of population proportions, using simple random sampling without replacement, is calculated by the following formula:

var (x) =
$$z\sqrt{(p(q))/(n-1)}$$

Where:

var (x) = the expected sampling error of the mean of some variable, expressed as a proportion

- p = some proportion of the sample displaying a certain characteristic or attribute
- q = (1 p)
- z = the standardized normal variable, given a specified confidence level (1.96 for samples of this size).
- n = the size of the sample

Using this formula, we can estimate that the maximum expected sampling error at the 95% confidence level (i.e., in 95 out of 100 repeated samples) for a total sample of 6,000 is \pm 1.3 percentage points. It should be noted that the maximum sampling error is based upon the conservative estimate that p = q = 0.5.

The sample sizes for the surveys are large enough to permit estimates for subsamples of particular interest. Table 5 (next page) presents the expected size of the sampling error for specified sample sizes of 6,000 and less, at different response distributions on a categorical variable. As the table shows, larger samples produce smaller expected sampling variances, but there is a constantly declining marginal utility of variance reduction per sample size increase.

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Expected Sampling Error (Plus or Minus) At the 95% Confidence Level (Simple Random Sample)									
Size of Sample or	Percentage of the Sample or Subsample Giving A Certain Response or Displaying a Certain Characteristic for Percentages Near:								
Subsample	10 or 90	20 or 80	30 or 70	40 or 60	50				
6,000	0.8	1.1	1.2	1.3	1.3				
3,000	1.1	1.4	1.6	1.8	1.8				
2,000	1.3	1.8	2.0	2.1	2.2				
1,500	1.5	2.0	2.3	2.5	2.5				
1,300	1.6	2.2	2.5	2.7	2.7				
1,200	1.7	2.3	2.6	2.8	2.8				
1,100	1.8	2.4	2.7	2.9	3.0				
1,000	1.9	2.5	2.8	3.0	3.1				
900	2.0	2.6	3.0	3.2	3.3				
800	2.1	2.8	3.2	3.4	3.5				
700	2.2	3.0	3.4	3.6	3.7				
600	2.4	3.2	3.7	3.9	4.0				
500	2.6	3.5	4.0	4.3	4.4				
400	2.9	3.9	4.5	4.8	4.9				
300	3.4	4.5	5.2	5.6	5.7				
200	4.2	5.6	6.4	6.8	6.9				
150	4.8	6.4	7.4	7.9	8.0				
100	5.9	7.9	9.0	9.7	9.8				
75	6.8	9.1	10.4	12.2	11.4				
50	8.4	11.2	12.8	13.7	14.0				

TABLE 5

NOTE: Entries are expressed as percentage points (+ or -).

Given extremely small differences in the confidence intervals for this sample and those expected for a simple random sample, the general formula for estimating confidence intervals for a simple random sample will normally be a perfectly reasonable guide for estimating sampling error for this sample. However, in order to conduct a specific interval for estimates from sample, the appropriate statistical formula for calculating the allowance for sampling error (at a 95% confidence interval) in a stratified sample is:

ASE =
$$1.96 / \left[\sum_{h=1}^{g} W_{h}^{2} \left\{ (1-f_{h}) (s_{h}^{2}/n_{h} - 1) \right\} \right]$$

where:

4

- ASE = allowance for sampling error at the 95% confidence level;
- h = a sample stratum;
- g = number of sample strata;
- w_h = stratum h as a proportion of total population;
- f_h = the sampling fraction for group h -- the number in the sample divided by the number in the universe;
- s_h^2 = the variance in the stratum h -- for proportions this is equal to $p_h (1.0 p_h)$;
- n_h = the sample size for the stratum h.

Although Table 5 provides a useful approximation of the magnitude of expected sampling error, precise calculation of allowances for sampling error requires the use of this formula.

ESTIMATING STATISTICAL SIGNIFICANCE

The estimates of sampling precision presented in the previous section yield confidence bands around the sample estimates, within which the true population value should lie. This type of sampling estimate is appropriate when the goal of the research is to estimate a population distribution parameter. However, the purpose of some surveys is to provide a comparison of population parameters estimated from independent samples (e.g., annual tracking surveys) or between subsets of the same sample. In such instances, the question is not simply whether or not there is any difference in the sample statistics which estimate the population parameter, but rather is the difference between the sample estimates statistically significant (i.e., beyond the expected limits of sampling error for both sample estimates).

To test whether or not a difference between two sample proportions is statistically significant, a rather simple calculation can be made. Call the total sampling error (symbolized as var (x) in the formula on page 14) of the first sample s_1 and the total sampling error of the second sample s_2 . Then, the sampling error of the difference between these estimates is sd which is calculated as:

$$sd = \sqrt{s_1^2 + s_2^2}$$

Any difference between observed proportions that exceed sd is a statistically significant difference at the specified confidence interval. Note that this technique is mathematically equivalent to generating standardized tests of the difference between proportions. An illustration of the pooled sampling error between subsamples for various sizes is presented in Table 6. This table can be used to indicate the size of difference in proportions between drivers and non-drivers or other subsamples that would be statistically significant.

Pooled Sampling Error Expressed as Percentages For Given Sample Sizes (Assuming P=Q)											
Sample	Sample Sample Size										
Size	100	200	300	400	500	600	700	800	900	1,000	2,000
2,000 1,000 900 800 700 600 500 400 300 200 100	10.0 10.3 10.4 10.5 10.6 10.7 11.0 11.3 12.0 13.0	7.2 7.6 7.6 7.7 7.8 8.0 8.2 8.5 9.0 9.8	6.1 6.5 6.6 6.7 6.8 7.0 7.2 7.5 8.1	5.4 5.8 5.9 6.0 6.1 6.3 6.6 6.9	4.9 5.4 5.5 5.6 5.8 5.9 6.2	4.6 5.1 5.2 5.3 5.4 5.7	4.3 4.9 5.0 5.1 5.2	4.1 4.7 4.8 5.0	4.0 4.5 4.7	3.8 4.4	3.1

TABLE 6

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APPENDIX A.

SPEEDING

QUESTIONNAIRE

SCHULMAN, RONCA AND BUCUVALAS, INC. 145 East 32nd Street NEW YORK, NEW YORK 10016 (301)608-3883

STUDY NUMBER 6801 FINAL OMB No. 2127-0587 Expiration: 1/31/2000

VERSION 1: SPEEDING

Sample Point Number:	Questionnaire No
Interviewer:	Date:

Telephone Number:

SAMPLE READ-IN

- 4. STATE CODE
- 5. COUNTY (FIPS) CODE
- 7. MET/NON-MET
- 9. NHTSA REGION

INTRODUCTION TO BE ADMINISTERED TO ANY ADULT HOUSEHOLD MEMBER: Hello, my name is (). I'm calling for the U.S. Department of Transportation. We are conducting a study of Americans' attitudes about driving and current traffic laws. The interview is completely confidential.

Α. First, how many persons age 16 and older live in this household, even if they are not at home right now?

> NUMBER OF ADULTS

IF ONLY ONE. ASK TO SPEAK TO THAT PERSON. IF TWO OR MORE. SAY:

How many of these persons age 16 and older drive a motor vehicle at A1. least a few times a year?

NUMBER OF DRIVERS None....00 (SCREEN OUT)

IF ONLY ONE, ASK TO SPEAK TO THAT PERSON. IF TWO OR MORE, SAY:

In order to select just one person to interview, could I speak to the Β. DRIVER in your household, age 16 and older, who (will have the next/who has had the most recent) birthday?

> Respondent is that person1 Other respondent came to phone......2 Respondent is not available [arrange callback].....3

Hello. I'm from SRBI, the national research organization. We are conducting a study for the U.S. Department of Transportation about Americans' driving habits and concerns, and their attitudes about driving and current traffic laws. The interview is completely confidential. It takes fifteen to twenty minutes.

CQ40. Record Respondent's Gender [from observation]

Male.....1 Female.....2

Q1. How often do you usually drive a car or other motor vehicle? Would you say that you usually drive... [READ LIST]?

Q2. How many years have you been driving?

YEARS DRIVING DK=98 REFUSED=99

Less than one year....00

Q4a. What kind of vehicle do you drive most often? Is it a car, van or minivan, motorcycle, pickup truck or something else?

- Q4b. What model year is the (car/truck/van) that you drive most often?
- Q5a. When driving this (car/truck/van), how often do you wear a seat belt? Do you wear a seatbelt.... **READ LIST**?

All of the time	1
Most of the time	2
Some of the time	3
Rarely	4
Never	5

CONDITION: IF VERSION = A, ASK OTHER ADULTS. IF VERSION = B, ASK CHILDREN.

Q6. How often do you drive with (other adults/children) in your (car/van/truck)?

Almost every day1
Few days a week2
Few days a month3
Few days a year4
Never5

CONDITIONAL: IF VERSION = A, ASK 54. IF VERSION = B, SKIP TO 10. Q8. Which of the following statements best describes your driving? READ STATEMENTS

Q8a. I tend to pass other cars more often than

Other cars pass me, OR.....1 Other cars tend to pass me more often......2 (VOL) Both or about equally......3

Q8b. In heavy traffic I tend to: Stay with the slower moving traffic OR.....1 Keep up with the faster traffic.....2 (VOL) Both or about equally......3

Q8c-Q9. DELETED

CONDITION: IF VERSION = B, ASK Q10. IF VERSION = A, SKIP TO Q11.

Q10. People have different feelings about driving. I'd like you to tell me whether you agree or disagree with the following statement about driving.

Strongly	Somewhat	Somewhat	Strongly
Agree	Agree	Disagree	Disagree
1	2	3	4

- Q10a. I enjoy the feeling of speed
- Q10b. The faster I drive, the more alert I am
- Q10c. I often get impatient with slower drivers
- Q10d. I try to get where I am going as fast as I can
- Q10e. I worry a lot about having a crash

Q11. People feel differently about how safe or dangerous different types of driving behavior are. How safe do you feel it usually is to...(READ ITEM)?

		EXTREMELY SAFE	Somewhat SAFE	NEITHER SAFE NOR DANGEROUS	Somewhat Dangerous	EXTREMELY DANGEROUS
		1	2	3	4	5
(For Q11a.	Version Drive t that wa you ent	= A) hrough a ligh s already reo ered an inter	t I before section			
(For Q11b.	Version Drive 1 than mo are goi	= A) O miles an ho st other vehi ng	ur faster cles			
(For Q11c.	Version Drive 2 the spe interst	= B) O miles an ho ed limit on a ate highway	ur over n			
(For Q11d.	Version Tailgat a highw each di	= A) e another veh ay with one l rection	icle on ane in			
(For Q11e.	Version Enter a just as turning	= B) n intersectio the light is from yellow	n to red			
(For Q11f.	Version Drive t stop si	= A) hrough a gn without sl	owing			
(For Q11g.	Version Slow bu stop at	= B) t not complet a stop sign	ely			
(For Q11h.	Version Cut in in orde	= B) front of anot r to make a t	her car urn	x		
(For Q11i.	Version Race an	= A) other driver				

	EXTREMELY SAFE	Somewhat Safe	NEITHER SAFE OR DANGEROUS	Somewhat Dangerous	EXTREMELY DANGEROUS
	1	2	3	4	5
(For Q11j.	Version = A) Drive when just unde the legal alcohol li	r nit			
(For Q11k.	Version = B) Use the shoulder to pass in heavy traffi	C			
(For Q11kk	Version = B) Make an angry, in obscene gesture or c toward another drive that they hear or se	sulting or omment r such e it			
(For Q111.	Version = A) Cross railroad track when the red light i	s s blinking			
(For Q11m.	Version = B) Pass a vehicle in a no-passing zone				
(For Q11n.	Version = A) Drive 10 miles an ho the speed limit on a interstate highway	ur over N			
(For Q110.	Version = A) Make a U-turn where a sign says not to				
(For Q11p.	Version = B) Drive 20 miles an ho faster than most oth vehicles are going	ur er			
Q11pp	-Q11uu ON VERSION 2 O	NLY			
Q12a.	Now, thinking about the roads where you	the roads you drive most o	u normally drive ften are in areas	on, would you s that are:	say that

Q12b. Do you drive at least weekly on: MULTIPLE RECORD

Residential or neighborhood streets (posted speed limits of 35 mph or less).....1 Interstate highways.....2 Other types of roads with speed limits of 40-55 mph......3

(INTERVIEWER NOTE: IF NONE WEEKLY, ASK WHICH THEY DRIVE MOST OFTEN).

CQ95. DUMMY FOR ROAD TYPE SELECTION Residential or neighborhood streets (posted speed limits of 35 mph or less)......1 Interstate highways.....2 Other types of roads with speed limits of 40-55 mph......3 Interstate highways..... 4 Other types of roads with speed limits of 40-55 mph......5

013. For the next series of questions, I'd like you to think about [residentia] or neighborhood streets/non-interstate roads/interstate highways] in an area where you normally drive.

How important are the following factors in selecting the speed at which you drive. How important is.. (READ ITEM)?

Extremely	Moderately	Slightly	Not
Important	Important	Important	Important

4

1	2	3	

- 013aa. Speed of other traffic
- Posted speed limit Q13ab.
- Q13ac. Chances of being stopped by police
- How much time you have Q13ad. to get to your destination
- Q13ae. How much traffic there is
- Your past experience driving the road 013af.
- Q13ag. Weather conditions
- Anything else (SPECIFY: 13ah2) 013ah1.
- Q13ah3: How important is other

Q15. How often do you see vehicles traveling at an unsafe speed on (ROAD TYPE)?

 All of the time......1

 Most of the time......2

 Some of the time......3

 Rarely......4

 Never......5

Q16. What do you consider to be the maximum safe speed for (ROAD TYPE)?

mph DK=98 REFUSED=99

- Q17. Why do you consider speeds greater than (Q16) to be unsafe on (ROAD TYPE)?
- CQ111. DROPPED

Q18. How often do you drive faster than (Q16) on that road?

- Q19a. What are the most common reasons that you have driven on (ROAD TYPE) at speeds that you consider to be unsafe?
- Q20. What times of day are you most likely to drive at an unsafe speed on that (ROAD TYPE)? READ LIST AND MULTIPLE RECORD

 Midnight to 6am.....1

 6-9am.....2

 9am-3pm.....3

 3-6pm.....4

 6-9pm....5

 9pm to midnight......6

 (VOL) Never7

Q21.What is the posted speed on (ROAD TYPE)?

_____ MPH DK=98 REFUSED=99

IF Q21 LE Q16, SKIP TO Q28

Q22. Compared to someone driving at the speed limit on that road, how much more likely is someone traveling faster than (Q16) to have a crash? Is it....

A lot more likely.....1 Somewhat more likely.....2 Slightly more likely.....3 No more likely.....4 (VOL) Less likely.....5

Q28. How often do you see police when you are traveling on (ROAD TYPE)? Would you say...

Every day1Almost every day2Several times a week3Once or twice a week4Once or twice a month5A few times a year6Never7

Q30. In your opinion, how much OVER THE SPEED LIMIT can you go on this road before police will normally give you a speeding ticket (if they see you)?

MPH OVER POSTED LIMIT

None.....00

Q32. When was the last time that you drove (Q30) mph over the speed limit on (ROAD TYPE)?

Today.....1 Within the past week.....2 Within the past month....3 Within the past year......4 Over a year ago......5 Never......6 SKIP TO Q34

Q33. Why were you going that fast on that occasion?

Q34. If the posted limits were INCREASED BY 10 MILES AN HOUR on (**ROAD TYPE**), do you think that you would normally drive.....?

Much slower than the limit.....1 A little slower than the limit.....2 Right at the limit.....3 A little faster than the limit, or.....4 Much faster than the limit.....5

Q35. If the posted limits for that road were INCREASED BY 10 MILES PER HOUR, do you think that it would make driving on the road....?

Much safer1	
Somewhat safer	2
No different3	
Somewhat more dangerous	4
Much more dangerous5	

Q36. If the posted limits for that road were INCREASED BY 10 MILES PER HOUR, do you think that it would make driving on the road.....?

Much more comfortable for you1	
Somewhat more comfortable2	
No different	
Somewhat less comfortable4	
Much less comfortable5	

Q37. Aside from driving at an unsafe speed, what other types of unsafe driving behaviors do you normally encounter on that road? DO NOT READ LIST. MULTIPLE RECORD.

Tailgating.1Failing to yield.2Weaving in and out.3Drinking and driving.4Running red lights.5Ignoring stop signs.6Driver inattention.7Other (SPECIFY)17

None......18 SKIP TO Q50a

CQ127. DUMMY FOR UNSAFE BEHAVIORS FROM CQ126

Q38-Q43 DELETED

CONDITION: IF VERSION = A, ASK Q136. IF VERSION = B, SKIP TO Q53a. Q50a. In the last year, were you ever in a situation where you were riding with a friend who had too much to drink to drive safely?

> Yes.....1 No......2 SKIP TO Q51a

Q50c. On those occasions, did the driver usually drive faster, slower or about the same as they normally would?

Faster.....1 Slower.....2 About the same....3

Q51a. (Aside from what you have already told me) In the past year, have you ever ridden with someone who you felt was driving at an unsafe speed?

Yes.....1 No......2 SKIP TO Q52

Q51c. Thinking about the most recent occasion, was the person who was driving at an unsafe speed -- a man or a woman?

Man.....1 Woman.....2

Q51d. What was their relationship to you? READ LIST IF NECESSARY

Spouse1 Boyfriend/girl friend	2
Date	
Parent	4
Boss/supervisor5	
Co-worker	6
Friend	
Sibling	8
Other relative9	

Q51d.1. Other (SPECIFY)_____

Q51e. Besides the unsafe speed, did the driver engage in any other unsafe driving actions on that occasion?

Yes.....1 No......2 SKIP TO Q51g Q51f. What types of unsafe driving behaviors did (he/she) do? RECORD ALL THAT APPLY

Speeding1
Tailgating2
Failing to yield
Weaving in and out4
Drinking and driving5
Running red lights6
Ignoring stop signs7

Q51f.1. Other (SPECIFY)

____....8

Q51g. Did you ask or tell them to stop driving like that?

Yes1	
No2	SKIP TO Q51j
Not sure3	SKIP TO Q51j

Q51h. Did they do what you asked?

Yes1	SKIP TO Q52
No2	SKIP TO Q52
Not sure3	SKIP TO 052

Q51j. If you HAD asked them to drive differently, do you think they would have done what you asked?

Yes.....1 No.....2 Not sure.....3

VERSION 2: UNSAFE DRIVING = Q51aa-Q51jj

Q52. In general, do you think that speed limits on (READ ITEM) are too high, too low, or about right?

		TOO HIGH 1	TOO LOW 2	ABOUT RIGHT
Q52a.	Interstate highways in rural area	S		-
Q52b.	Interstate highways in urban area	IS		
Q52c.	Residential or neighborhood stree	ets		
Q52d.	Other non-interstate roads in rur	al areas		

Q52e. Other non-interstate roads in urban areas

CONDITIONAL: IF VERSION = B, ASK Q53a. IF VERSION = A, SKIP TO Q54a.

Q53a. In your area, do you think that the amount of police enforcement of SPEEDING LAWS on (READ ITEM) is too much, too little, or about right.

		TOO HIGH	TOO LOW	ABOUT RIGHT
Q53aa.	Interstate highways in rural are	1 eas	2	3
Q53ab.	Interstate highways in urban are	eas		
Q53ac.	Residential or neighborhood stre	eets		

053ad. Other non-interstate roads in rural areas

053ae. Other non-interstate roads in urban areas

Q54a. How often do you think police should ticket drivers WHO ARE GOING TEN MILES AN HOUR over the posted limit on a highway with traffic lights?

Always1	
Most of the time2	
Sometimes3	
Rarely4	-
Never	

Q55a. How often do you think police should ticket drivers WHO ARE GOING TWENTY MILES AN HOUR over the posted limit on a highway with traffic lights?

Always1	
Most of the time	2
Sometimes3	
Rarely	4
Never5	

CONDITION: IF VERSION = B, ASK Q58b. IF VERSION = A, SKIP TO Q63.

Q58b. Some areas have introduced automated enforcement devices which use cameras to identify vehicles that speed or run red lights. A traffic ticket is mailed to the owner of the vehicle along with information about the location, time, date, and type of infraction. If the driver or owner pays the fine, no further action is taken. If the ticket is contested, a photo of the offender's vehicle and license plates is presented in court. Have you ever heard of this kind of traffic enforcement that doesn't require police officers to stop and ticket traffic violators?

Have heard.....1 Have not heard.....2
Q62b. If photo enforcement of driving laws was introduced in your community, how much effect do you think it would have on (READ ITEM) --- a lot, some, only a little or none at all?

A LOT	SOME	LITTLE	NONE
1	2	3	4

- Q62ba. Cutting down speeding
- Q63bb. Cutting down running stop signs and red lights
- Q62bc. Getting dangerous drivers off the roads
- Q62bd. Reducing crashes
- Q59b. Do you think that it would be a good idea or a bad idea to use a photo enforcement system like this to identify vehicles which were...

ROTATE LIST

ţ

		GOOD	BAD
Q59aa.	Running red lights	1	2
Q59ab.	Speeding	1	2
Q59ac.	Not stopping at stop signs	1	2

- Q59b. Why do you think it is a (good/bad/both good and bad) idea to use a photo enforcement system to identify vehicles committing these violations.
- Q59c. Thinking about locations where photo enforcement might be used, would you find it very acceptable, somewhat acceptable, or not at all acceptable to use it (READ ITEM)?

		VERY	SOMEWHAT	NOT AT ALL
		ACCEPTABLE	ACCEPTABLE	ACCEPTABLE
Q59ca.	Where it could be hazardous to the driver or officer to	1 stop	2	3
Q59cb.	Where stopping a vehicle cou cause traffic congestion	ıld		
Q59cc.	Where an accident has occurr	red		
Q59cd.	In school zones			

Q63. Thinking back over the past year, when was the most recent time that you (**READ ITEM**) -- today, within the past week, within the past month, more than a month ago, or not in the past year?

,

	Today	Past Week 2	Past Month 3	More than a Month 4	Not in past year 5
<pre>(For Version = A) Q63a. Drove through a light that was already red before you entered an intersection</pre>	-	L	0	·	0
(For Version = A) Q63b. Drove 10 miles an hour faster the most other vehicles were going	han .				
(For Version = B) Q63c. Drove 20 miles an hour over the speed limit on an interstate hig	ghway				
(For Version = A) Q63d. Tailgated another vehicle on a H with one lane in each direction	highway				
(For Version = B) Q63e. Entered an intersection just as the light was turning from yellow to red					
(For Version = A) Q63f. Drove through a stop sign without slowing					
(For Version = B) Q63g. Slowed but didn't completely stop at a stop sign					

Q63 (cont). Thinking back over the past year, when was the most recent time that you (READ ITEM) -- today, within the past week, within the past month, more than a month ago, or not in the past year?

Today	Past	Past	than a	past
	Week	Month	Month	year
1	2	3	4	5

(For Version = B) Q63h. Cut in front of another car in order to make a turn

(For Version = A) Q63i. Raced another driver

(For Version = A) Q63j. Drove when affected by alcohol

- (For Version = B) Q63k. Used the shoulder to pass in heavy traffic
- (For Version = B)
 Q63kk.Made an angry, insulting or obscene
 gesture or comment toward another driver
 such that they heard or saw it

(For Version = A)
Q631. Crossed railroad tracks
 when the red light was blinking

(For Version = B) Q63m. Passed a vehicle in a no-passing zone

(For Version = A)

Q63n. Drove 10 miles an hour over the speed limit on an interstate highway

(For Version = A)

Q63o. Made a U-turn where a sign said not to

(For Version = B)

1

Q63p. Drove 20 miles an hour faster than most other vehicles were going

VERSION 2: UNSAFE DRIVING = Q63u-Q63t

CONDITIONAL: IF VERSION = A, ASK Q64a-Q64c. IF VERSION = B, SKIP TO Q86a.

Q64a. If you saw a vehicle pass a stopped school bus that has its red lights flashing and its stop arm in full view, how likely would you be to call and report it to the police?

Very likely.....1 Somewhat likely.....2 Somewhat unlikely.....3 Very unlikely.....4 SKIP TO Q64c SKIP TO Q64c

Q64b. Why would you be unlikely to report it?

SKIP TO Q86a

Q64c. How would you report it?

Have	car phone1	
Have	cell phone	2
Stop	at payphone3	
Call	when get to destination	4
Ot	ther (specify)5	

Q86a. You may be aware that the National Maximum Speed Limit law was repealed. Have the speed limits on interstates affected by that law been increased in your state in any areas in which you drive?

Yes1	
No2	SKIP TO Q87a
Not sure3	SKIP TO Q87a

Q86c. How have the higher limits on those roads affected the number of people who speed? Do. $\overline{}$?

Q86d. Do you think that driving on those roads is...

Safer now with the higher speed limits.....1 About as safe, or.....2 Less safe than with the old limits.....3 Q87a. Do you think that a uniform speed limit should be set for all interstate highways or should it be allowed to vary from state to state?

Uniform limit.....1 Allowed to vary......2 SKIP TO Q242

Q87b. What do you think that speed limit should be for interstate highways?

SPEED LIMIT DK=98 REFUSED=99

PUBLIC EDUCATION EFFORTS

Q102a. In your opinion, how much is SPEEDING by other people a threat to the personal safety of you and your family? Would you say driving at an unsafe speed is...

A major threat.....1 A minor threat.....2 Not a threat.....3 Not sure (VOL).....4

Q103a. How important is it that something be done to reduce speeding? Is it... [READ LIST]?

Very important1	
Somewhat important	2
Not important	
Not sure (VOL)	4

VERSION 2: UNSAFE DRIVING = Q102b-Q103b

Q104a.	How El speed	FFECTIVE d ing?	o you think	the fol	lowing ste	os wou	ld be in	reducing
W	lould ((READ ITEM)	be (READ F	RESPONSE	CATEGORIES)in re	educing s	speeding.
	ł	VERY EFFECTIVE	SOMEWHAT EFFECTIVE	NEITHER OR IN	EFFECTIVE EFFECTIVE	SO INEF	MEWHAT FECTIVE	VERY INEFFECTIVE
		1	2		3		4	5
(For Ve Q104aa.	rsion More assi	= A) police of gned to tr	ficers affic					
(For Ve Q104ab.	rsion More	= B) frequent	ticketing					
(For Ve Q104ac.	r sion Doub spee	= A) De or trip Eding viola	le fines fo tions	r				
(F or Ve Q104ad.	rsion Taki lice	= B) ng away dr nses more	iver's often					
(For Ve Q104ae.	rsion Enco to s thei	= A) uraging pa ay somethi r driver i	ssengers ng when s speeding					
(For Ve Q104af.	rsion Incr of t	= A) easing pub he risks o	lic awarene f speeding	ess				
(For Ve Q104ag.	rsion Enco repo	= B) uraging ci rt speedin	tizens to g to police	<u>!</u>				
(For Ve Q104ah.	rsion Road spee circ	= B) design ch d bumps an les, to sl	anges, like d traffic ow down tra	ffic				
(For Ve Q104ai.	rsion Insu incre	= A) rance cost eased for	s were speeding					

Q105a. How would you feel about implementing the following methods in your community to reduce speeding? Would you strongly approve, somewhat approve, neither approve nor disapprove, somewhat disapprove, or strongly disapprove (READ ITEM)?

		Strongly Approve	Somewhat Approve	Neither Approve Or Disapprove	Somewhat Disapprove	Strongly Disapprove
		1	3	4	5	6
(For Ver s Q105aa.	sion = A More po assigne) lice office d to traffi	ers ic			
(For Ver s Q105ab.	si on = B More fr) equent tick	keting			
(For Ver : Q105ac.	s ion = A Double speedin) or triple 1 g violation	fines for 1s			
(For Ver : Q105ad.	s ion = B Taking more of) away driven îten	's license	S		
(For Ver : Q105ae.	sion = A Encoura try to	n) Iging passer Iget drivers	ngers to s not to sp	eed		
(For Ver : Q105af.	sion = A Increas the ris) ing public ks of speed	awareness ding	of		
(For Vers Q105ag.	sion = B Encoura speedin	6) Iging citize Ig to police	ens to repo e	rt		
(For Ver : Q105ah.	sion = B Road de bumps a to slow	3) esign chango nd traffic v down traf [.]	es, like sp circles, fic	eed		
(For Ver : Q105ai.	sion = A Insuran for spe	N) Nice costs w Reding	ere increas	ed		

Q107a. During the past year, have you seen or heard any public service announcement about speeding?

Yes.....1 No.....2 SKIP TO Q108b (VOL) Don't know......3 SKIP TO Q108b

Q107b. Do you recall the slogan or anything else about the announcement? DO NOT READ. MULTIPLE RECORD.

Speed shatters life.....1 Don't be a dummy.....2

Q107b.1. Other (SPECIFY)_____

No, don't recall.....14

Q108b. When you hear/see something about speeding on radio, television or the newspapers, how much effect does it have on your driving? Does it have a...(READ LIST).

Lot of effect1	
Some effect2	
Little effect	
No real effect4	

SPEED-RELATED FATAL CRASHES

Q109d. Do you think that alcohol is a major factor, minor factor, or not a factor in speed-related crashes?

Major factor.....1 Minor factor.....2 Not a factor in speed-related crashes......3

Q109i. What percent of ALL fatal crashes do you think involve speeding? [HOW MANY OUT OF EVERY 100]

% DK=101 REFUSED=102

CONDITION: IF VERSION = A, ASK Q112-Q114. IF VERSION = B, SKIP TO Q115a. Q112. Compared to a year ago, would you say that you generally drive.....

A lot faster1		
Somewhat faster	.2	
About the same	SKIP TO Q115	5a
Somewhat slower	.4	
Much slower now5		

Q114. Why do you drive (slower/faster) now?

Q115a. Compared to a year ago, do you feel that driving is.....

Q115b. Why is that?

CRASH EXPERIENCE

Q99a. Have YOU been in a vehicle crash in the past five years?

Yes.....1 No.....2 SKIP TO Q97a (VOL) Don't know.....3 SKIP TO Q97a (VOL) Refused.....4 SKIP TO Q97a

Q99b. How many times has this happened to you (in the past five years)?

DON'T KNOW=98 REFUSED=99

Q99c. How long ago did that (most recent) crash occur?

Today.....1 Within the past week.....2 Within the past month....3 Within the past year.....4 Over a year ago......5 Never......6 SKIP TO Q97a

Q99d. Were you driving or was someone else driving?

Respondent driving.....1 Someone else.....2 Q99dd. Was anyone injured in that crash (only count injuries that required attention? [PROBE FOR RESPONDENT, OTHER PERSON, OR BOTH]

Q99e. Was the driver of your vehicle or the other vehicle cited for speeding in that crash?

Your car1
Other car2
Both3
Neither4

Q99f. Were any other unsafe driving actions a major factor, a minor factor or not a factor in that crash?

Major	factor1	
Minor	factor2	
Not a	factor in that crash3	SKIP TO Q97a

Q99f1. Was the unsafe driving by the driver of your vehicle, driver of the other vehicle, or both?

Driver of your vehicle......1 Driver of the other vehicle......2 Both......3

- CONDITION: IF VERSION = A, ASK Q97a. IF VERSION = B, SKIP TO Q98.
- Q97a. In the past twelve months, have you been STOPPED by the police for any traffic-related reason?

Yes1	
No	SKIP TO Q98
(VOL) Don't know3	SKIP TO Q98
(VOL) Refused4	SKIP TO Q98

Q97b. How many times have you been stopped by the police in the past twelve months (for a traffic related reason)?

_____ NUMBER OF TIMES DK=98 REFUSED=99

Q97c. What were you stopped for? CODE ALL THAT APPLY

Drinking and driving	1
Speeding	2
Stop signal	3
Stop sign	4

Q97c.1. Other (SPECIFY) ...15

Q97d. Did you receive a ticket or warning (on any of those occasion)?

Yes, ticket1	
Yes, warning	2
Yes, both3	
Neither	4

Q97e. Did you change your driving behavior as a result of receiving the ticket?

Yes.....1 No......2 SKIP TO Q98

Q97f. For about how long a period of time did you change your driving behavior as a result of receiving that ticket? [DO NOT READ LIST]

Days1	CQ346.	
Weeks	2 CQ347.	
Months3	CQ348.	
Years	4 CQ349.	

Q98. Within the past 5 years, have you (READ ITEM)?

		NO	YES
Q98a.	Gotten a ticket for speeding	1	2
Q98b.	Gotten a warning for speeding	1	2
Q98c.	Gotten a ticket for any other moving violation (such as running a red light or stop sign)	1	2
Q98d.	Been convicted of DWI or DUI	1	2
Q98e. o a	Had your car insurance canceled r premiums increased as result of claims or points	1	2

CONDITIONAL: IF VERSION = A, SKIP TO D1. IF VERSION = B, ASK Q98i-Q99.

Q98i. What is the make and model of the vehicle that you drive most often (e.g., Toyota Camry)?

Q99. Do you have a radar detector in your vehicle?

Yes.....1 No.....2

DEMOGRAPHICS

Now, a few last questions for statistical purposes...

D1. How old are you?

____ age

D2. Are you currently employed full time, part time, unemployed and looking for work, retired, going to school, homemaker, or something else? **SINGLE RECORD**

	Employed full time1
	Employed part time2
	Unemployed and looking for work3
	Retired4
	Going to school5
	Homemaker6
	Disabled (VOL)7
D2.1.	Other (SPECIFY):8
	Not sure (VOL)9
	Refused (VOL)10

D3. What is highest grade or year of regular school you have completed? [D0 NOT READ]

No formal schooling1
First through 7th grade2
8th grade3
Some high school4
High school graduate5
Some college6
Four-year college graduate7
Some graduate school8
Graduate degree9
Refused (VOL)

D4. Are you currently married, divorced, separated, widowed, or single?

Married.....1 Divorced......2 Separated.....3 Widowed.....4 Single.....5

D5. Are you of Hispanic origin or descent?

Hispanic.....1 Not Hispanic.....2

D6. Which of these categories best describes your racial background? [READ LIST]

	White	.1
	Black or African-American	2
	Asian or Pacific Islander	.3
	Eskimo, Aleutian or American Indian.	4
	Mixed	.5
	(VOL) Hispanic	6
D6.1.	(VOL) Other	16
	Not sure (VOL)	
	Refused (VOL)	18

D7. How many persons live in your household who are under 16 years old?

persons

None.....00

D8. Which of the following categories best describes your total household income before taxes in 1996? Your best estimate is fine. [READ LIST]

Less than \$5,000.....1 \$5,000 to \$14,999.....2 \$15,000 to \$29,999.....3 \$30,000 to \$49,999.....4 \$50,000 to \$74,999.....5 \$75,000 to \$99,999.....6 \$100,000 or more.....7 Not sure (VOL)......8 Refused (VOL).....9

D9. Let me just confirm that the number I reached you at was: [READ NUMBER]

D10. Is this the only telephone number for this household?

Yes, this is the only number.....1 No, there is more than one number......2

Thank you for your assistance. That completes our interview.

National Survey of Speeding and Other Unsafe Driving Actions: Methodology Report

APPENDIX B.

UNSAFE DRIVING BEHAVIORS

QUESTIONNAIRE

SCHULMAN, RONCA AND BUCUVALAS, INC. 145 East 32nd Street NEW YORK, NEW YORK 10016 (301)608-3883

STUDY NUMBER 6801 FINAL OMB No. 2127-0587 Expiration: 1/31/2000

VERSION 2: UNSAFE DRIVING BEHAVIORS

Sample Point Number:	Questionnaire No
Interviewer:	Date:
Telephone Number:	

CONDITION: IF VERSION = A or B. PROCEED TO INTRODUCTION.

INTRODUCTION TO BE ADMINISTERED TO ANY ADULT HOUSEHOLD MEMBER: Hello, I'm calling for the U.S. Department of Transportation. We are conducting a study of Americans' attitudes about driving and current traffic laws. The interview is completely confidential.

First, how many persons age 16 and older live in this household. even if Α. they are not at home right now? NUMBER OF ADULTS

None.....00 SCREEN OUT

IF ONLY ONE, ASK TO SPEAK TO THAT PERSON. IF TWO OR MORE, SAY:

A1. How many of these persons age 16 and older drive a motor vehicle at least a few times a year? NUMBER OF DRIVERS None.....00 SCREEN OUT

IF ONLY ONE. ASK TO SPEAK TO THAT PERSON. IF TWO OR MORE. SAY:

In order to select just one person to interview, could I speak to the Β. DRIVER in your household, age 16 and older, who has had the most recent/next birthday?

> Respondent is that person1 Other respondent came to phone.....2 Respondent is not available [arrange callback].....3

Hello. I'm from SRBI, the national research organization. We are conducting a study for the U.S. Department of Transportation about Americans' driving habits and concerns, and their attitudes about driving and current traffic laws. The interview is completely confidential. It takes fifteen to twenty minutes.

Record respondent's gender [FROM OBSERVATION] CO40.

> Male.....1 Female.....2

Q1. How often do you usually drive a car or other motor vehicle? Would you say that you usually drive... [READ LIST]?

Almost every day1	
A few days a week	.2
A few days a month3	
A few times a year	.4
Never	SELECT ANOTHER RESPONDENT OR
	TERMINATE IF ONLY ONE ADULT IN HH

Q2. How many years have you been driving?

YEARS DRIVING

Less than one year....00

Q4a. What kind of vehicle do you drive most often? Is it a car, van or minivan, motorcycle, pickup truck, or something else?

Car1	
Van or minivan2	
Sport utility vehicle	
Pickup truck4	
Other truck5	
Motorcycle	SKIP TO Q8a
Other (SPECIFY)7	

- Q4b. What model year is the (car/truck/van) you drive most often?
- Q5a. When driving this (car/truck/van), how often do you wear a seat belt? Do you wear your seatbelt.... **READ LIST**?

All of the time	.1
Most of the time	2
Some of the time	.3
Rarely	4
Never	.5

CONDITION: IF VERSION = A, ASK Q6a. IF VERSION = B, SKIP TO Q6b. Q6a. How often do you drive with other adults in your (car/van/truck)?

Almost every day	1
Few days a week	2
Few days a month	3
Few days a year	4
Never	5

CONDITION: IF VERSION = B, ASK Q6b. IF VERSION = A, SKIP TO Q8a. Q6b. How often do you drive with children in your (car/van/truck)?

Almost every day	1
Few days a week	2
Few days a month	3
Few days a year	4
Never	ō

CONDITION: IF VERSION = A, ASK Q8a. CONDITION: IF VERSION = B, SKIP TO Q10.

Q8. Which of the following statements best describes your driving? READ STATEMENTS

Q8a.	I tend to pass other cars more often than	
	other cars pass me, OR	1
	Other cars tend to pass me more often	2
	(VOL) Both or about equally	3

Q8b. In heavy traffic I tend to:

Stay with the slower moving traffic OR......1 Keep up with the faster traffic......2 (VOL) Both or about equally......3

CONDITION: IF VERSION = B, ASK Q10-Q10e. CONDITION: IF VERSION = A, SKIP TO Q11.

Q10. People have different feelings about driving. I'd like to you to tell me whether you agree or disagree with the following statement about driving.

Strongly	Somewhat	Somewhat	Strongly
Agree	Agree	Disagree	Disagree
1	2	3	4

- Q10a. I enjoy the feeling of speed
- Q10b. The faster I drive, the more alert I am
- Q10c. I often get impatient with slower drivers
- Q10d. I try to get where I am going as fast as I can
- Q10e. I worry a lot about having a crash

Q11. People feel differently about how safe or dangerous different types of driving behavior are. How safe do you feel it usually is to...(READ ITEM)? ...extremely safe, somewhat safe, neither safe nor dangerous, somewhat dangerous, or extremely dangerous?

Version = A, ask Q11a. Q11b, Q11d, Q11f, Q11i, Q11j, Q11pp, Q11rr, & Q11tt. Version = B, ask Q11c, Q11e, Q11g, Q11h, Q11k, Q11kk, Q11qq, Q11ss, & Q11uu.

EXTREMELY	SOMEWHAT	NEITHER SAFE	SOMEWHAT	EXTREMELY
SAFE	SAFE	NOR DANGEROUS	DANGEROUS	DANGEROUS
1	2	3	4	5

(For Version = A)

Q11a. Drive through a light that is already red before you entered an intersection

(For Version = A)

Q11b. Drive 10 miles an hour faster than most other vehicles are going

(For Version = B)

Q11c. Drive 20 miles an hour over the speed limit on an interstate highway

(For Version = A)

Q11d. Tailgate another vehicle on a highway with one lane in each direction

(For Version = B)

Q11e. Enter an intersection just as the light is turning from yellow to red

(For Version = A)

Q11f. Drive through a stop sign without slowing

(For Version = B)

Q11g. Slow but not completely stop at a stop sign

Q11. (CONT)

•						
		EXTREMELY SAFE 1	SOMEWHAT SAFE 2	NEITHER SAFE NOR DANGEROUS 3	Somewhat Dangerous 4	Extremely Dangerous 5
(For Ver Q11h. Cu in	r sion = It in fi I order	B) ront of anot to make a t	her car urn			
(For Ver Q11i. Ra	sion = ice anot	A) ther driver				
(For Ver Q11j. Dr al	r sion = ive ju cohol	A) st under the limit	legal			
(For Ver Q11k. Us pa	sion = se the s iss in l	B) shoulder to heavy traffi	с			
(For Ver Q11kk.Ma ge su	r sion = ike an a esture o ich tha	B) angry, insul or comment t t they hear	ting or obs oward anoth or see it	cene er driver		
(For Ver Q11pp.Dr Sw be	rsion = ive the vitching tween	A) rough traffi g quickly ba lanes	c by ck and fort	h		
(For Ver Q11qq.Pa re ar	r sion = Iss a so ed light rm in fo	B) chool bus th ts flashing ull view	at has its and the sto	p		

(For Version = A) Q11rr.Go 10 miles an hour over the speed limit in a residential neighborhood

(For Version = B) Q11ss.Go 10 miles an hour over the speed limit on a two-lane rural road

(For Version = A) Q11tt.Drive 20 miles an hour over the speed limit on a rural road

(For Version = B) Q11uu.Drive 20 miles an hour faster than most other vehicles are going

Q12a. Now, thinking about the roads you normally drive on, would you say that the roads where you drive most often are in areas that are:

More	urban	than	rural	 	 1
More	rural	than	urban	 	 2
About	the :	same [[VOL]	 	 .3

Q12b. Do you drive at least weekly on: MULTIPLE RECORD

Residential or neighborhood streets (posted speed limits of 35 mph or less)......1 Interstate highways......2 Other types of roads with speed limits of 40-55 mph.....3

IF NONE WEEKLY, RECORD TYPE THEY DRIVE ON MOST OFTEN. SELECT ROAD TYPE DRIVEN AT LEAST WEEKLY; IF TWO OR MORE ROAD TYPES DRIVEN AT LEAST WEEKLY, RANDOMLY SELECT ONE

For the next series of questions, I'd like you to think about [residential or neighborhood streets/non-interstate roads/interstate highways, from Q94] where you normally drive

Q13. How important are the following factors in determining <u>how aggressively</u> you drive on (**ROAD TYPE**).

Extremely	Moderately	Slightly	Not	Not
Important	Important	Important	Important	Applicable*
1	2	3	4	5

- Q13ba. Speed of other traffic
- Q13bb. Posted speed limit
- Q13bc. Chances of being stopped by police
- Q13bd. How much time you have to get to your destination
- Q13be. How much traffic there is
- Q13bf. Your past experience driving the road
- Q13bg. Weather conditions
- Q13bh1. Is anything else important in selecting the speed at which you drive? (SPECIFY_____)

*Never Drive Aggressively

Q15. How often do you see vehicles traveling at an unsafe speed on (ROAD TYPE)?

Q16. What do you consider to be the maximum safe speed for that road?

_____ MPH

- Q17. Why do you consider speeds greater than (Q109) to be unsafe on that road? Anything else?
- Q37. Aside from driving at an unsafe speed, what other types of unsafe driving behaviors do you normally encounter on that road? DO NOT READ LIST. MULTIPLE RECORD.

None1	SKIP TO Q50a
Tailgating2	•
Failing to yield	
Weaving in and out4	
Drinking and driving5	
Running red lights6	
Ignoring stop signs7	
Driver inattention8	
Other (SPECIFY)	
9	

IF MORE THAN 1 TYPE IN Q37, ASK Q38. ELSE SKIP TO Q39. Q38. Which of these behaviors (READ LIST FROM Q37) do you encounter most often on (ROAD TYPE)?

Tailgating2)
Failing to yield	
Weaving in and out4	ŀ
Drinking and driving5	
Running red lights6	,
Ignoring stop signs7	
Other (SPECIFY)8	5

•

DK = Unsafe Driving For Read-In

Q39. How often do you see (Q38) on (ROAD TYPE)?

All of the time1	
Most of the time	2
Some of the time	
Rarely	4
Never	

Q131. How many of the drivers who do this are also speeding?

A]]	L
Most	2
Some	3
Few	4
None5	

CONDITION: IF ONLY ONE IN Q37, SKIP TO Q50a.

Q41. Which of these behaviors (READ LIST FROM Q37) do you consider the most dangerous on (ROAD TYPE)?

Tailgating2
Failing to yield
Weaving in and out4
Drinking and driving5
Running red lights6
Ignoring stop signs7
Other (SPECIFY)
8

DK = Unsafe Driving For Read-In

CONDITION: IF Q41 EQ Q38 SKIP TO Q136. Q42. How often do you see (Q41) on (ROAD TYPE)?

All of the time1
Most of the time2
Some of the time
Rarely
Never

Q43. How many of the drivers who do this are also speeding?

All1
Most2
Some
Few4
None5

CONDITION: IF VERSION = A, ASK Q50a. IF VERSION = B, SKIP TO Q53b. Q50a. In the last year, were you ever in a situation where you were riding with a friend who had too much to drink to drive safely?

> Yes.....1 No.....2 SKIP TO Q51aa

Q50c. On those occasions, did the driver drive more aggressively, less aggressively, or about the same as they normally would?

More aggressively1		
Less aggressively2	SKIP	TO Q51aa
About the same	SKIP	TO Q51aa

Q50d. What did they do to make you feel they were driving more aggressively? Anything else?

IF VERSION = A, ASK Q51aa-Q158. IF VERSION = B, SKIP TO Q178.

Q51aa. (Aside from what you have already told me about drinking and aggressive drivers) In the past year, have you ever ridden with someone who you felt was driving in an <u>unsafe manner</u>?

Yes.....1 No......2 SKIP TO Q53b

Q51cc. Thinking about the most recent occasion, was the person who was driving in an unsafe manner a man or a woman?

Man.....1 Woman.....2

Q51dd. What was their relationship to you? READ LIST IF NECESSARY

Spouse1
Boyfriend/girl friend2
Date3
Parent
Boss/supervisor5
Co-worker6
Friend7
Sibling8
Other relative9
Q51dd.1. Other (SPECIFY)

Q51ff. What types of unsafe driving behaviors did (he/she) do? RECORD ALL THAT APPLY

Speeding1	
Tailgating	2
Failing to yield	
Weaving in and out	4
Drinking and driving5	
Running red lights	6
Ignoring stop signs7	
Q51ff.1. Other (SPECIFY)	8

Q51gg. Did you ask or tell them to stop driving like that?

Yes1	
No2	SKIP TO Q51jj
Not sure3	SKIP TO Q51jj

Q51hh. Did they do what you asked?

Yes1	SKIP TO Q53b
No2	SKIP TO Q53b
Not sure3	SKIP TO Q53b

Q51jj. If you had asked them to drive differently, do you think they would have done what you asked?

Yes.....1 No.....2 Not sure.....3

ASK ONLY FOR VERSION = B

Q53b. Do you think that the amount of police enforcement of traffic laws on the roads that you drive on is too much, too little or about right for.....?

TOO MUCH	TOO LITTLE	ABOUT RIGHT
1	2	3

Q53ba. Running red lights

Q53bb. Failure to stop at stop signs

Q53bc. Tailgating

Q53bd. Weaving in and out

Q53be. Failing to yield

Q53bf. Speeding

CONDITION: IF Q41 = Q38, SKIP TO Q186

Q54b. How often do you think police should ticket drivers who are (MOST DANGEROUS FROM Q41)?

 Always.....1

 Most of the time.....2

 Sometimes.....3

 Rarely.....4

 Never.....5

Q55b. How often do you think police should ticket drivers who are (MOST OFTEN FROM Q38)

 Always......1

 Most of the time......2

 Sometimes......3

 Rarely......4

 Never.....5

CONDITION: IF VERSION = B, ASK Q58b TO Q59c. IF VERSION = A, SKIP TO Q63. PHOTO-ENFORCEMENT

Q58b. Some areas have introduced automated enforcement devices which use cameras to identify vehicles that speed or run red lights. A traffic ticket is mailed to the owner of the vehicle along with information about the location, time, date, and type of infraction. If the driver or owner pays the fine, no further action is taken. If the ticket is contested, a photo of the offender's vehicle and license plates is presented in court. Have you ever heard of this kind of traffic enforcement that doesn't require police officers to stop and ticket traffic violators?

> Have heard.....1 Have not heard.....2

Q62b. If photo enforcement of driving laws was introduced in your community, how much effect do you think it would have on (**READ ITEM**) --- a lot, some, only a little or not at all?

A LOT	SOME	LITTLE	NONE
1	2	3	4

Q62ba. Cutting down speeding

- Q62bb. Cutting down running stop signs and red lights
- Q62bc. Getting dangerous drivers off the roads
- Q62bd. Reducing crashes

Do you think that it would be a good idea or a bad idea to use a Q59a. photo enforcement system like this to identify vehicles which were

ROTATE LIST

		GOOD	BAD
Q59aa.	Running red lights	1	2
Q59ab.	Speeding	1	2
Q59ac.	Not stopping at stop sign	ns1	2

- 059b. Why do you think it is a (good/bad/both good and bad) idea to use a photo enforcement system to identify vehicles committing these violations? Anything else?
- Q59c. Thinking about locations where photo enforcement might be used... [READ ITEM]. Would you find it very acceptable, somewhat acceptable, or not at all acceptable to use it.

VERY	SOMEWHAT	NOT AT ALL
1	2	3

- Q59ca. Where it could be hazardous to the driver or officer to stop
- Q59cb. Where stopping a vehicle could cause traffic congestion
- Q59cc. Where an accident has occurred
- Q59cd. In school zones
- Q59ce. Any other places (specify)

Q63. Thinking back over the past year, when was the most recent time that you (READ ITEM) -- today, within the past week, within the past month, more than a month ago, or not in the past year?

CONDITION:

If Version = A, ASK Q63a, Q63d, Q63f, Q63i, Q63j, Q63pp, Q63r, & Q63s. If Version = B, ASK Q63b, Q63c, Q63e, Q63g, Q63h, Q63k, Q63kk, Q233, & Q63p.

			More	Not in
	Past	Past	than a	past
Today	Week	Month	Month	year
1	2	3	4	5

(For Version = A)

- Q63a. Drove through a light that was already red before you entered an intersection
- (For Version = B)
- Q63b. Drove 10 miles an hour faster than most other vehicles were going
- (For Version = B)
- Q63c. Drove 20 miles an hour over the speed limit on an interstate highway
- (For Version = A)
- Q63d. Tailgated another vehicle on a highway with one lane in each direction

(For Version = B)

Q63e. Entered an intersection just as the light was turning from yellow to red

(For Version = A)
Q63f. Drove through a stop
 sign without slowing

(For Version = B)
Q63g. Slowed but didn't completely
 stop at a stop sign

(For Version = B) Q63h. Cut in front of another car in order to make a turn

(For Version = A) Q63i. Raced another driver Q63.(cont) Thinking back over the past year, when was the most recent time that you (READ ITEM) -- today, within the past week, within the past month, more than a month ago, or not in the past year?

			More	Not in
	Past	Past	than a	past
Today	Week	Month	Month	year
1	2	3	4	5

- (For Version = A) Q63j. Drove when affected by alcohol
- (For Version = B)
- Q63k. Used the shoulder to pass in heavy traffic

(For Version = B)

Q63kk.Made an angry, insulting or obscene gesture or comment toward another driver such that they heard or saw it

(For Version = A)

Q63pp.Drove through traffic by switching quickly back and forth between lanes

(For Version = A)

Q63r. Went 10 miles an hour over the speed limit in a residential neighborhood

(If Version = B)

Q63s. Went 10 miles an hour over the speed limit on a two-lane rural road

(If Version = A)

Q63t. Drove 20 miles an hour over the speed limit on a rural road

(If Version = B)

Q63p. Drove 20 miles an hour faster than most other vehicles were going

CONDITION: IF VERSION = A, ASK Q64. IF VERSION = B, SKIP TO Q86aa.

Q64. If you saw a vehicle illegally pass a stopped school bus that has its red light flashing and its stop arm in full view, how likely would you be to call and report it to the police?

Very likely1	SKIP TO Q64c
Somewhat likely2	SKIP TO Q64c
Somewhat unlikely3	-
Very unlikely4	

Q64b. Why would you be unlikely to report it?

SKIP TO Q86aa

Q64c. How would you report it?

Q86aa. You may be aware that the National Maximum Speed Limit Law was repealed. Have the speed limits on interstates affected by that law been increased in your state in any areas in which you drive?

Yes1	
No2	SKIP TO Q87a
Not sure3	SKIP 10 Q8/a

Q86c. How have the higher limits on those roads affected the number of people who speed? Do a lot more drivers obey the new limits, some more, only a few more, or about the same amount as the old limit?

A lot more drivers obey the new limits1
Some more drivers2
Only a few more drivers
About the same4
Fewer now (VOL)

Q86d. Do you think that driving on those roads is safer now with the higher speed limits, about as safe, or less safe than with the old limits?

Safer now.....1 About as safe.....2 Less safe.....3 Q87a. Do you think that a uniform speed limit should be set for all interstate highways or should it be allowed to vary from state to state?

Uniform limit.....1 Allowed to vary......2 SKIP TO Q102b

Q87b. What do you think that speed limit should be for interstate highways?

SPEED LIMIT

PUBLIC EDUCATION EFFORTS (split sample)

Q102b. Now I'd like you to think again about unsafe driving actions, like [RESPONSES FROM Q37]. In your opinion, how much are UNSAFE DRIVING ACTIONS by other people a threat to the personal safety of you and your family? Would you say unsafe driving is....

> A major threat.....1 A minor threat.....2 Not a threat.....3 Not sure (VOL).....4

Q103b. How important is it that something be done to reduce unsafe driving? Is it... [READ LIST]?

Very important.....1
Somewhat important.....2
Not important.....3
 Not sure (VOL).....4

Q104b. How EFFECTIVE do you think the following steps would be in reducing <u>unsafe driving</u>? Would (READ ITEM) be very effective, somewhat effective, neither effective nor ineffective, somewhat ineffective, or very ineffective.

CONDITION: IF VERSION = A, ASK Q104ba, Q104bc, Q104be, & Q104bf. CONDITION: If Version = B, ASK Q104bb, Q104bd, Q104bg, Q104bh, & Q104bi.

NEITHER EFFECTIVE SOMEWHAT VERY SOMEWHAT VERY NOR INEFFECTIVE INEFFECTIVE INEFFECTIVE EFFECTIVE EFFECTIVE 2 1 3 4 5 (For Version = A) 0104ba. More police officers assigned to traffic (For Version = B) 0104bb. More frequent ticketing (For Version = A) Q104bc. Double or triple fines for traffic violations (For Version = B) Q104bd. Taking away driver's licenses more often (For Version = A) Q104be. Encouraging passengers to say something when their driver is not driving safely (For Version = A) Q104bf. Increasing public awareness of risks of unsafe driving (For Version = B) Q104bg. Encouraging citizens to report unsafe driving to police (For Version = B) 0104bh. Road design changes, like speed bumps and traffic circles, to slow down traffic (For Version = B) Q104bi. Insurance costs increased for traffic violations

Q105b. How would you feel about implementing the following methods in your community to reduce <u>unsafe driving</u>. Would you strongly approve, somewhat approve, neither approve nor disapprove, somewhat disapprove, or strongly disapprove of...(READ ITEM).

CONDITION: IF VERSION = A, ASK Q105ba, Q105bc, Q105be, & Q105bf. CONDITION: IF VERSION = B. ASK Q105bb, Q105bd, Q105bg, Q105bh, & Q105bi. STRONGLY SOMEWHAT NEITHER APPROVE SOMEWHAT STRONGLY APPROVE NOR DISAPPROVE DISAPPROVE DISAPPROVE APPROVE 1 2 3 4 5 (For Version = A) 0105ba. More police officers assigned to traffic (For Version = B) Q105bb. More frequent ticketing (For Version = A) 0105bc. Double or triple fines for traffic violations (For Version = B) Q105bd. Taking away driver's licenses more often (For Version = A) Q105be. Encouraging passengers to try to get drivers not to drive unsafely

(For Version = A) Q105bf. Increasing public awareness of the risks of unsafe driving

(For Version = B)

Q105bg. Encouraging citizens to report unsafe driving to police

(For Version = B)
Q105bh. Road design changes, like speed
 bumps and traffic circles, to slow down traffic

(For Version = B) Q105bi. Insurance costs increased for violations

Q109gg. Which of these would you say is more dangerous? SINGLE RECORD

Drunk driving, or.....1 Aggressive driving......2 Q112a2. Compared to a year ago, would you say that other drivers in your area drive a lot more aggressively now, somewhat more aggressively, about the same, somewhat less aggressively, or much less aggressively?

A lot more aggressively now.....1 Somewhat more aggressively......2 About the same......3 Somewhat less aggressively......4 Much less aggressively......5 Not Sure/Refused......6 SKIP TO Q115aa

- Q114a2. Why do other drivers in your area drive (more/less) aggressively now?
- Q115aa. In the past year, have you ever felt that the behavior of another driver was a personal threat to you or your passengers?

Yes.....1 No.....2 SKIP TO Q99a Don't know......3 SKIP TO Q99a

Q115bb. How often in the past year have you felt this?

Every day/nearly every day...1 Several times a week...........2 Several times a month.......3 Once a month or less.............4

Q115cc. When was the last time you felt that another driver's behavior was a personal threat?

Today.....1 Past week.....2 Past month......3 More than a month ago.....4

Q115dd. Thinking about that last time, what did the driver do that made you feel threatened? [DO NOT READ LIST. MULTIPLE RECORD.]

Drove very closely behind/beside me.....1 Cut [very closely] in front of me.....2 Cut me off at an intersection/exit.....3 Passed me in a dangerous place/manner.....4 Honked the horn [repeated]y].....5 Made an obscene or threatening gesture.....6 Other (SPECIFY) Q115ee. What did you do? [DO NOT READ LIST.]

Tried to avoid trouble......1 Responded in kind.....2 Didn't know what to do/did nothing.....3

CRASH EXPERIENCE

Q99a. Have you been in a vehicle crash in the past five years?

Yes1	
No2	SKIP TO Q97a
(VOL) Don't know3	SKIP TO Q97a
(VOL) Refused4	SKIP TO Q97a

Q99b. How many times has this happened to you (in the past five years)?

DON'T KNOW=98 REFUSED=99

Q99c. How long ago did that (most recent) crash occur?

Today.....1 Within the past week.....2 Within the past month....3 Within the past year.....4 Over a year ago......5 Never......6 SKIP TO Q97a

Q99d. Were you driving or was someone else driving?

Respondent driving.....1 Someone else.....2

Q99dd. Was anyone injured in that crash (only count injuries that required medical attention)? [PROBE FOR RESPONDENT, OTHER PERSON, OR BOTH]

Q99e. Was the driver of your car or the other car cited for speeding in that crash?

Your vehicle1	
Other vehicle2	
Both3	
Neither4	

Q99f. Were any other unsafe driving actions a major factor, a minor factor or not a factor in that crash?

Major factor.....1 Minor factor.....2 Not a factor......3 SKIP TO Q100

Q99f1. Was the unsafe driving by the driver of your vehicle, driver of the other vehicle, or both?

Driver of your vehicle.....1 Driver of other vehicle.....2 Both.....3

CONDITION: IF VERSION = A, ASK Q97a-Q97d. CONDITION: IF VERSION = B, SKIP TO Q98.

SAFETY VIOLATIONS

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Q97a. In the past twelve months have you been STOPPED by the police for any traffic-related reason?

Yes1	
No2	SKIP TO Q98
(VOL) Don't know	SKIP TO Q98
(VOL) Refused4	SKIP TO Q98

Q97b. How many times have you been stopped by the police in the past twelve months (for a traffic related reason)?

NUMBER OF TIMES

Q97c. What were you stopped for? CODE ALL THAT APPLY

Drinking and driving	1
Speeding	2
Stop signal	3
Stop sign	4
Other (SPECIFY)	5

Q97d. Did you receive a ticket or warning (on any of those occasion)?

Yes, ticket1	
Yes, warning2	
Yes, both3	
Neither4	SKIP TO Q98
Q97e. Did you change your driving behavior as a result of receiving the ticket?

Yes.....1 No.....2 SKIP TO Q98

Q97f. For about how long a period of time did you change your driving behavior as a result of receiving a ticket? [DO NOT READ LIST]

 Weeks
 Months Years

Q98. Within the past 5 years, have you...(READ ITEM)?

		NO	YES
Q98aa.	Gotten a ticket for speeding	1	2
Q98bb.	Gotten a warning for speeding	1	2
Q98cc.	Gotten a ticket for any other moving violation (such as running a red light or stop sign)	1	2
Q98dd.	Been convicted of DWI or DUI	1	2
Q98ee.	Had your car insurance been canceled or premiums increased as a result of claims or points	1	2

CONDITION: IF VERSION = A, SKIP TO DEMOGRAPHICS, D1. IF VERSION = B, ASK Q98i.

Q98i. What is the make and model of the vehicle you drive most often? (e.g. Toyota Camry)?

Q99. Do you have a radar detector in your car?

Yes.....1 No.....2

DEMOGRAPHICS

Now, a few last questions for statistical purposes...

D1. How old are you?

_____ age

D2. Are you currently employed full time, part time, unemployed and looking for work, retired, going to school, homemaker or something else? SINGLE RECORD

Employed full time	.1
Employed part time	2
Unemployed and looking for work	.3
Retired	4
Going to school	.5
Homemaker	6
Disabled (VOL)	.7
Other (SPECIFY):	8
Not sure (VOL)	.9

D3. What is highest grade or year of regular school you have completed? [D0 NOT READ]

No formal schooling......1 First through 7th grade.....2 8th grade.....3 Some high school.....4 High school graduate.....5 Some college.....6 Four-year college graduate....7 Some graduate school......8 Graduate degree.....9 Refused (VOL).....10

D4. Are you currently married, divorced, separated, widowed, or single?

Married.....1 Divorced.....2 Separated.....3 Widowed.....4 Single.....5

D5. Are you of Hispanic origin or descent?

Hispanic.....1 Not Hispanic.....2 D6. Which of these categories best describes your racial background? [READ LIST]

White......1 Black or African-American......2 Asian or Pacific Islander......3 Eskimo, Aleutian or American Indian....4 Mixed......5 (VOL) Other Not sure (VOL)......6 Refused (VOL).....7

D7. How many persons live in your household who are under 16 years old [READ CATEGORIES]?

_____ persons

D8. Which of the following categories best describes your total household income before taxes in 1996? Your best estimate is fine. [READ LIST]

Let me just confirm that the number I reached you at was: [READ NUMBER]

CQ391. Is this the only telephone number for this household?

Yes, this is the only number.....1 No, there is more than one number.....2

Thank you for your assistance. That completes our interview.

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